DARVEEN

www.darveen.com

RTC-M82

User's Manual

With Android 16

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Chapter 1. About this Manual

1.About this Manual

1.1 Introduction

This is the user manual of RTC-M82, which mainly includes the introduction of the application environment of the product, appearance description, product characteristics, technical parameters, common function settings, machine installation, precautions and after-sales common problem diagnosis. This manual is designed to help users solve problems encountered in the process of use， In order to better use RTC-M82, please be sure to read this manual in detail.

1.2 Precautions and Safety

- Before using the RTC-M82, be sure to read the tablet's manual carefully and follow the instructions.
- Do not exert excessive pressure or impact on the screen; otherwise, the LCD panel may crack, causing personal injury. If the liquid crystal panel is damaged and leaks, do not touch the liquid inside, because the liquid will irritate the skin.
- Although the terminal is tested to IP67 standards for water and dust resistance, it is exposed to rain or other concentrated moisture for long periods of time. This situation exceeds IP67 standards and can result in water or other contaminants entering the terminal..
- Use only the original standard AC/DC adapter on the terminal. Using AC/DC adapters that do not meet the standards can cause electrical problems and even cause fires or electrical failures.
- Do not disassemble the terminal. Maintenance should be carried out by the supplier. If the terminal or accessories are damaged due to faulty operation or unauthorized repair, the warranty is void. If the warranty seal is damaged, the warranty is void.
- Ack up all important data regularly.
- In no event shall Supplier be liable for any direct, indirect, consequential or incidental damage and/or any loss of data arising from the use or inability to use the hardware and software, even if Supplier has been advised of the possibility of such damage.

1.3 Recycling and Disposal Instructions

Do not throw away products with this logo or discard them in the trash.

1.4 Regulatory Information

If you need CE, FCC, RoHS and other documents that meet the requirements, please consult the contact window of Darveen Tablet .

1.5 Product Application Scenario

RTC-M82 is an 8-inch rugged Android tablet powered by the MediaTek MT8781 octa-core processor with up to 2.2 GHz performance and Android 16 preinstalled, designed to support demanding field operations with reliable performance and connectivity. Featuring a high-brightness 700 nit capacitive touchscreen for clear visibility even under direct sunlight and a rugged construction certified to IP67 and MIL-STD-810H standards, the RTC-M82 delivers stable operation in harsh environments. Equipped with versatile connectivity and optional modules such as 1D/2D barcode scanning, NFC, and RFID, it enables efficient data capture, communication, and integration with backend systems. With support for 4G LTE, Wi-Fi, Bluetooth, Ethernet, and rich I/O interfaces, it suits mobile workflows in industrial automation, field maintenance, asset tracking, logistics and warehouse management, public safety, energy inspection, outdoor patrol, and other applications requiring robust human-machine interaction and dependable performance in challenging conditions.

Chapter 2. Product Overview

2.Product Overview

2.1 RTC-M82

Congratulations on your purchase of RTC-M82, RTC-M82 is an 8-inch rugged tablet launched by Darveen, MTK 8781 octa-core processor，The main frequency is up to 2.2GHz, The Android 16 OS is preinstalled；

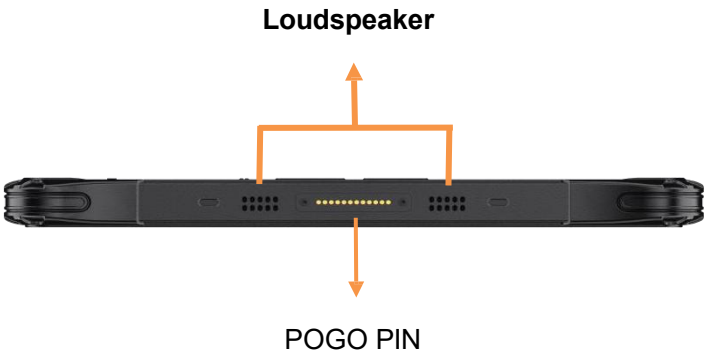
Take full advantage of Google Android data processing capabilities in a mobile environment, optimize application and network management capabilities, while maintaining the flexibility of multitasking applications. RTC-M82 adopts industrial high-brightness capacitive touch screen, protection level IP67, meet 1.22m fall prevention, a variety of wireless communication methods, support 4G LTE, WIFI, BT, GPS and other communication, long endurance time, built-in large-capacity lithium battery, battery removable. Optional modules: 1D/2D scanning code, RFID UHF, NFC, ID card (second generation), fingerprint recognition and so on.

- MTK 8781 octa-core processor，The main frequency is up to 2.2GHz,
- 8 "brightness 400cd/㎡(optional 700cd/㎡ high-light capacitive touch screen)
- IP67 protection grade, meet 1.22m fall prevention
- A variety of wireless communication modes, support 4G LTE, WIFI, BT, GPS and other communication
- Long standby, built-in large capacity lithium battery, battery removable
- Optional modules: 1D/2D scanning code, RFID UHF, NFC, ID card (second generation), fingerprint recognition

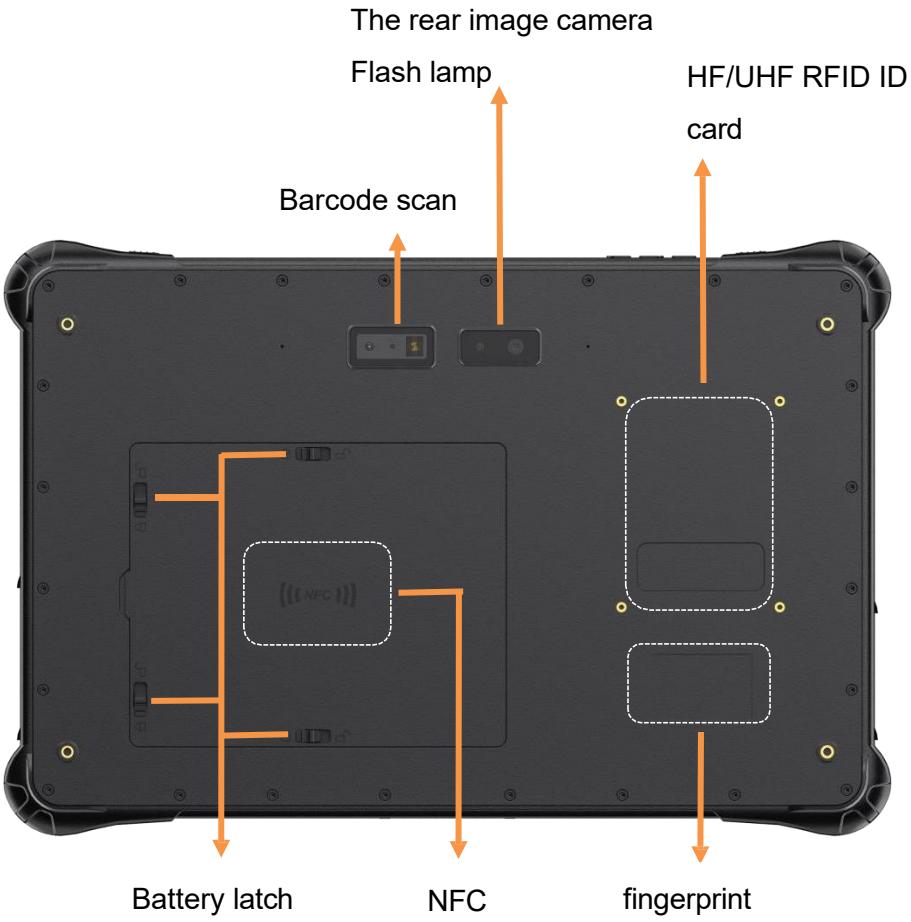
2.2 RTC-M82 Appearance View

Front component

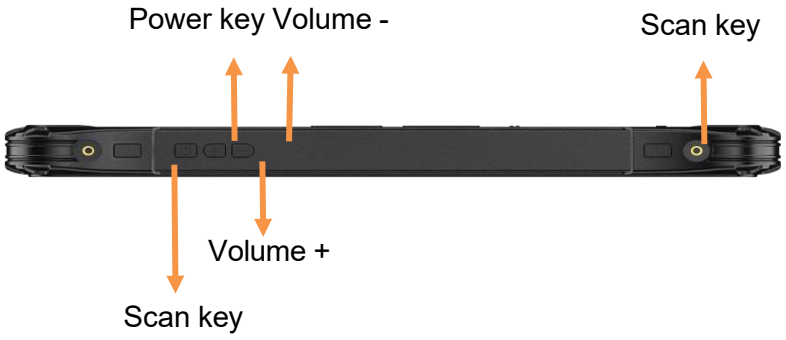
Bottom component



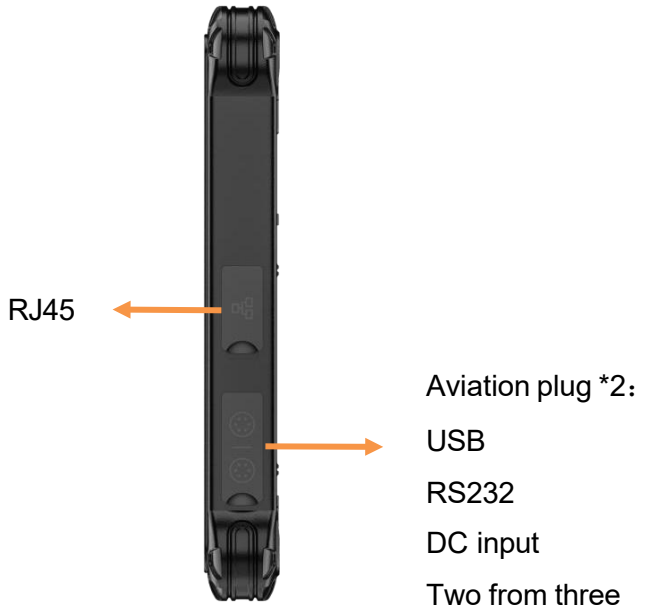
Back-end component



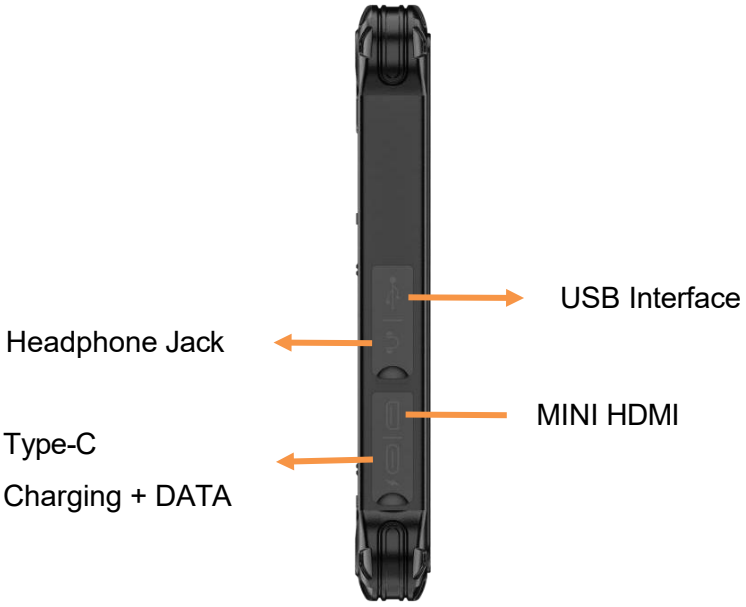
Top component



Right side component



Left side component



2.3 System specifications

The specifications of the RTC-M82 are as follows. Unless otherwise specified, all specifications are subject to change without prior notice.

Basic parameter	Apparent dimension	236.5 * 156.7 * 23mm
	Weight	840g
	Colour	Black
	Display screen	8 inch 16:10 TFT IPS, resolution 800*1280, Brightness 700cd/㎡
	Touch screen	Multi-touch capacitive touch screen, G+G, Gorilla glass, hardness 7H
	Camera	Front 5MP prime camera, rear 13MP autofocus camera with flash
	Loudspeaker	8Ω/1W, Stereo dual speakers
	Microphone	Built-in microphone
	Battery	Removable polymer lithium-ion battery，3.8V 10000mAh
	Endurance time	8 hours
System configuration	CPU	MTK 8781，ARM Cortex-A76 Dual-core 2.2 GHz, ARM Cortex-A55 Hexa-core 2.0GHz
	GPU	ARM Mail-G57
	RAM	8GB
	ROM	128GB
	Sensor	Geomagnetic sensor (compass), gyroscope, Gravity sensor, ambient light sensor
Network configuration	WIFI	Wi-Fi 802.11 (a/b/g/n/ac), dual band (2.4G + 5.0G)
	Bluetooth	BT5.2 (BLE) Class 1

	4G	GSM: B2/B3/B5/B8 WCDMA: B1/B2/B5/B8 CDMA2000: BC0/BC1 FDD: B1/B2/B3/B4/B5/B7/B8/B17/B20/B28A/B28B TDD: B34/B38/B39/B40/B41
	GPS	GPS, GLONASS, BeiDou
Software configuration	Operating system	Android 16
Data acquisition	NFC	13.56MHz, supports ISO/IEC 14443A/14443B/15693/18092/mifare
(Optional)	RFID	UHF RFID, supports PR9200
	Barcode Reader	1D, 2D barcode reader
	ID card	Second generation ID card module
	Fingerprint	FBI/ISO/GA certification
I/O Interface	TF	TF Card holder *1 ， Supports up to 256GB
	SIM	Micro SIM Card holder *1
	USB Type-C	Full-function Type-C *1 , Charging and data transfer
	USB Type-A	USB 2.0 *1
	Headphone Jack	Standard 3.5mm interface *1
	HDMI	Mini HDMI 1.4a *1
	Ethernet	RJ45 *1 ,10/100M

	Pogo Pin	Bottom 12Pin *1(Charging interface, USB signal connection base)
	Aviation port	Aviation port *2（ Optional ）: USB、RS232、 DC power input （two from three ）
Buttons and indicators	Barcode scan keys	Barcode scan keys *2
	Power key	Power key *1
	Volume key	Volume + *1， Volume - *1
	indicator	Charging LED indicator *1
Protection configuration	Drop height	1.22m composite wood floor Power-on state
	protection	IP67
	Operating	-10 °C ~ 50 °C
	Storage	-20 °C ~ 60 °C
	Electrostatic	± 5kV Contact discharge 、± 10kV Air discharge
	humidness	95% condensation free

Chapter 3. Function Use

3.Function Use

3.1 Key Operation

3.1.1 Start the RTC-M82

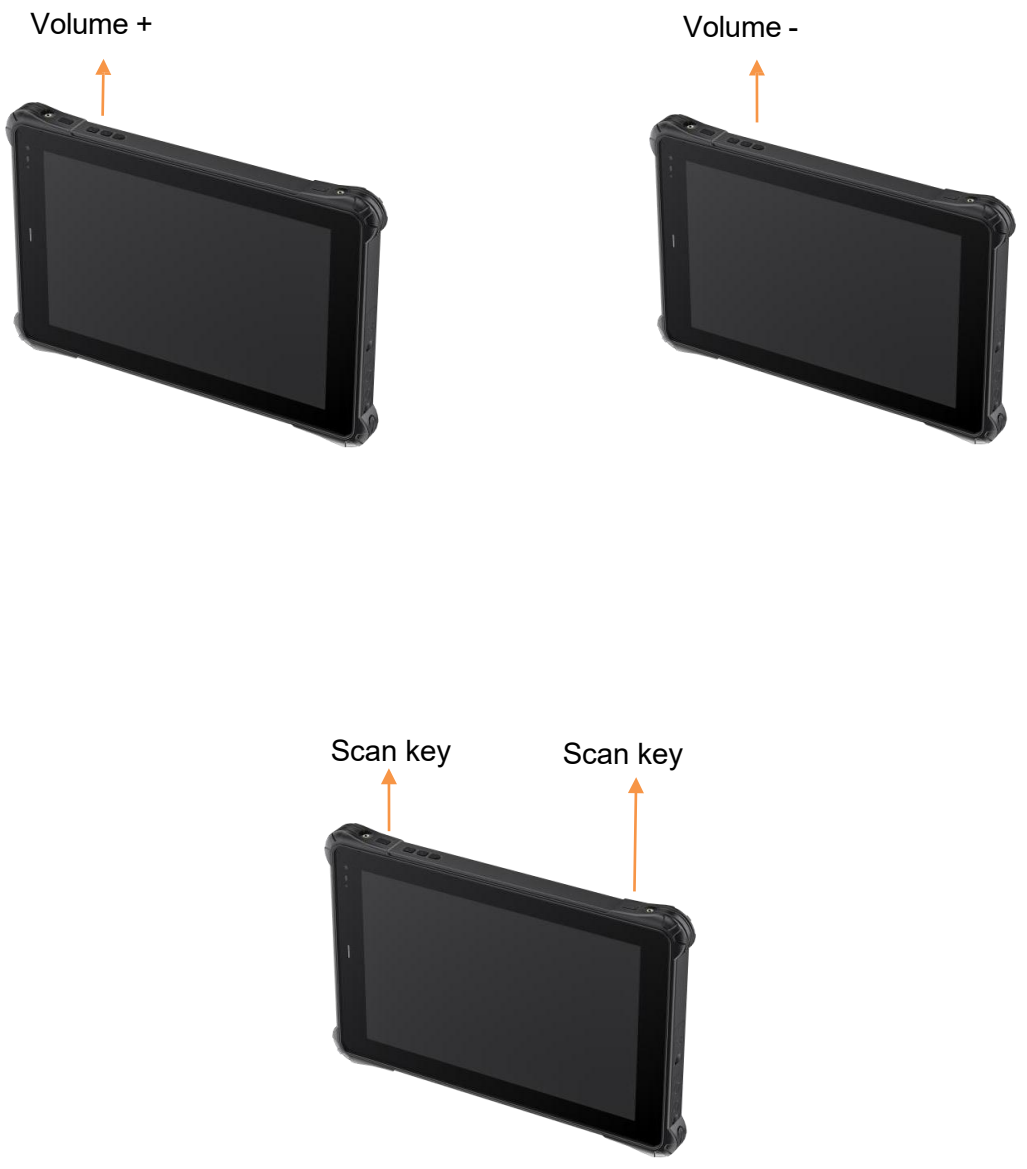
Press the power button to turn on RTC-M82. If RTC-M82 does not power on, check whether the power supply is normal Connect and try again.

When the RTC-M82 is powered on, after the operating system starts, an Android startup LOGO will appear on the screen for a short time, and then enter the Android desktop window.

Android system-activated LOGO

3.1.2 Volume Adjustment and Scan Key

After the RTC-M82 is powered on and the Android operating system is opened, you can manually adjust the volume and manually set the code scan key by pressing the buttons on the top of the RTC-M82



3.1.3 Shut Down the RTC-M82

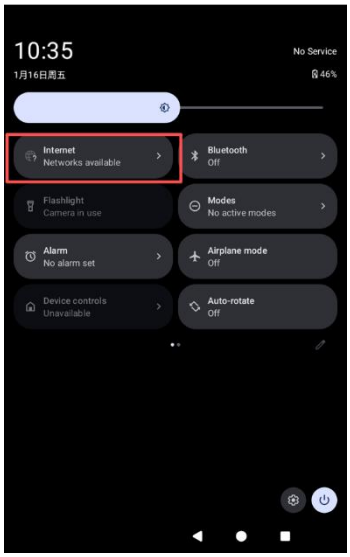
When you're done, you can turn off the power or put the tablet to sleep

1	**Power off**	Long press [Power button]→ Pop-up window, select (Off).
2	**Dormancy**	Press [Power button], the screen will enter the black screen, the tablet will enter the black screen.
3	**Wake up**	When the screen is blank, press the [Power button] to wake up the screen.

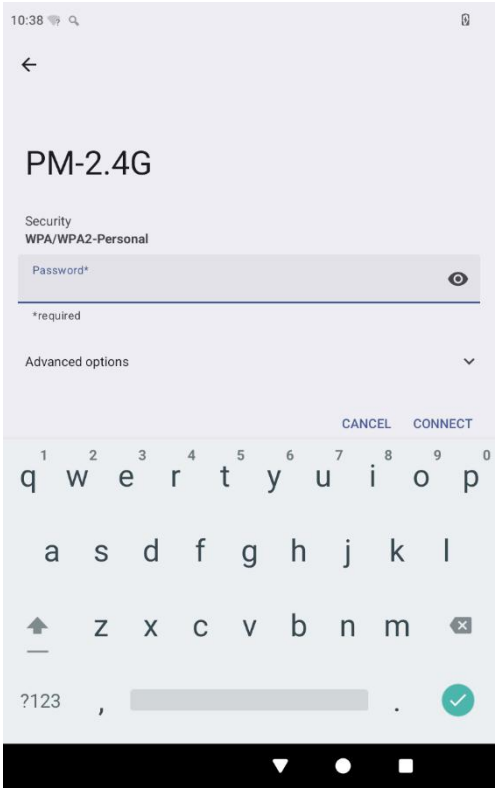
3.2 Wireless Network

3.2.1 WLAN Connection

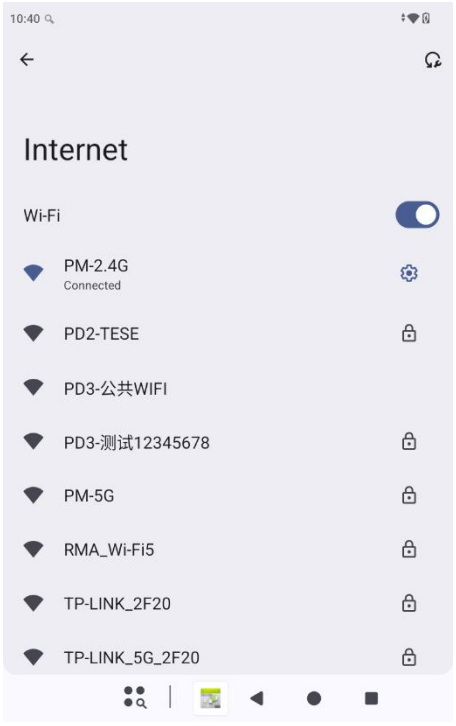
1. Open WLAN Settings by long pressing the Internet icon in the drop-down status bar, or by tapping Network and Internet in Settings.



2. Select the WLAN SSID to connect to and enter the correct password.



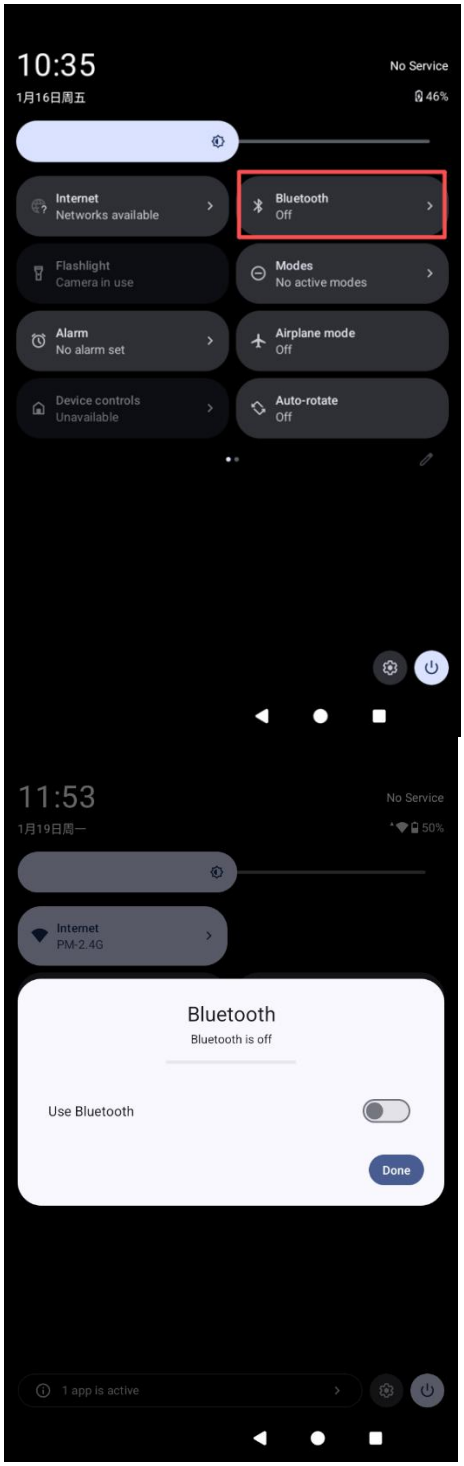
3. At this time, the wireless network is properly connected, and you can use the wireless network to access the Internet.

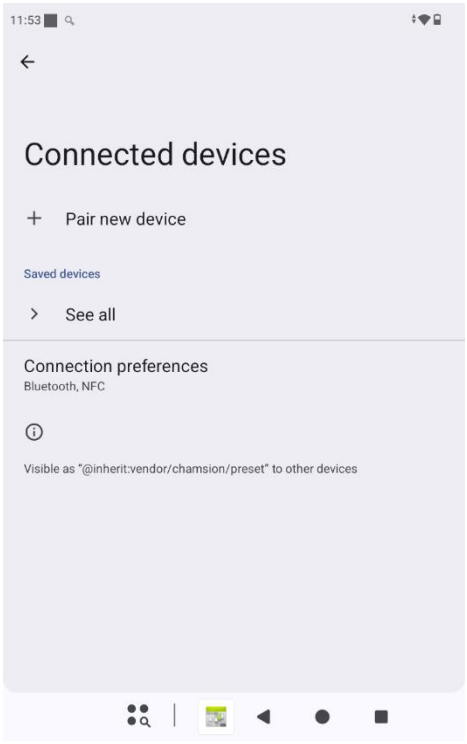


3.3 Bluetooth (Andriod 16)

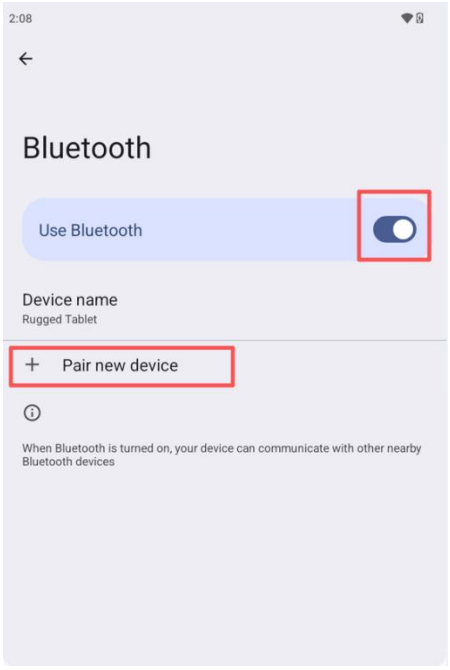
3.3.1 Turn on Bluetooth

1. Tap and hold the Bluetooth icon in the drop-down status bar, or tap connected devices in Settings, then Connect and Set Preferences；



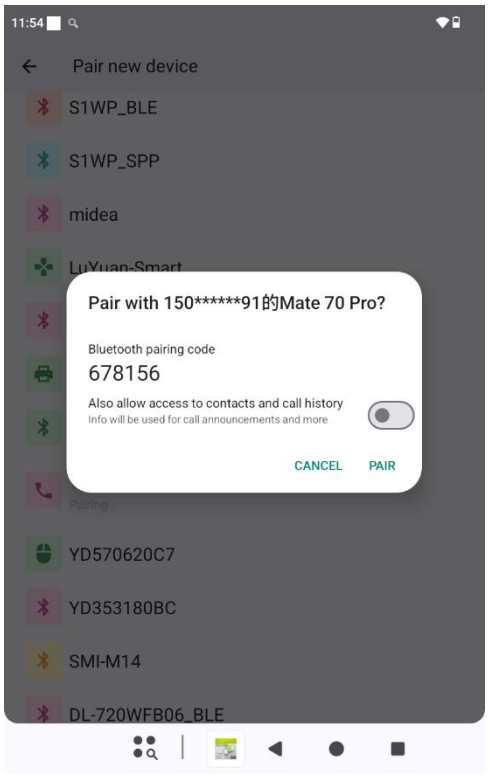

11:53
Connected devices
Pair new device
Saved devices
See all
Connection preferences
Bluetooth, NFC
Visible as "@inherit:vendor/chamsion/preset" to other devices

2. Tap Bluetooth again to turn on your Bluetooth device and put it in the discovery state.

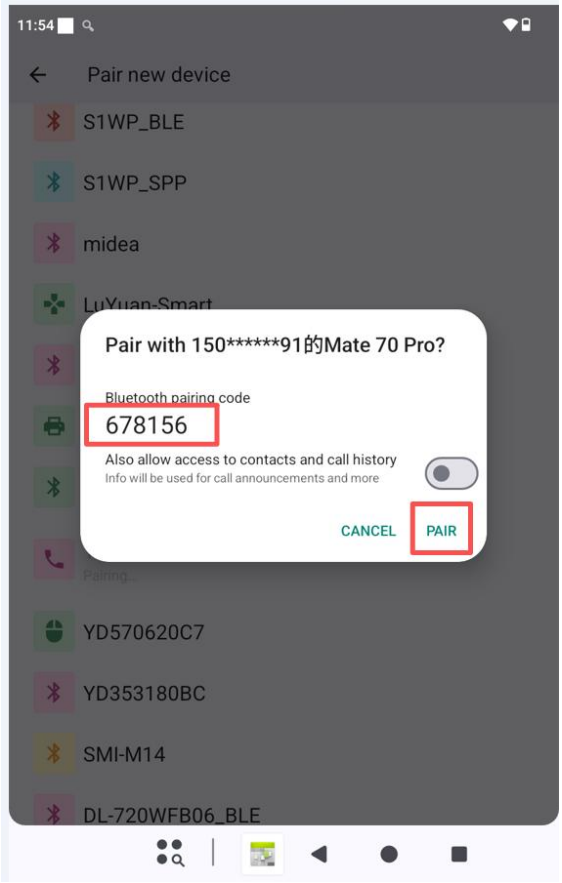


3.3.2 Connect Bluetooth

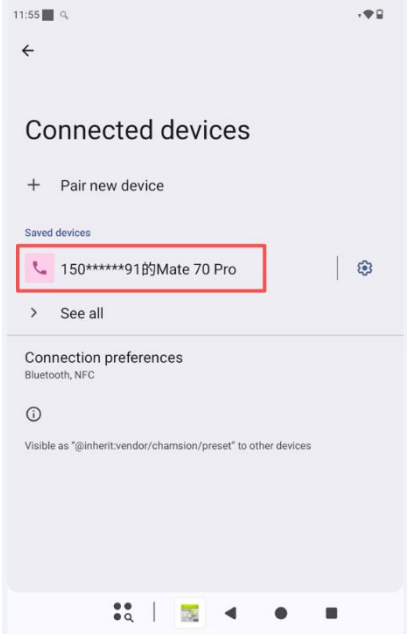
1. Tap Pair with new device and select the device you want to pair with；



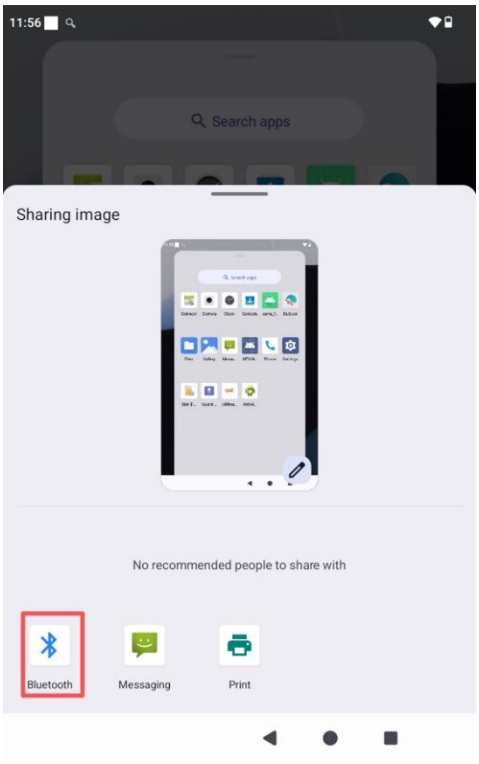
2. For multiple devices, you'll see a matching PIN, making sure the RTC-M82 and the password on the device are the same. This can help you ensure that you are connecting your device to the correct machine and not another computer nearby.You need to confirm the connection verification code on the RTC-M82 and other machines.



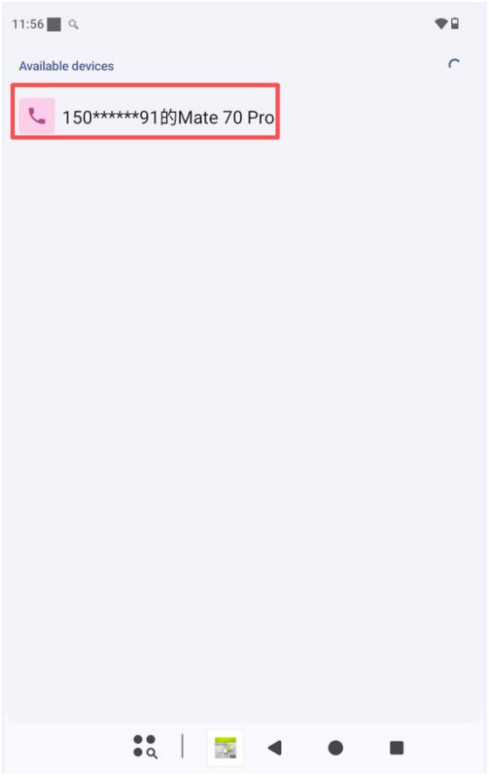
3. After the pair is successful, the connected devices are displayed；



4. RTC-M82 sends files to other devices via Bluetooth, select the file you want to send, select Send using Bluetooth；



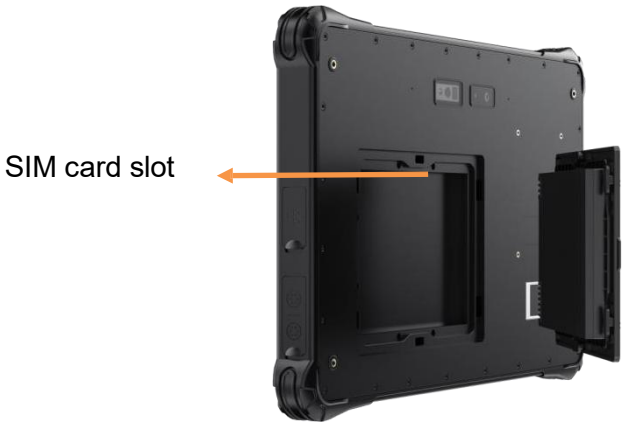
5. Select the device you want to send, click on the device to send the file, and wait for the file to be sent.



3.4 4G/5G (Andriod 16)

3.4.1 SIM Card Installation

1. Insert the SIM card into the RTC-M82. The SIM card is Nano-SIM size and the SIM card slot is as follows：



2. After installing the SIM card, you can connect to the 4G/5G network and surf the Internet normally.

3.5 System Setting (Android 16)

3.5.1 APPs

This module manages and configures the association mappings between various data protocols and applications within the Android system. It allows users to designate specific applications as the primary handlers for specific types of files, links, or system actions.

Primary Functions:

Protocol Handling: When a user triggers a specific system event (such as clicking a web link, dialing a number, or sending a text message) or opens a specific file format, the system will directly invoke the preset default application for processing, eliminating the need for manual selection on each occasion.

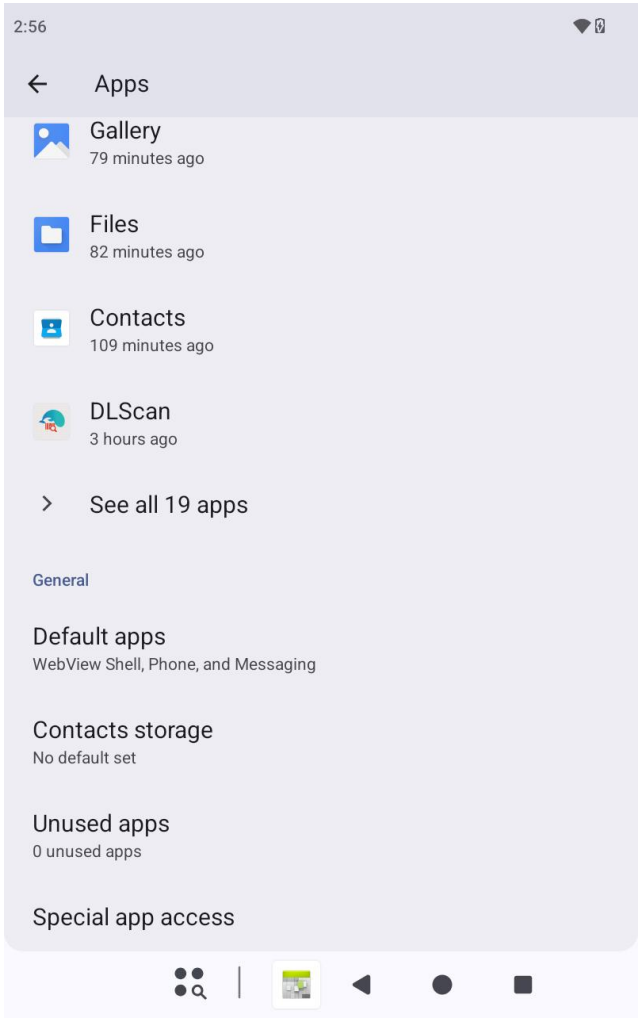
Workflow Optimization: By establishing preset associations, this feature reduces repetitive application confirmation steps in daily operations, thereby enhancing system responsiveness and operational efficiency.

Personalization: It permits users to customize their system experience by setting third-party applications as default system-level tools (e.g., designating a third-party browser as the default web

handler), thus achieving personalized expansion of system functions.

Configuration Notes:

Users can assign default applications for different categories, such as Browser, Phone, Messages, Music, and Gallery. To reset these preferences, users may clear existing defaults to restore the system to its factory state or revert to the interactive mode where the user is prompted for a selection each time.



3.5.2 Notifications

The Notification system is a core interactive component of Android devices, designed to present real-time device status changes, application events, and critical information to the user. Serving as an asynchronous communication channel between the system and the user, it ensures that key data updates are received promptly even when the user is not directly interacting with the application.

Primary Functions:

Real-time Information Synchronization: Receives and displays instant messages from social, email, and office applications, ensuring the timeliness of communication and collaboration.

System Status Feedback: Alerts the user to hardware status (such as low battery warnings, network connection changes) and system-level events (such as download completion, insufficient storage).

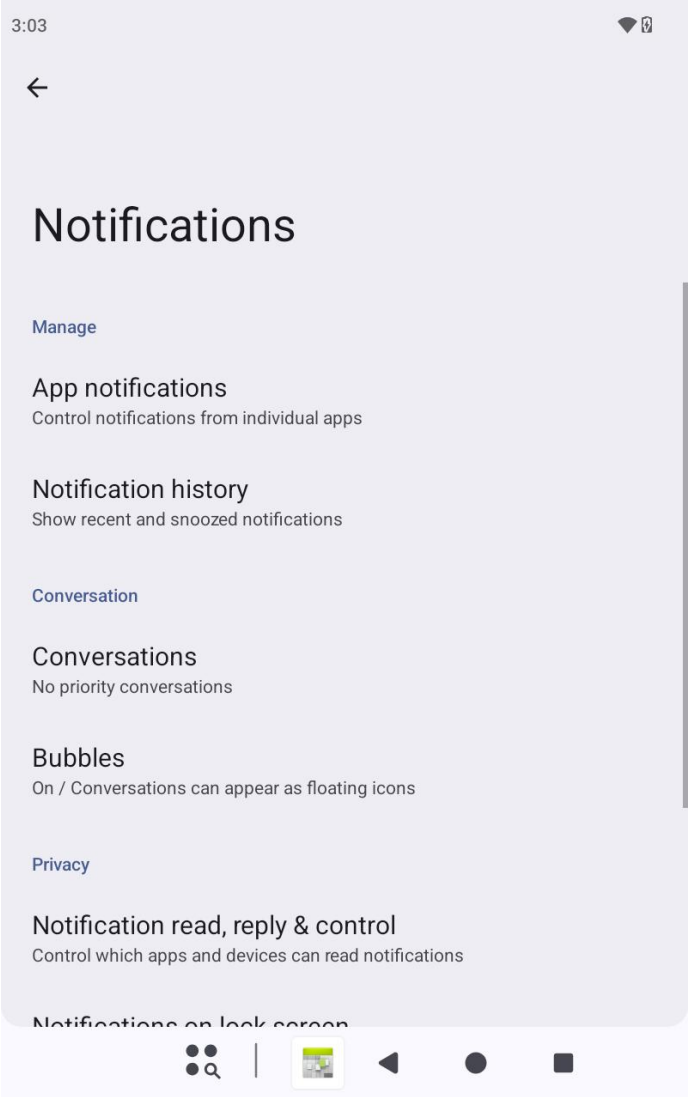
Quick Action Entry: Supports direct execution of shortcut operations via notification pop-ups (e.g., replying to SMS, snoozing alarms) without opening the full application.

History Management: Centralizes archived information through the Notification Center (Notification Shade), allowing users to review past notifications.

Features:

Priority Management: Supports classification by priority (e.g., Default, High Priority, Silent), allowing important information to interrupt the user while minor updates are displayed silently.

Customization: Users can independently configure notification permissions for individual apps, including enabling/disabling notifications, setting ringtones, vibration patterns, and pop-up styles.



3.5.3 Battery

The Battery settings module serves as the power management hub of the Android system. It is designed to monitor device power status, analyze application energy consumption, and provide power optimization strategies. This feature aims to balance device performance with battery life, ensuring user requirements are met across various power scenarios.

Primary Functions:

Monitoring and Analysis: Displays real-time remaining battery percentage and provides power consumption charts for the past 24 hours or specific periods. It details the power consumption ranking of each application, helping users identify apps that drain power abnormally.

Power Saving Management: Offers various preset power plans (such as "Power Saving Mode" and "Ultra Power Saving Mode"). These modes extend battery life by limiting CPU frequency, reducing screen brightness, and disabling non-essential background sync and network connections.

Background Restriction: Allows users to set "Keep Alive" or "Freeze" policies for specific apps,

preventing them from waking the device abnormally or consuming power continuously in the background.

3.5.4 Display

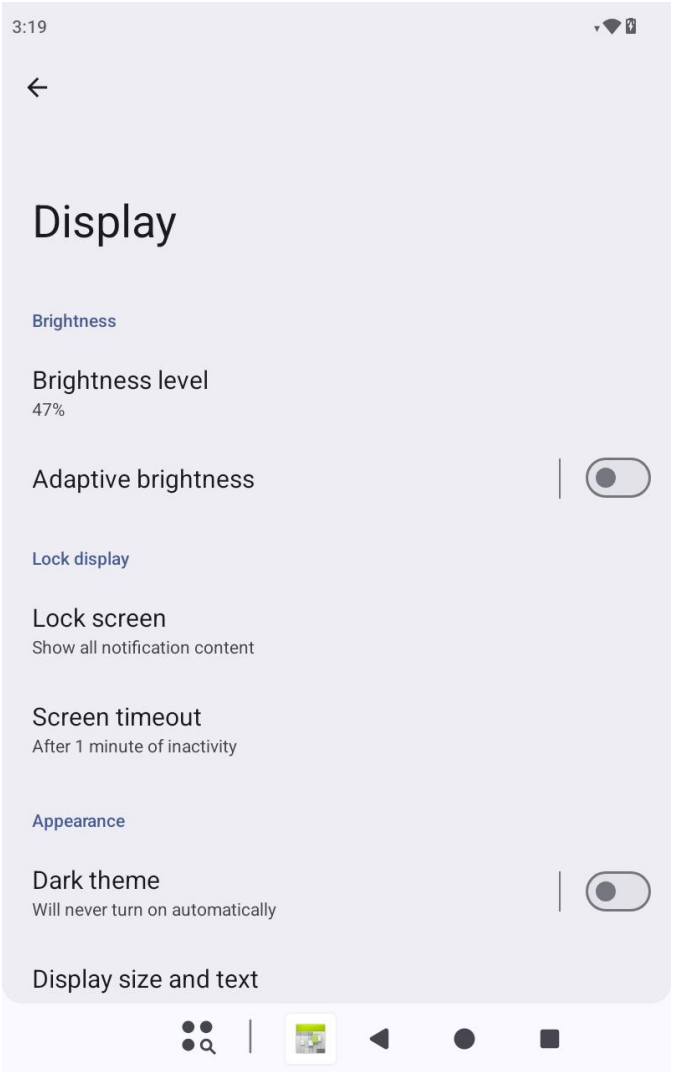
The Display settings module serves as the visual output control center of the Android system. It is used to configure screen visual parameters, layout scaling, and interaction behaviors. This feature directly impacts the user's visual experience, reading comfort, and screen power consumption, allowing users to customize display effects according to ambient light and personal preferences.

Primary Functions:

Brightness and Color Adjustment: Provides manual or automatic brightness adjustment to adapt to different lighting environments;

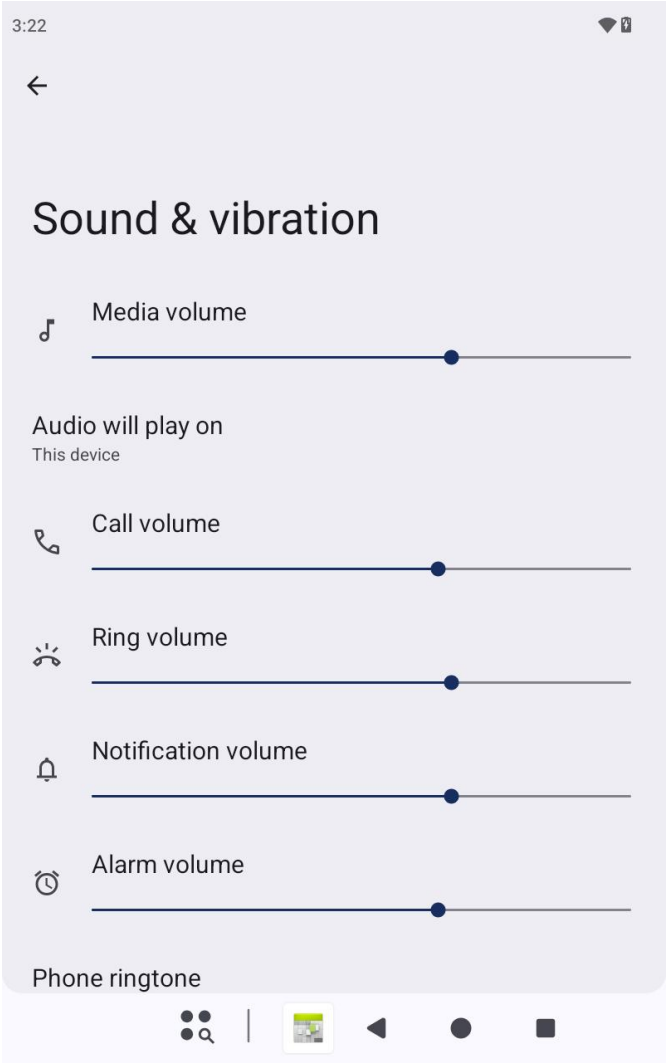
Font and Scaling Management: Allows adjustment of system font size, weight, and display size (DPI scaling) to optimize the reading experience for users with different visual needs or to increase on-screen information density.

Screen Timeout Control: Sets the delay time for the screen to automatically go to sleep (timeout), balancing user convenience with battery life.



3.5.5 Sound & Vibration

Set the media volume, alarm volume, notification volume (you can also use the physical keys to directly adjust the corresponding interface, Do not Disturb Settings), notification ringtone Settings and other operations.



3.5.6 Storage

The Storage settings module serves as the file system management hub of the Android system. It is used to visualize the usage of internal storage space and provide tools for data archiving, cleaning, and management. This feature aims to help users monitor storage resources, optimize space utilization, and ensure smooth system operation.

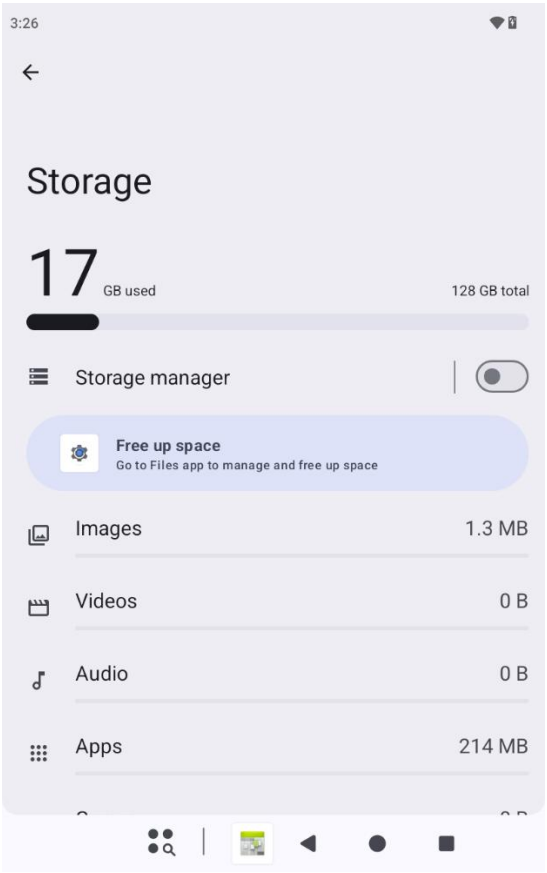
Primary Functions:

Space Visualization: Intuitively displays the allocation of storage space through charts, categorizing and counting the specific proportions occupied by apps, images, videos, audio, documents, and system files.

Junk Cleaning & Optimization: Scans and identifies redundant files within the device (such as app cache, residual installation packages, and advertisement junk files)

App Storage Management: Allows users to view detailed space usage for individual apps (including the app itself, data, and cache), and provides options to "Clear Cache" or "Clear Data" to reset the app state.

Categorized Browsing: Offers convenient entry points to quickly locate and access various files stored on the device by type (such as Recently Deleted, Downloads, Images & Videos).



3.5.7 Security & privacy

The Security & Privacy module serves as the defense core of the Android system, designed to establish multi-layered security barriers to protect user data confidentiality and device integrity. This module integrates authentication mechanisms, permission management systems, and system security hardening features to ensure user trust and safety in the digital environment.

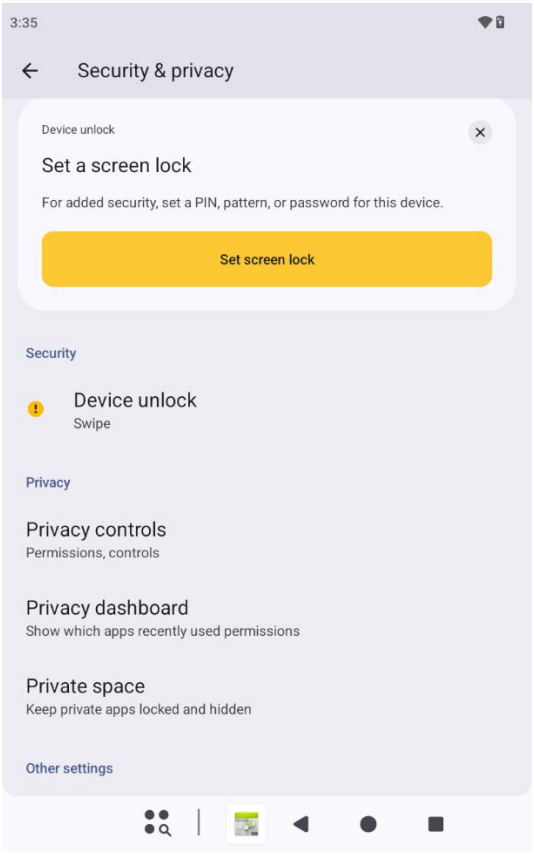
Primary Functions:

Authentication Management: Provides screen locking mechanisms, supporting PIN codes, patterns, passwords to prevent unauthorized physical access.

App Permission Control: Centrally manages access permissions for all applications to sensitive resources (such as Location, Contacts, Microphone, and Camera), implementing the "principle of least privilege" to prevent privacy leaks.

System Security Protection: Includes mechanisms such as Google Play Protect (or vendor-specific security centers) to scan for malware and viruses in real-time, detect unsafe application behaviors, and provide system updates to patch potential vulnerabilities.

Device Tracking & Protection: Offers a "Find My Device" feature that allows users to remotely locate, lock, or erase data if the device is lost or stolen.



3.5.8 Passwords, passkeys & accounts

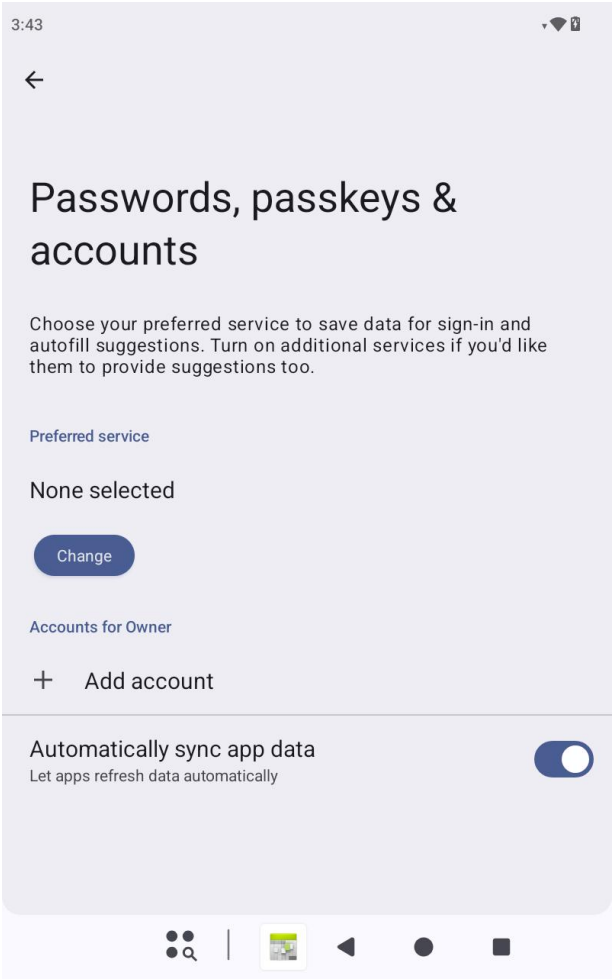
This module serves as the identity authentication and data synchronization management hub of the Android system. It integrates credential management frameworks with account sync services, designed to simplify the user login process, enhance account security, and enable seamless data flow across multiple devices.

Primary Functions:

Credential Auto-Management: The system automatically stores, fills, and updates login credentials for apps and websites. It provides strong password generation suggestions and includes leak detection to alert users if their password has been exposed in a data breach.

Centralized Account Management: Unifies the management of all online accounts configured on the device (such as Google, Exchange, and OEM accounts). Users can add, remove accounts, or modify account synchronization settings here.

Data Synchronization Control: For each account, users can precisely control the types of data to be synchronized (such as Contacts, Calendar, Mail, and Photos), ensuring important information remains up-to-date across all linked devices.



3.5.9 Safety & emergency

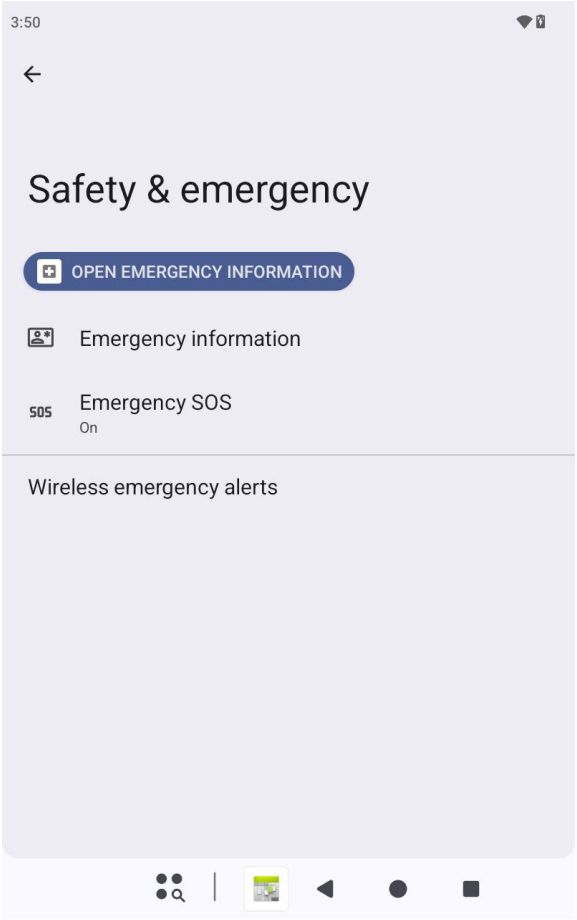
This module serves as the personal safety hub of the Android system, designed to provide rapid response mechanisms for users facing sudden health conditions, traffic accidents, or personal threats. It integrates medical information management, emergency distress triggering, and external safety alert reception to maximize the protection of the user's physical well-being.

Primary Functions:

Emergency SOS: Allows users to set up a quick trigger method (such as pressing the power button 5 times). When activated, the system automatically dials local emergency services (e.g., 110/119/120) and sends a distress message containing the user's real-time geographic location to preset emergency contacts.

Medical Information: Provides a medical profile accessible without unlocking the device. Users can input blood type, drug allergies, chronic conditions, and doctor contact information, enabling first responders to access critical medical data in emergencies.

Wireless Emergency Alerts: Receives and displays emergency warnings issued by government or public safety agencies (such as Earthquake Early Warnings, Tsunami Alerts, and AMBER Alerts). These alerts trigger a high-volume notification even if the device is in silent mode.



3.5.10 DuraSpeed

Function Description: A system-level process management tool customized by MediaTek. It enhances app responsiveness, mitigates performance degradation, and optimizes battery life through background process control and foreground resource prioritization. Supports whitelist configuration to balance foreground experience and background requirements.

Key Functions:

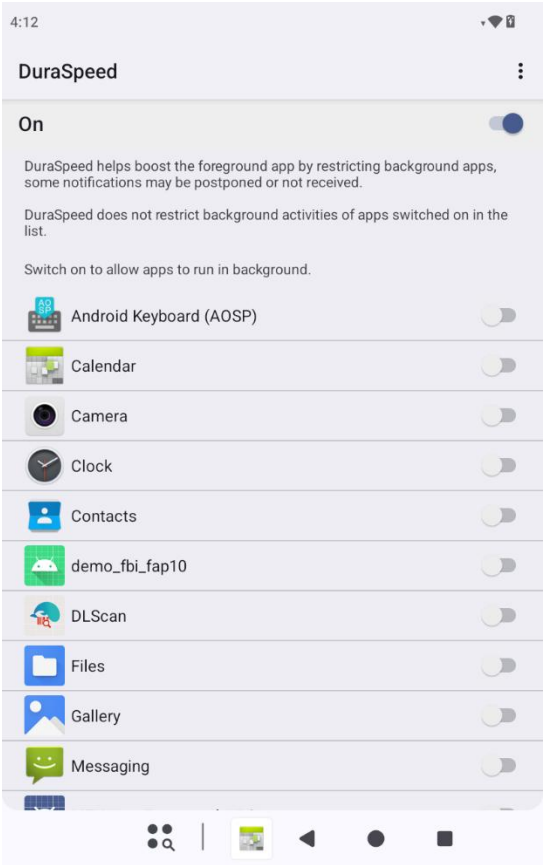
Background Process Restriction: Limits background activities, service starts, and cross-app wakeups for non-whitelisted apps to free up system resources.

Whitelist Management: Preset + user-defined app lists to ensure core apps run properly in the background.

Foreground Acceleration: Dynamically allocates resources to reduce launch time and improve foreground smoothness.

Power Optimization: Reduces unnecessary background resource usage to lower overall power consumption.

Usage: Settings → DuraSpeed, enable global toggle and manage app whitelist.



3.5.11 Accessibility

Function Description: A core assistive framework of the Android system that provides interaction enhancement and content adaptation capabilities for users with visual, auditory, motor, or cognitive impairments. It ensures equal and convenient device usage through system-level services and application semantic adaptationAndroid.

Key Functions:

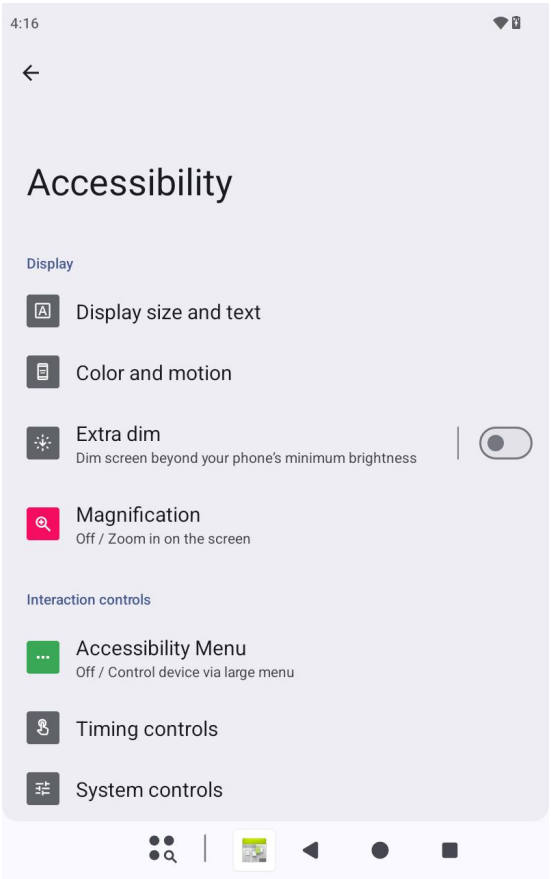
Vision Assistance: Screen reading, magnification, and color adjustment to help visually impaired users perceive on-screen content.

Audio Assistance: Live captioning, sound amplification, and hearing aid compatibility to address audio interaction challenges for users with hearing impairmentsGoogle.

Interaction Assistance: Voice control and switch access to adapt to the operational needs of users with motor impairmentsGoogle.

Shortcut & Permission Management: Quick activation methods and service permission control to balance convenience and security.

Usage: Settings → Accessibility, enable features and configure shortcuts as needed; developers should optimize apps by following accessibility design guidelines.



3.5.12 System

3.5.12.1 Language & region

The Language & region module serves as the localization configuration hub of the Android system, used to define device display language priorities and regional format standards. This feature directly impacts the display of system UI text, application content translation, date and time formats, numeric currency units, and temperature units, ensuring the system environment aligns with the user's language habits and geographic location settings.

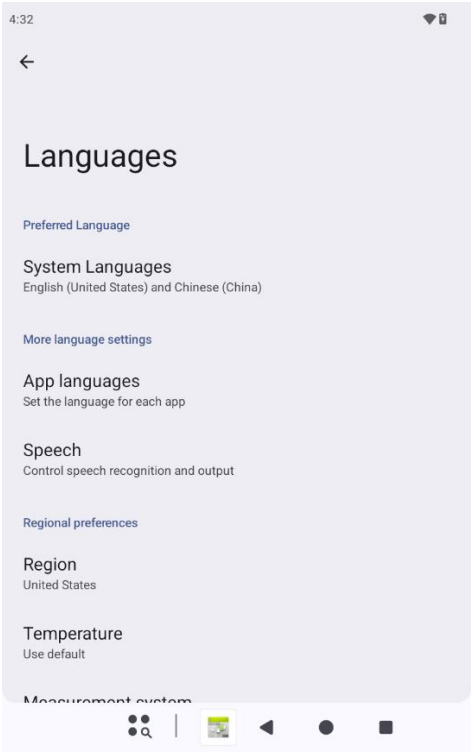
Primary Functions:

System Language Management: Allows users to add, remove, or adjust the priority order of system languages. When an application supports multiple languages, the system automatically selects the most appropriate display language based on this list.

Regional Format Settings: Independent of language, allows users to specify their region (e.g., China, USA, UK). This automatically adjusts digit separators (commas or dots), date ordering (Year/Month/Day or Day/Month/Year), and temperature units.

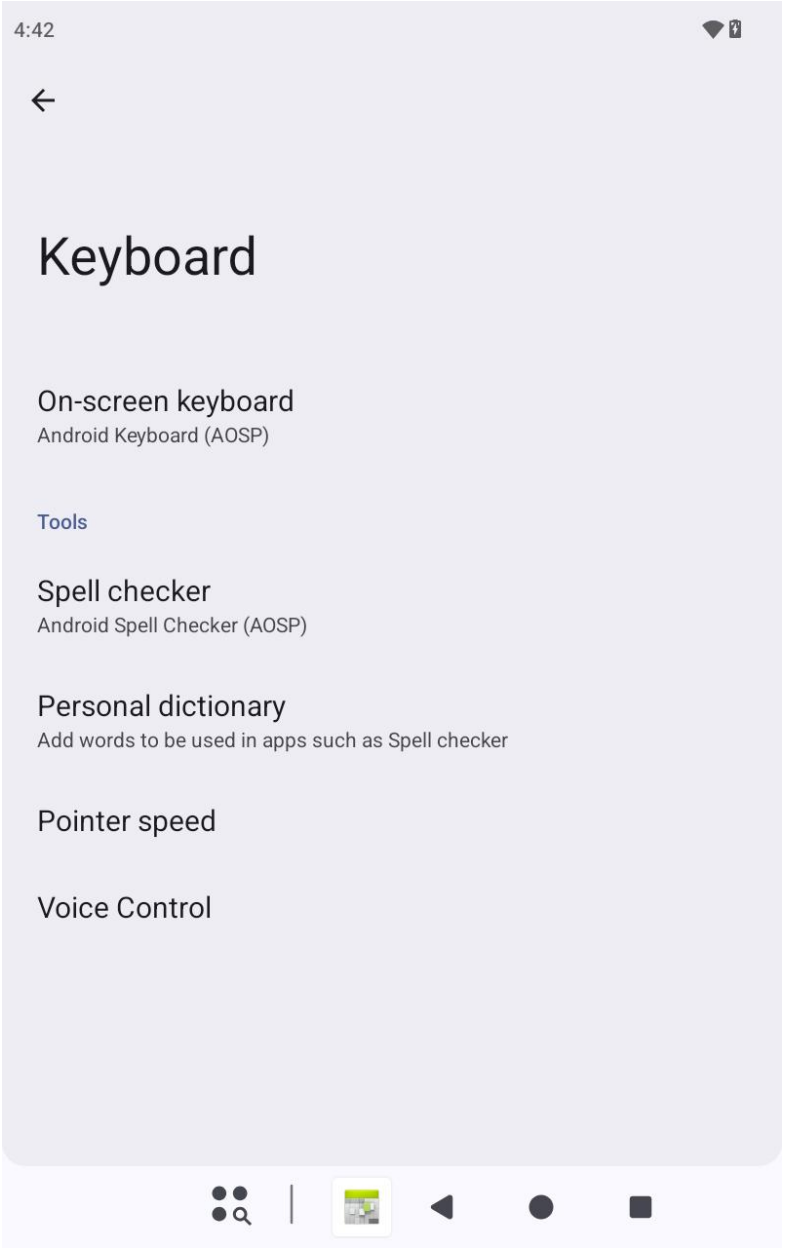
Bilingual Search & Suggestions: Based on the list of added languages, optimizes the system global search and keyboard input suggestion lexicon, supporting mixed multilingual input and search.

App Language Control: (Android 13 and above) Allows users to set a specific language for individual applications without changing the language settings of the entire system.



3.5.12.2 Keyboard

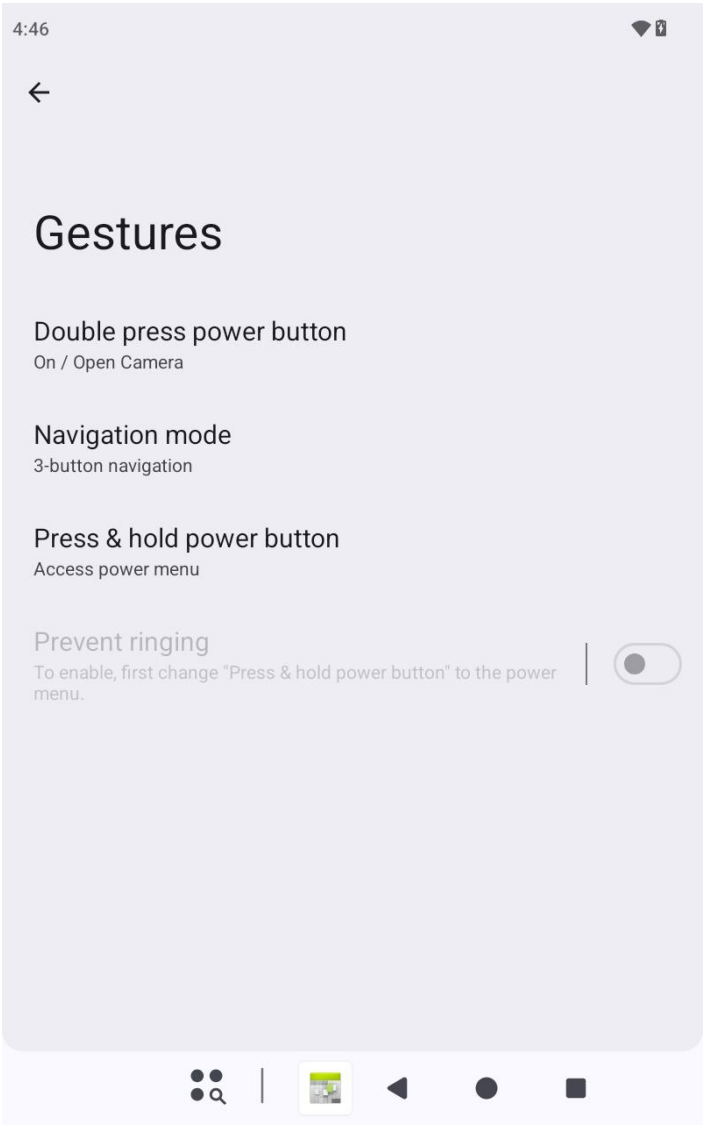
The Keyboard settings module serves as the text input management hub of the Android system, used to configure the layout, behavioral logic, and auxiliary input functions of the on-screen keyboard. This module allows users to manage installed Input Method Editors (IMEs) and deeply customize key feedback, correction mechanisms, and personalization features to enhance the efficiency and comfort of text input.



3.5.12.3 Gestures

The Gestures settings module serves as the non-touch input and navigation interaction management hub of the Android system. It allows users to control system navigation, launch

shortcut functions, and execute system-level operations through preset screen swipe trajectories or physical motions. This feature aims to replace traditional physical buttons, maximize screen real estate, and provide a more intuitive and efficient human-machine interaction method.



3.5.12.4 Date & time

The Date & time module serves as the time reference configuration hub of the Android system, used to manage device time synchronization strategies, time zone settings, and time display formats. This feature ensures the accuracy of the system clock, guaranteeing the proper operation of applications dependent on timestamps, such as the Calendar, Alarms, logging, and certificate validation.

Primary Functions:

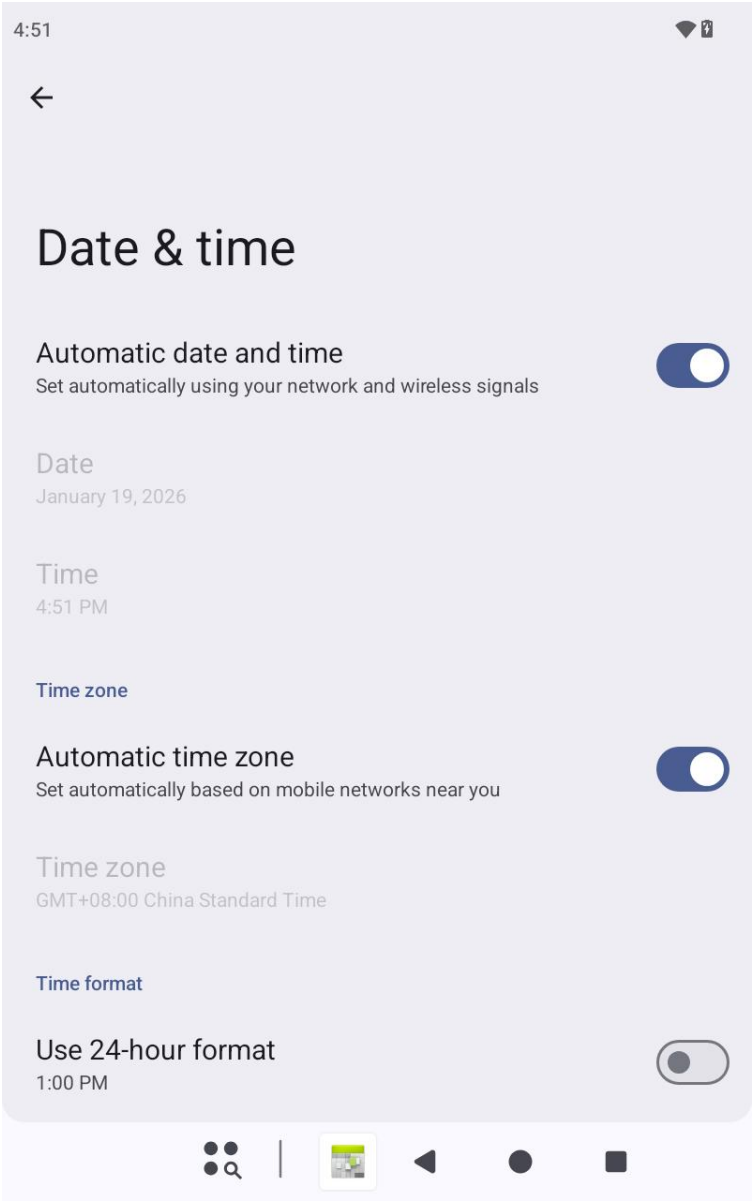
Network Time Synchronization: When "Automatic date & time" is enabled, the device retrieves

standard time from carrier or internet servers via network protocols (NITZ or NTP), automatically calibrating the system clock to eliminate manual setting errors.

Automatic Time Zone Detection: Utilizes network location information to update time zone data automatically. When a user travels across time zones, the system time adjusts in real-time to ensure the timeliness of schedules and reminders.

Display Format Customization: Allows users to switch between 24-hour format and 12-hour format (AM/PM), and adjust date display order (e.g., Year/Month/Day or Day/Month/Year) to align with regional reading conventions.

Manual Calibration Mode: Provides a manual input interface when automatic synchronization is disabled, allowing users to directly modify the year, month, day, hour, and minute, suitable for network-free environments or specific testing scenarios.



3.5.12.5 Users

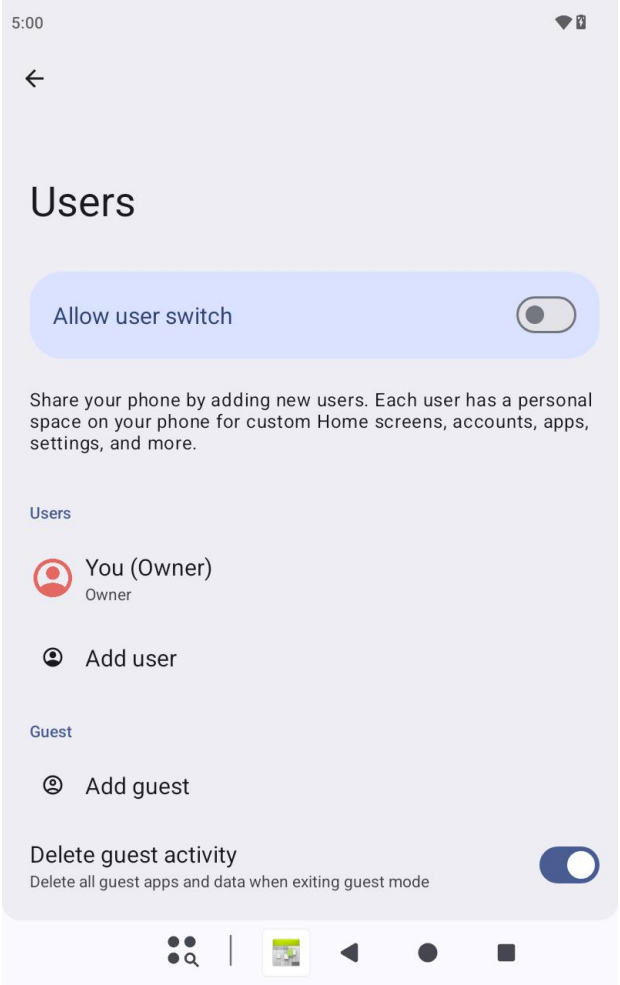
The Users module serves as the multi-user environment management hub of the Android system, supporting the creation and isolation of multiple independent user spaces on a single device. Through system-level sandboxing, this feature provides exclusive application data, system settings, and file storage areas for different users, enabling shared device usage with privacy isolation.

Primary Functions:

Multi-user Environment Creation: Allows the Owner to create multiple Restricted Profiles or standard Users, each with independent app data, wallpapers, accounts, and home screen layouts.

Guest Mode Management: Provides a temporary access mechanism. Guests cannot access the owner's personal data (such as contacts and photos), and the system automatically clears all guest-generated data when exiting Guest Mode to protect the owner's privacy.

Permissions & Controls: The Owner holds the highest administrative privileges for the device and can control whether other users are allowed to make calls, send SMS.



Chapter 4. Accessories and Power Connections

4.Accessories and Power Connections

4.1 Check the packing

Open the package and inspect all parts for shortages and damage.

The main components are: RTC-M82 rugged tablet, adapter, data cable, hand strap

1	RTC-M82 rugged tablet	
2	data cable	
3	adapter	
4	hand strap	
5	Power conversion head *2	

4.2 Power connection

The power supply must be connected for the first time.

1. Open the waterproof plug of the Type-C port. (Flat front, waterproof plug on left side)

2. The Type-C power cable of the power adapter is inserted into the Type-C port of the tablet.
3. Insert the female end of the power cable into the power adapter and the male end into the power socket.
4. The power outlet supplies power to the panel through an adapter. Now you can power on the tablet.

Chapter 5. Battery Description

5. Battery Description

Your tablet can be powered by an external Type-C power supply or an internal battery pack. This chapter shows you how to effectively use and manage the power supply. For the best battery performance, you should follow the battery usage precautions.

5.1 Power Adapter

NOTE：

- The power adapter only works with your tablet. Misuse for any other purpose may damage the included appliance or adapter.
- The power cable attached to the power adapter meets the specifications of the place of purchase. If you want to use this tablet abroad, please consult your dealer for a suitable power cord.
- When unplugging, do not pull the wire, should hold the plug to pull out.

- Since your tablet runs on direct current, but a power outlet usually provides AC power, the power adaptor's role is to convert the AC power from the power source to the direct current required by the tablet. While connected to the power adaptor, the battery is automatically charged, and the adapter can operate in the voltage range of 100V to 240V AC.

5.2 Battery Pack

- The battery pack is the internal source of power for the tablet and can be charged via a power adapter.
- Note: The time to remove the battery pack is only when the battery is not being charged. .

5.2.1 Battery Charging

- Note: The rechargeable temperature of the battery is between 0 °C and 50 °C.
- Connect the tablet to the power adapter, and plug the power cord of the adapter into the power socket to charge the battery. At this time, the two battery indicators on the tablet will light red, indicating that charging is in progress. When the battery is fully charged, the battery indicator is green.

When the battery is low, connect the adapter, put the tablet to sleep, or turn off the tablet power immediately.

- Note: Do not unplug and connect the power adapter immediately after the battery is fully charged, as the battery may be damaged.

5.2.2 Replace Battery Pack

Note:

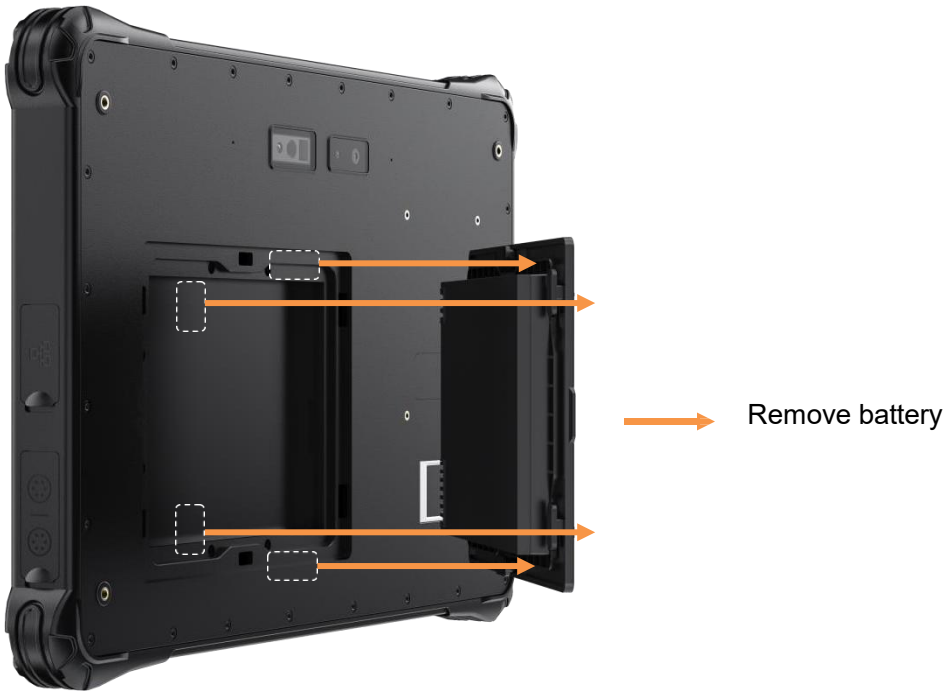
• Battery replacement errors can cause an explosion. Be sure to use the original battery supplied by the flat plate when replacing the battery. Follow the manufacturer's instructions when discarding old battery packs.

• Do not disassemble the battery pack.

• The battery pack will get hot under prolonged operation. Do not touch the hot battery pack with your bare hands. After removing the battery pack, place it in a well-ventilated place.

• Note: Be sure to turn off the device when replacing the battery so that the device can save the work in progress.

1. Carefully flip the tablet so that the bottom is facing up.
2. Push the four battery door locks to the unlocked position ( ).
3. Remove the battery pack.



Chapter 6. Product Maintenance

6.Product Maintenance

6.1 Protective Tablet

To protect the data integrity of the tablet and the security of the tablet itself, you can protect the tablet in several ways described in this section.

- Use anti-virus measures

– You can install antivirus software to protect your tablet.

6.2 Flat Maintenance

6.2.1 Environmental Standard

- To ensure optimum performance, use the tablet in the recommended temperature range of 0 °C to 40 °C. (Actual operating temperature depends on product specifications.)
- Avoid humidity, extreme temperatures, vibration, direct sunlight and places with a lot of dust when using the slab. Long-term use of tablets in extreme environments can lead to product degradation and shortened product life.
- Do not operate in an environment containing metal dust.
- The plate should be placed on a stable and firm surface. Do not store the tablet on its side or turn it upside down. A strong impact from a drop or blow may damage the tablet.
- Do not cover or block any vents on the tablet. For example, do not place the tablet on a bed, sofa, rug, or other similar surface. Otherwise, the tablet will be damaged due to overheating.
- The tablet will generate high temperatures during operation. Please keep the tablet away from items that are easily damaged by heat.
- The flat tablet should be at least 13cm away from electrical appliances that generate strong magnetic fields, such as televisions, refrigerators, motors, or large loudspeakers.
- Do not immediately move the tablet from cold to warm. If the temperature difference between the two places is higher than 10 ° C, it will condense water vapor inside the machine and damage the storage medium.

6.2.2 General criterion

- Do not place heavy objects on the tablet to avoid damaging the screen.
- To protect the LCD screen from damage, do not touch the screen with sharp objects.
- Leaving the LCD screen to display a fixed image for a long time may cause image residue. Limiting the length of time the screen displays static content can help avoid this problem. It is recommended that you use a screen saver or turn off the screen when not in use.
- To extend the life of the screen backlight, turn off the automatic backlight from the power management.

6.2.3 Clean-up criteria

- Do not clean the tablet during tablet startup.
- When cleaning the outside of the fuselage, wipe it with a soft cloth dampened with water or alcohol-free detergent.
- When cleaning the screen, wipe it with a soft cloth free of debris.
- If the plate gets wet with water or other liquids, dry it when you can. Although your tablet is waterproof, However, it is still not suitable for the tablet to remain wet while it can be wiped dry.
- Flat tablet wet at 0 °C may cause frostbite. Be sure to wipe the wet tablet dry.

6.2.4 Battery criteria

- Batteries are consumables, and the following conditions will shorten their service life：

– Charge the battery frequently

– Use, charge or store batteries in high temperature environments

- In order to avoid accelerating the aging of the battery and extending its service life, the number of charging times should be minimized to avoid the internal temperature rising frequently.
- Charge the battery in a temperature range of 10 °C to 30 °C. Higher ambient temperatures cause battery temperatures to rise. Avoid charging batteries in closed cars and in hot weather conditions.
- Do not charge the battery multiple times in one day.
- It is recommended that you charge the battery with the tablet off.
- If you need to remove the battery for storage, in order to maintain the operating efficiency of the battery, please remove it from the tablet when the remaining power is 30% to 40%, and then store it in a cool and dark place.
- Note the following when installing or removing batteries：

– Do not touch the battery terminal. Otherwise, it may cause damage, which may cause the battery or tablet to work improperly.

- The input voltage and ambient temperature of the plate directly affect the charging and discharging time of the battery：

– The charging time is extended when the tablet is active.
– To shorten the charging time, it is recommended to put the tablet in sleep or hibernate mode.
– The low temperature will lengthen the charging time and shorten the discharge time.
• When battery power is used at extremely low temperatures, there may be shortened operating time and incorrect power display values. This is due to the chemistry of the battery.
• Do not store the battery for more than six months without charging it.

6.2.4 Touch screen criteria

• Use your finger or touch screen pen to operate on the touch screen. If sharp or metal objects are used, the display may be scratched and damaged, leading to errors.
• Use a soft cloth to wipe the dust off the display. The touch screen surface has a special protective layer to prevent dust from adsorbing on it. If a soft cloth is not used, the special protective layer on the touch screen surface may be damaged.
• Turn off the panel power before cleaning the display. Cleaning the display when it is turned on May cause abnormal operation.
• Avoid pushing too hard on the screen. Do not place items on the screen to avoid screen breakage and damage.
• In low and high temperature conditions, the touch screen response speed may be slow or the touch position may be offset. After reaching room temperature conditions, it can return to normal.

6.3 Carry it on long trips

• Make sure the battery is fully charged.
• Power supply should be turned off properly.
• All protective covers should be securely covered to ensure the waterproof performance of the tablet.
• Carry a tablet power adapter with you. Use a power adapter as a power supply with a battery charger.
• The tablet must be carried with you on the plane and never hauled in the suitcase.
• If you want to leave the tablet in the car, place it in the trunk to avoid overheating.
• When going through airport security, it is recommended that you take the tablet and disk to the X-ray machine (the machine where you put your carry-on luggage). Magnetic field detectors (including arched door machines you walk through and handheld detectors held by security personnel) should be avoided.
• When traveling overseas with a tablet, check the local national power cord specifications.

Chapter 7. FAQ and Warranty

7.FAQ & Warranty

7.1 Preliminary Inspection Items

●When you encounter a problem, you may wish to do the following preliminary checks, perhaps at this stage you can solve the problem:

- Try to identify the source and type of problem.
- Make sure you power on the peripheral before turning on the tablet.
- If there is a problem with the external device, make sure that all lines are properly and securely connected.
- Observe the actual situation. Does any information appear on the screen? How is the light on? When you have to ask for help from maintenance personnel, the more detailed the information you provide, the better.

●If the problem persists after following the instructions in this chapter, contact your authorized distributor for assistance.

7.2 Reboot

●When the tablet crashes due to a problem, you may need to restart the tablet.

●If it is determined that the tablet has crashed and you cannot use the restart function provided by the operating system, restart it in one of the following ways:

- Press and hold the power button for more than 5 seconds to force the tablet off. Then turn it on again.

7.3 Warranty and After-sales Service

●If the machine fails, contact your original retailer with the product name, serial number and details of the problem.

Darveen Co., Ltd.
Email: sales@darveen.com
www.darveen.com