



Newland



Information Terminal

**User
Guide**

Revision History

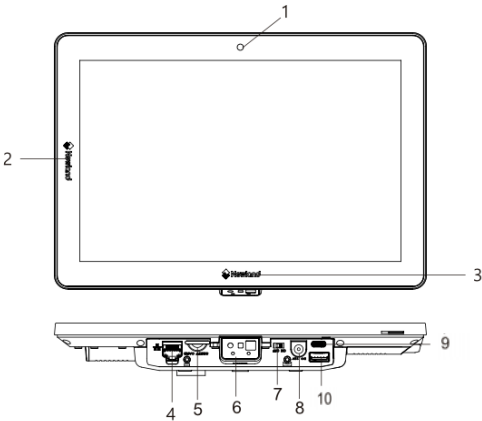
Version	Description	Date
V1.0	Initial release.	Mar 8th, 2024
V1.1	Update the first page	April.28 th , 2024

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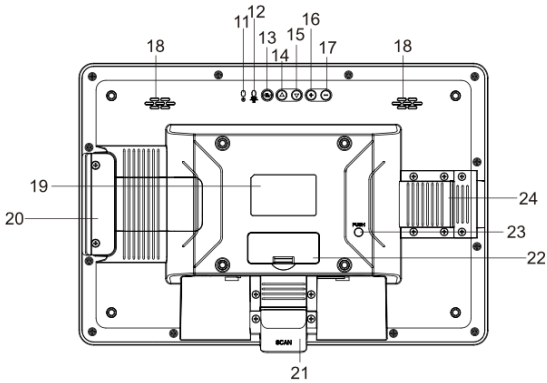
Chapter 1 Device Instruction & Installation

Hardware Instruction



1 Camera	2 Logo LED #1
3 Logo LED #2	4 RJ45 Ethernet Port
5 SIM/TF Card Slot	6 Barcode Scanner (Option)
7 Power Switch	8 DC-In Jack
9 Type-C USB Port	10 Type-A USB Port

Note: NLS-NQuire500 does not have type-A USB Port



11 Power LED Indicator	12 Ethernet LED Indicator
13 Menu key	14 Up Key
15 Down Key	16 Vol+ Key
17 Vol- Key	18 Speaker
19 Product Label	20 Expansion Slot Cover
21 Barcode Scanner (Option)	22 Expansion Slot Cover
23 Push-to-Release-Hole	24 Scanner Connector Cover

Hardware Instruction & Operations

(Installation & Uninstallation)

1. LED Indicator



Power Status	Red LED is solid on	Power supply is on.
	Red LED is Off	Power supply is off.
Ethernet Connection	Green LED flashes constantly	Network connected
	Green LED is solid on	Network disconnected

2. Sim/IF Installation

- 1) Release the screw on the SD card cover
- 2) Remove SD card cover
- 3) Insert SD card into the push-push SD card slot

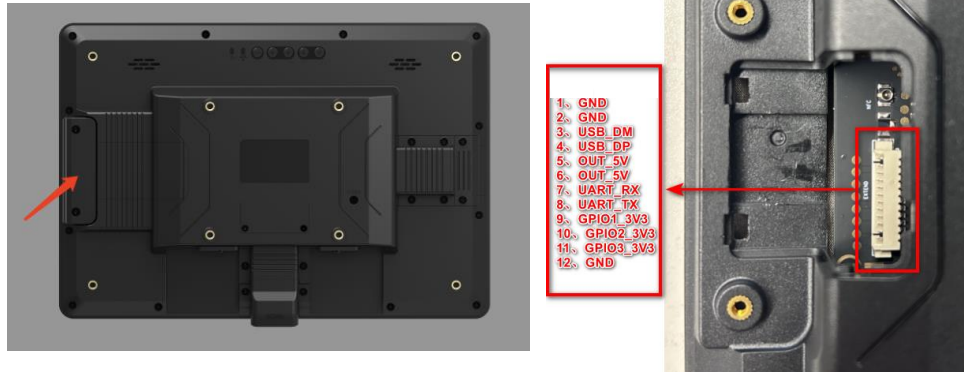


3 Push Buttons



From left to right, they are the menu key, up key, down key, volume +, and volume -.

4. Expansion Slots & Add-on modules

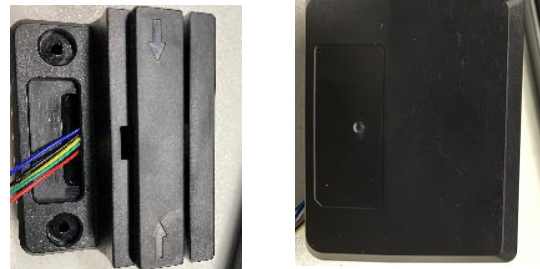


ADD-ON MODULES

NFC MODULE

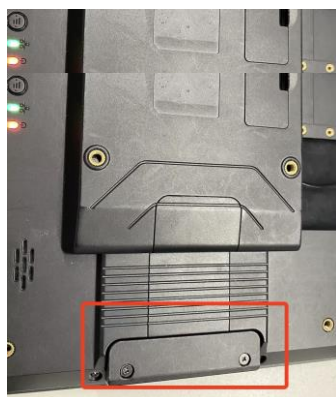


MSR MODULE



INSTALLATION (Enable the NFC/MSR in the system setting first)
Below is an example of NFC installation

1. Unscrew and remove the covering part.



2. Gently lift the cover up with your hand.



3. Plug the jack of the antenna into the socket, then install the cover.

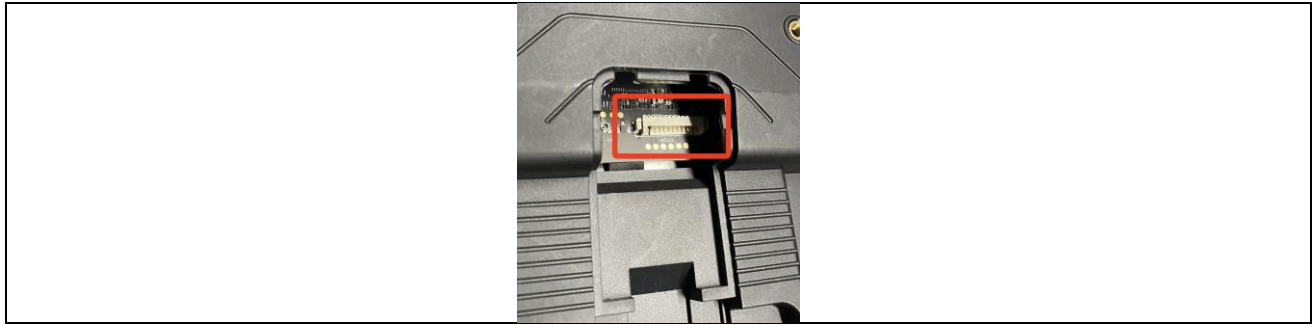


4. Remove the cover of the NFC antenna and secure it with a screw to ensure the fixation of NFC and NQuire



5. Install the cover of the NFC antenna

Notes: The installation steps for MSR are similar to NFC.
Connect the MSR to the NQuire jack as shown below

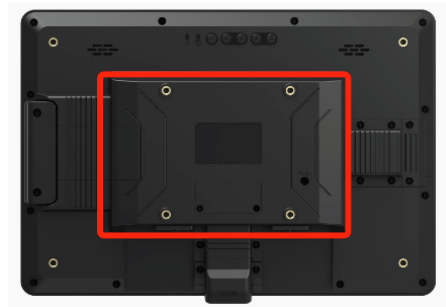


5. Speaker

Dual audio output.

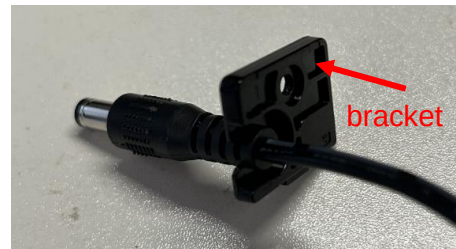
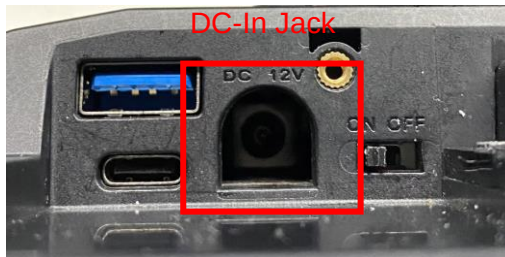


6. Vesa Mount Holes



7. DC-In Jack

Plug the power adapter into the power jack, and fix the position with a bracket to prevent it from loosening.



8. Barcode Scanner

The scan engine is set up in auto mode as the default setting. LED will light up when any object shows in front of the barcode scanner within proper distance, and the barcode engine will automatically scan when a barcode showed within a proper distance.

Notes: The scanner head can be changed from horizontal to vertical use:

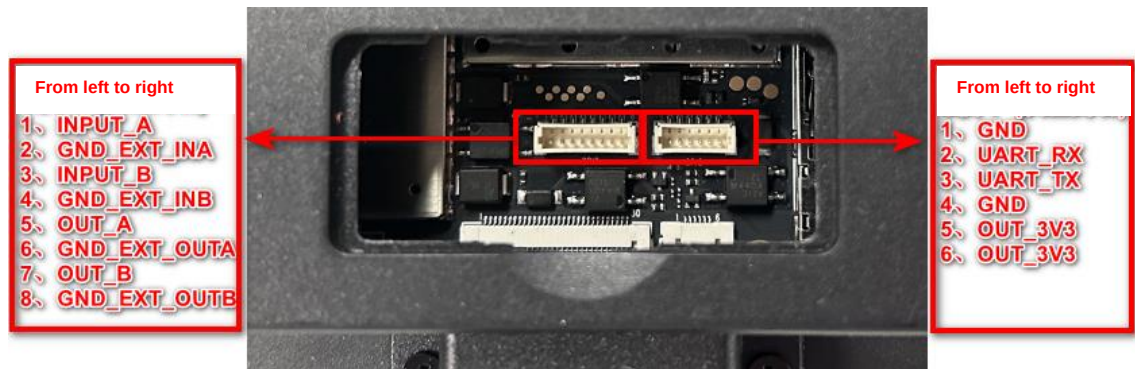
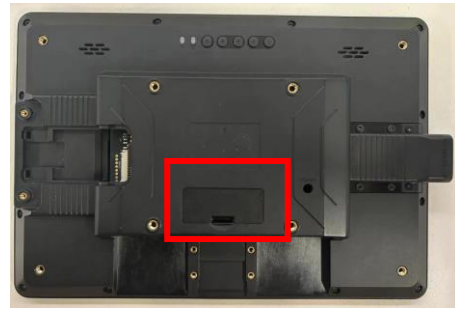
- 1) Unscrew the screw to remove the scanner head.
- 2) Insert it into the vertical position and tighten the screw.



9. Control I/O Ports & Cover

There are UART(3.3V) & GPIO under the Control IO cover.

The Control I/O ports match with 1mm pitch connectors: 8-pin on the left and 6-pin on the right, as shown in the figure below.

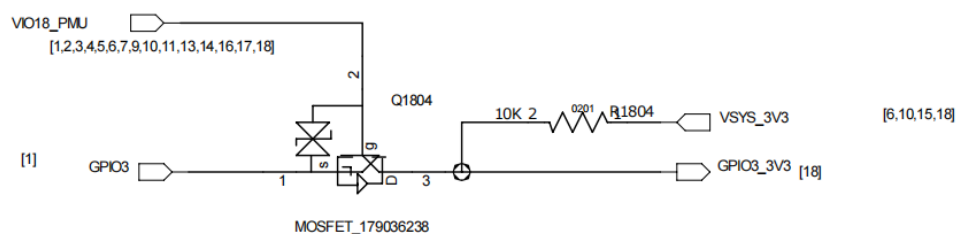
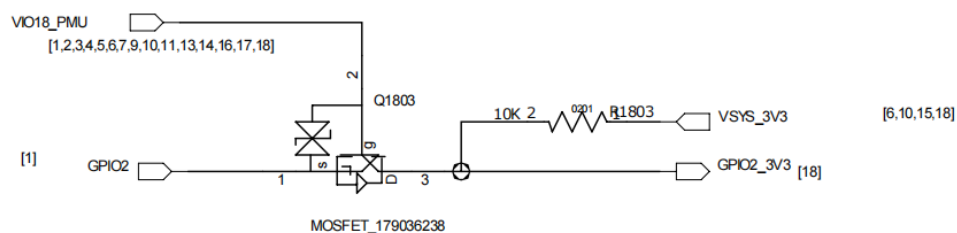
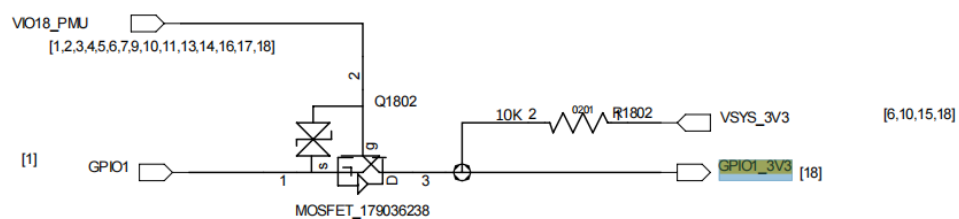


8-pin connector

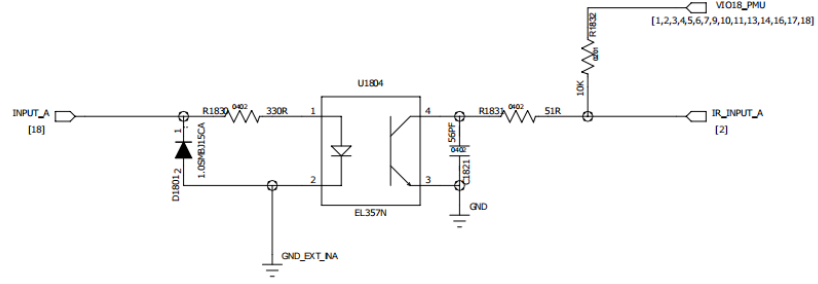


6-pin connector

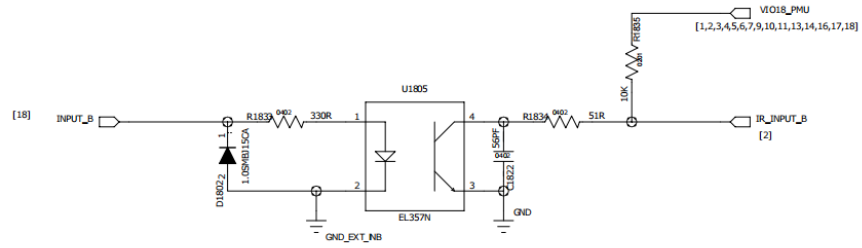
Typical Application Circuit for GPIO:



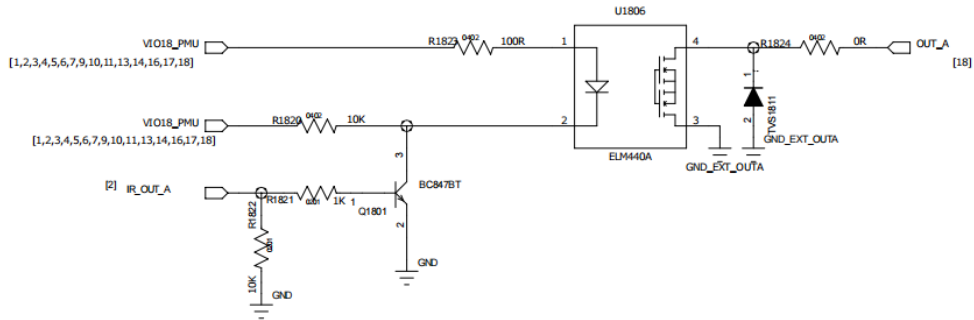
INA



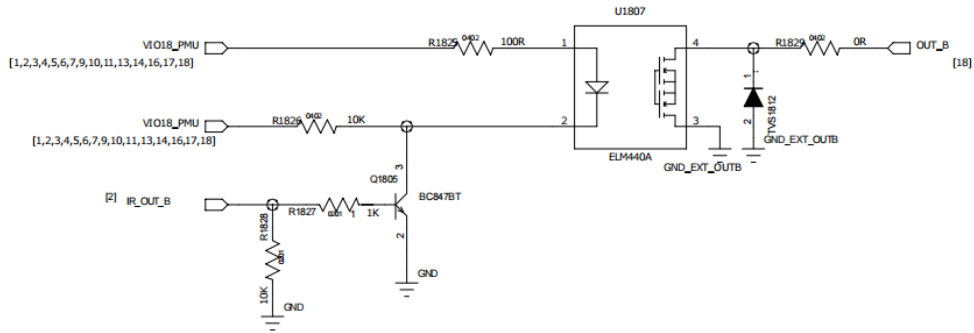
INB



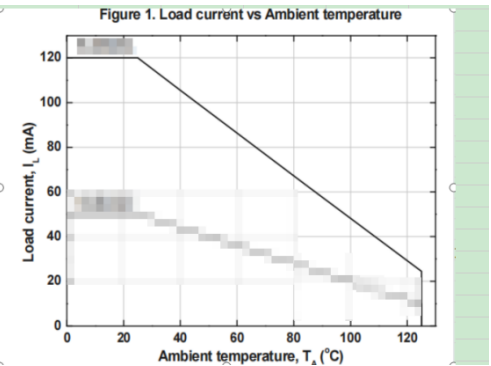
OUT_A



OUT_B



NET NAME	CONDITION	RESULT	REMARK
GPIO1_3V3	GPIO1_3V3=L/H	GPIO1=L/H	INPUT & OUTPUT PS:It is used as an interface for purchasing accessories
	GPIO1=L/H	GPIO1_3V3=L/H	
GPIO2_3V3	GPIO2_3V3=L/H	GPIO2=L/H	
	GPIO2=L/H	GPIO2_3V3=L/H	
GPIO3_3V3	GPIO3_3V3=L/H	GPIO3=L/H	
	GPIO3=L/H	GPIO3_3V3=L/H	
INPUT_A	INPUT_A=INT_VCC	IR_INPUT_A=L	INPUT
	INPUT_A=GND_EXT_INA	IR_INPUT_A=H	
INPUT_B	INPUT_B=INT_VCC	IR_INPUT_B=L	
	INPUT_B=GND_EXT_INB	IR_INPUT_B=H	
OUT_A	IR_OUT_A=L	OUT_A=OUT_VCC	OUTPUT
	IR_OUT_A=H	OUT_A=GND_EXT_OUTA	
OUT_B	IR_OUT_B=L	OUT_B=OUT_VCC	
	IR_OUT_B=H	OUT_B=GND_EXT_OUTB	



Electrical Characteristics:

GPIO1_3V3, GPIO2_3V3, and GPIO3_3V3 voltage requirements are equal to 3.3V.

OUT VCC (external connection required) should be externally connected and requires an external series circuit. The series circuit size is set based on current requirements. The voltage requirement for OUT VCC is not greater than 24V. It is required that the current into the device from OUT-A and OUT_B inputs be less than 80mA at 60 degrees Celsius (subject to temperature variations, refer to above diagram).

INT_VCC (external connection required) voltage requirement is not less than 3.3V and not greater than 20V. (External series circuit can increase input power supply voltage, with the requirement that the input current does not exceed 50mA.)

10. Interface

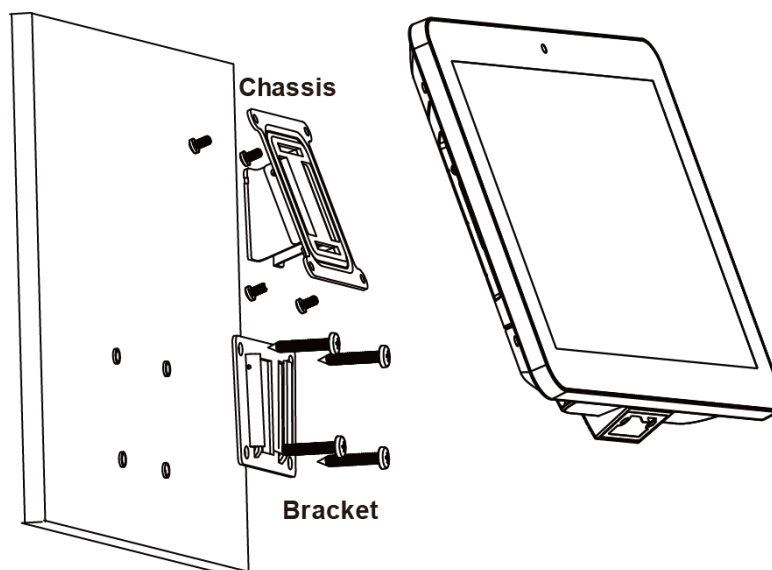
The interfaces are shown as below :



VESA Wall Mount

Installation & Operation

1. Select a mounting location that is convenient for operation.
2. Remove the screw attaching the bracket to the chassis of The VESA 75 mount.
3. For wall mounting, install the four plastic wall anchors in a wall and then secure the bracket of VESA 75 mount to the wall using the four large screws. For countertop/shelf mounting, secure the bracket of VESA 75 mount to a countertop/shelf using the four large screws.
4. Complete all wire/cable connections to the NQuire. Secure the chassis of VESA 75 mount to the back of the NQuire using the four small screws.
5. Attach the bracket back to the chassis with the screw that was removed in step 2.
- 6 For safety reasons, it is advisable not to install the product at a height exceeding 2 meters.
- 7 Adjust the installation height to a reasonable distance based on the usage environment and the settings of the barcode scanner, ensuring it is not less than 60cm

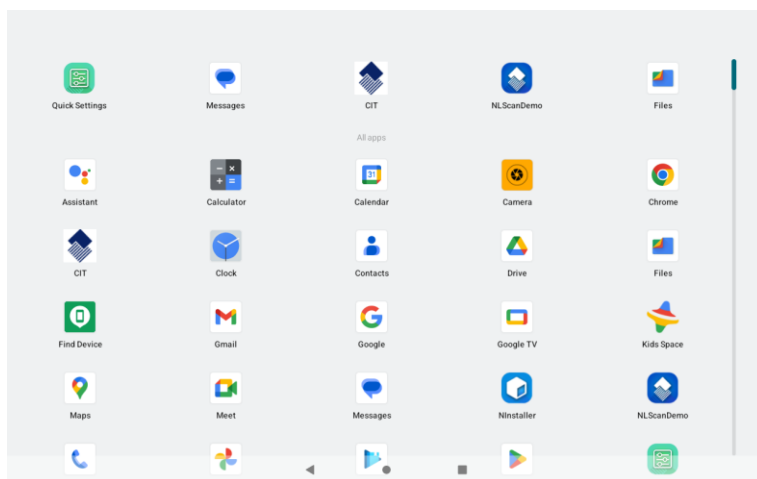
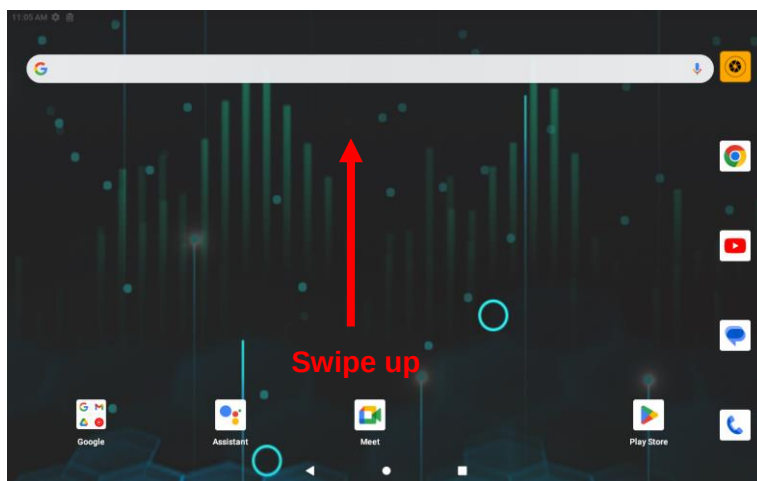


Chapter 3 Feature Programming

Home Screen

Open an app: Tap it.

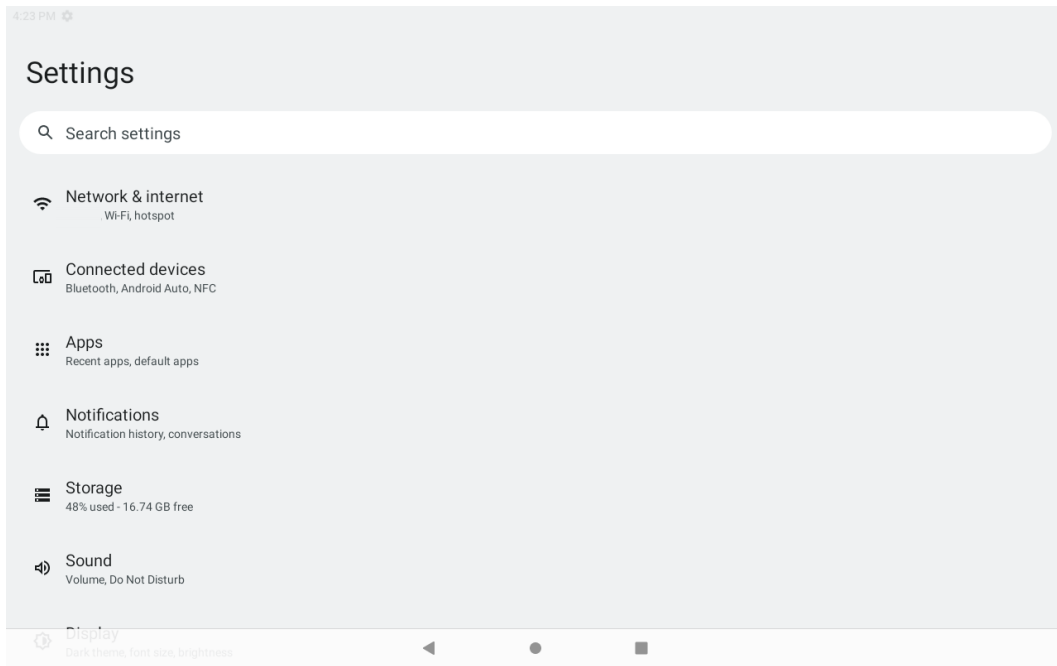
View all apps/Open apps list: Swipe up from the bottom of the screen to view all the apps.



Apps list

Network & Internet

Tap the app icon  -> “Network & Internet”, then set Wi-Fi, Hotspot & Tethering, and VPN according to your needs.



Connected Device

Tap the app icon  -> “Connected devices”, and set USB, Bluetooth, and NFC parameters according to your needs.

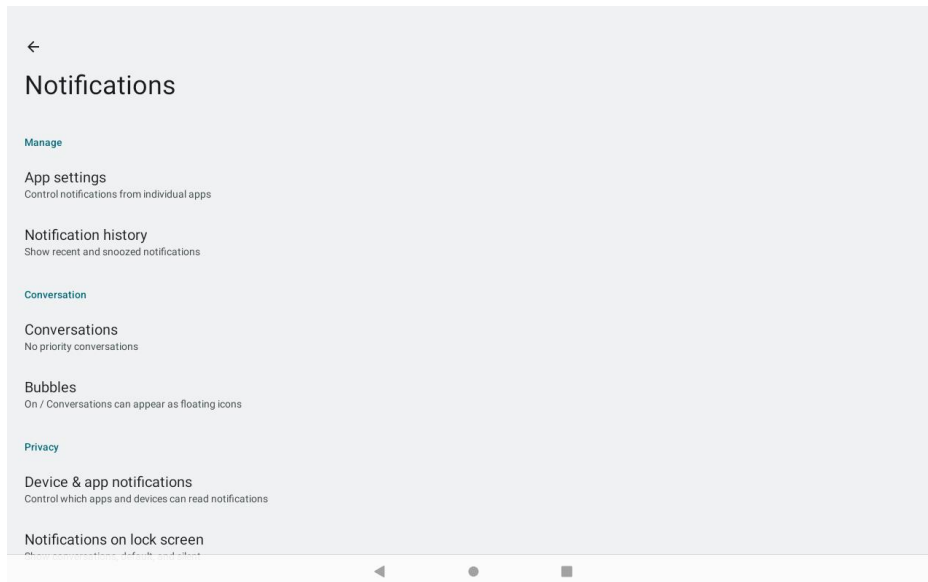
Apps

Tap the app icon  -> “Apps”, then view app usage and handle special app access.



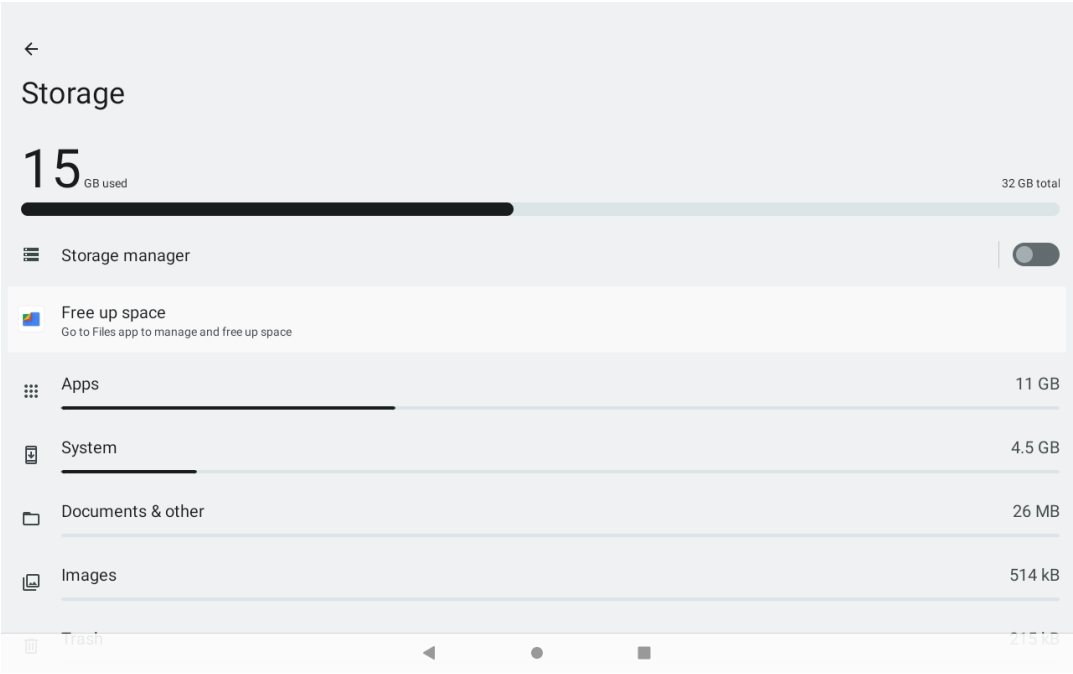
Notification

Tap the app icon  -> “Notification”, then manage device notifications, including notification history, notification on lock screen, do not disturb mode, and other parameter settings.



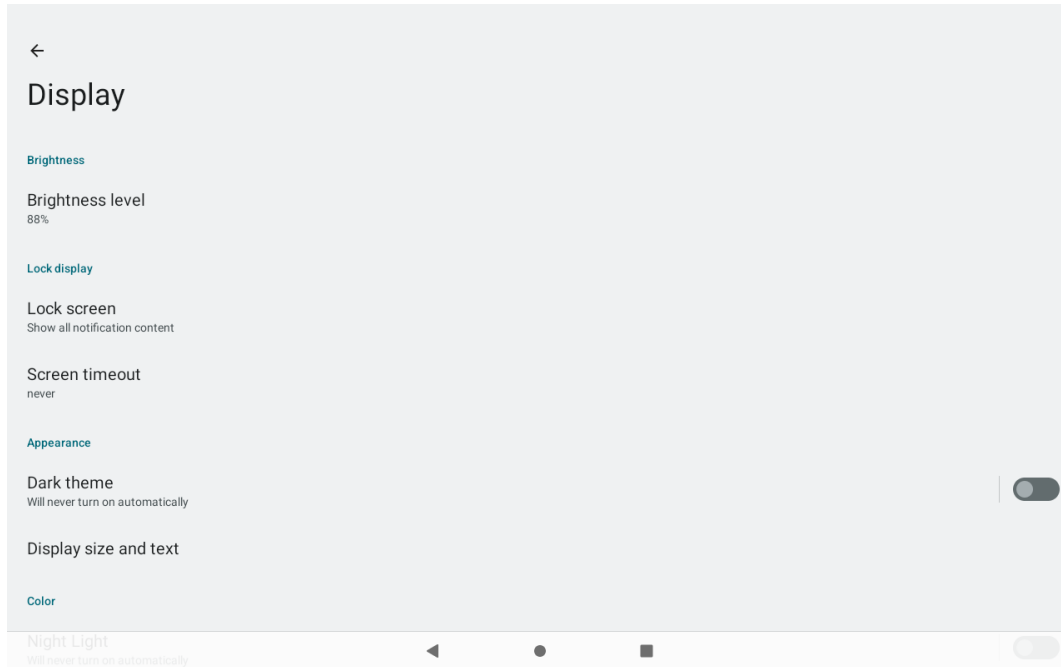
Storage

Tap the app icon  then “Storage” to display the current device storage status and manage storage.



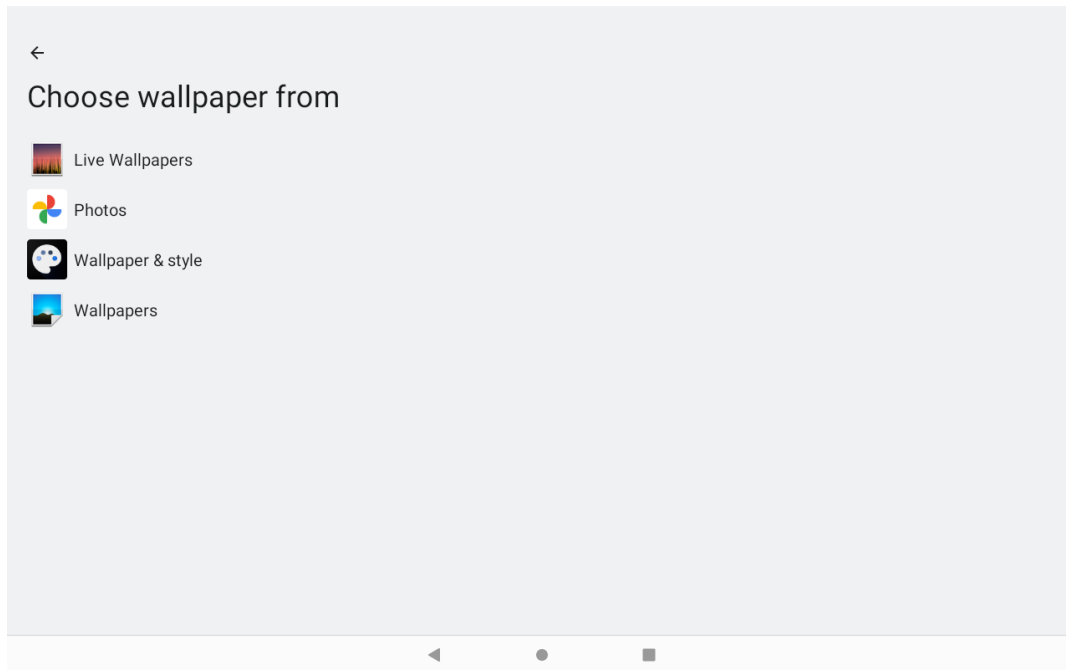
Display

Tap the app icon  -> “Display”, and set the brightness level, dark theme, night light, and other parameters on the screen shown below as per your needs.



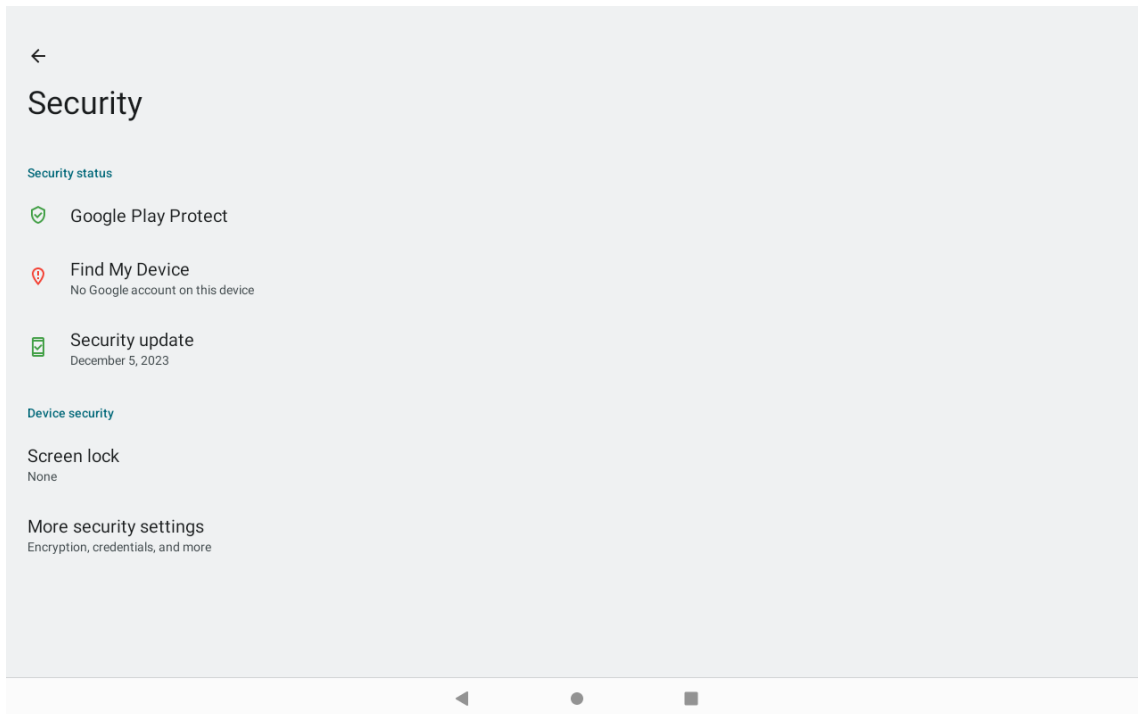
Wallpaper

Tap the app icon  -> “Wallpaper”, and choose the wallpaper for Home screen and Lock screen.



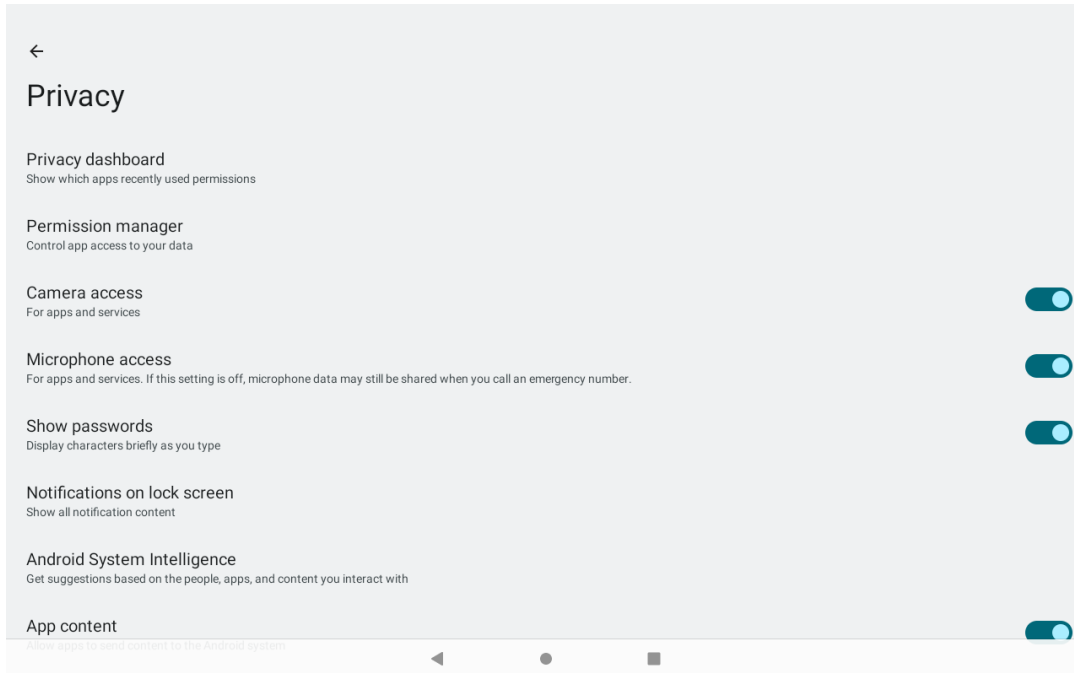
Security

Tap the app icon  and then “security” to set up screen lock, find my device, security updates, and other parameter settings.



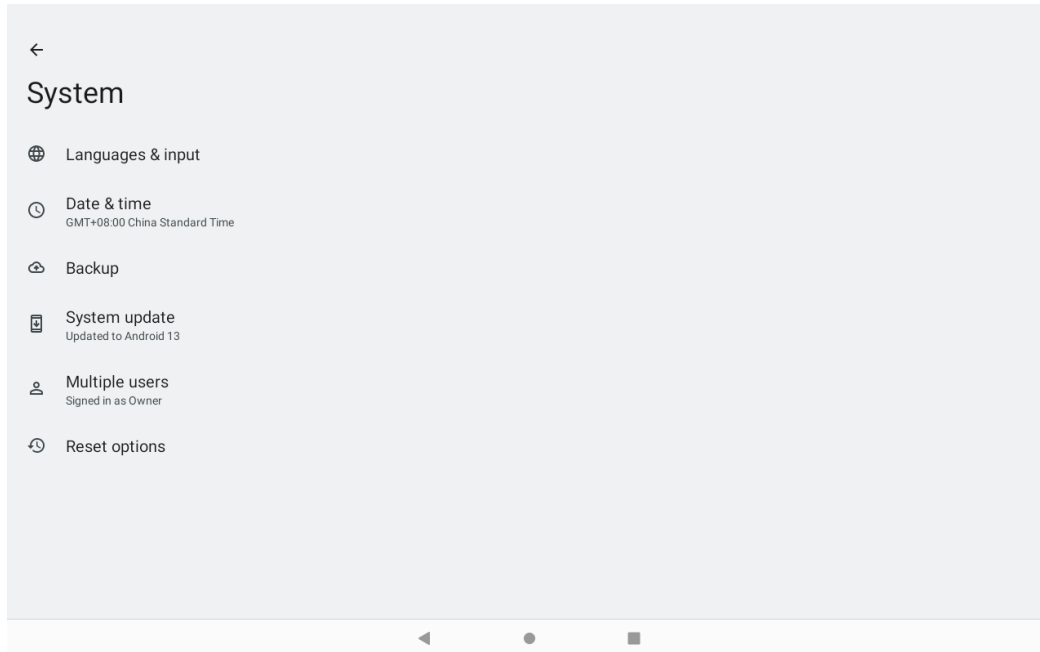
Privacy

Tap the app icon  -> “security”, then view the privacy dashboard and set permission manager, camera access and other parameters.



System

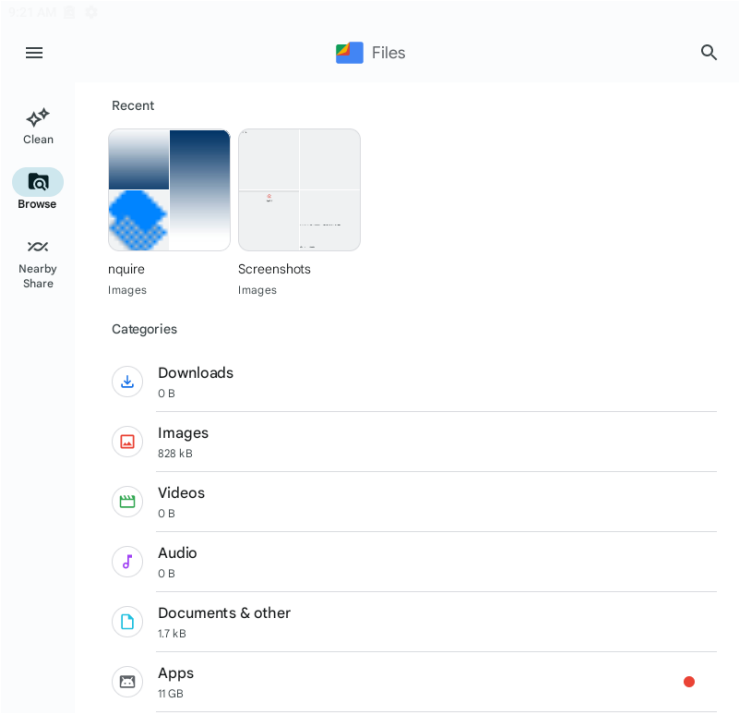
Tap the app icon  -> "system", then set language and input settings, date and time preferences, system updates, and restore factory settings



File Management

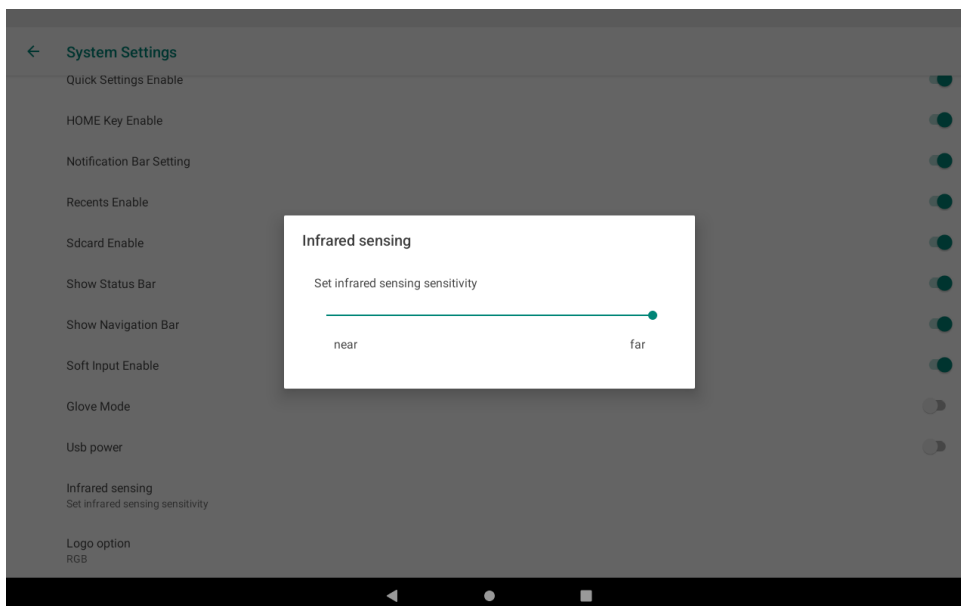
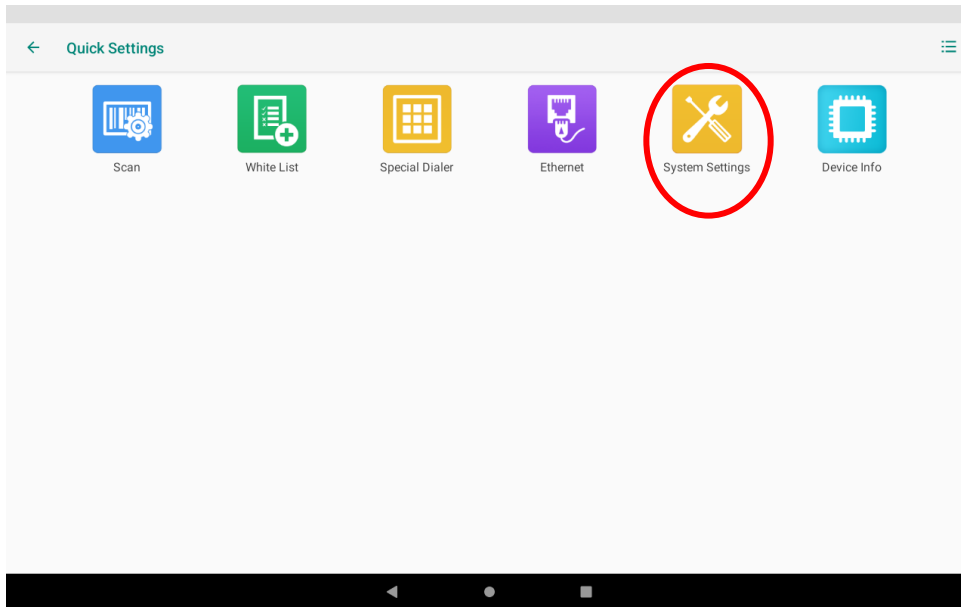


Tap the app icon on the Home screen and then manage all the file on the device.



Infrared Sensing

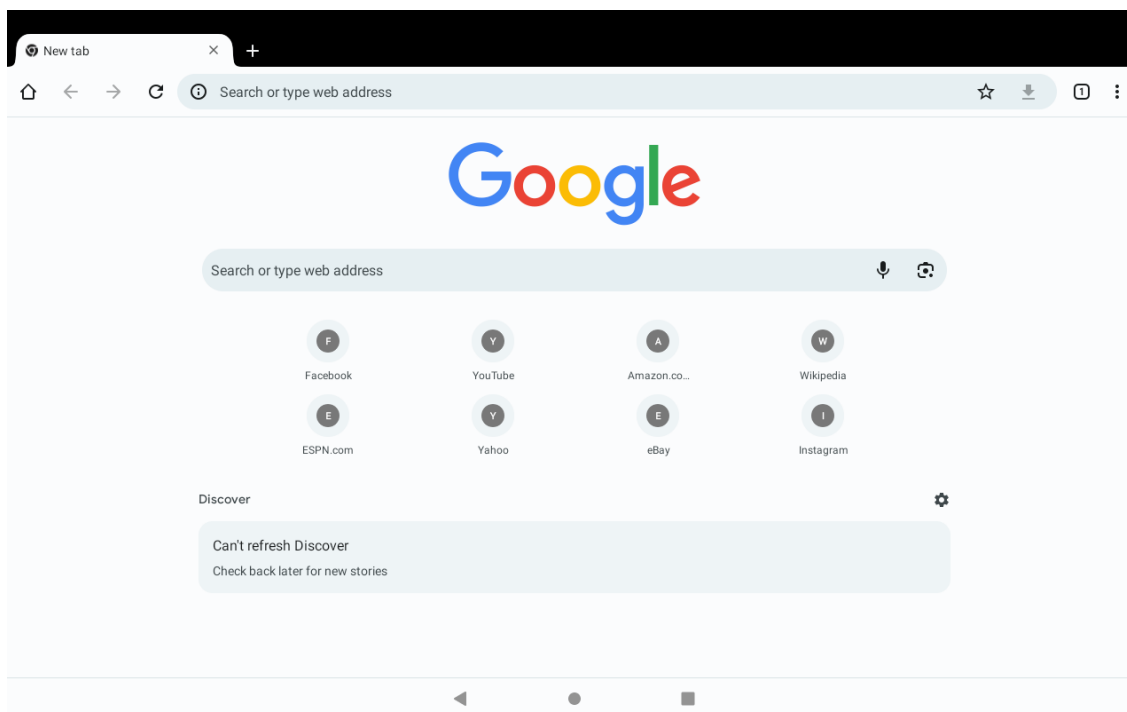
Tap the app icon  on the Home screen then  , and tap “Infrared sensing” to manually set the infrared sensing distance (7cm to 30cm from near to far).



Web Browser



Tap the app icon on the Home screen, and use Google Chrome to log in and access websites.



Ethernet

Tap the app icon  on the Home screen then  to set ethernet parameters. Currently, the default setting is a static IP.

Note: If you intend to connect the device to the internet via Ethernet, ensure Wi-Fi is turned off and insert the Ethernet cable into the device's Ethernet port.

Restoring Factory Settings

Tap the app icon  -> “System” -> “Reset options” -> “Erase all data (factory reset)” -> “Erase all data”. After this operation, the terminal will be reset to factory defaults and all the personal data on the internal storage, such as music and photos, will be deleted.

Chapter 4 Important Safety and Handling Information

- ✓ Please read the instructions carefully before equipment installation and using the device.
- ✓ Do not install the product at a height exceeding 2 meters.
- ✓ Do not put the product in a high-temperature, humid, or dusty environment.
- ✓ Do not drop, crash, or break down this product.
- ✓ Do not power off the device when it's formatting or upgrading; otherwise, it will cause an operating system error.
- ✓ Use only approved add-on enhancements.
- ✓ This product contains button batteries. If swallowed, button batteries can cause severe burns within 2 hours and may lead to death.

FCC Statement

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

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.