Newland
SCANNING MADE SIMPLE

NLS-NQUIRE
1000 MANTA III

Micro Kiosk

User Guide

Disclaimer

Revision History

Version	Description	Date
V1.0	Initial release.	Mar 8th, 2024

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9	Type-C USB port	10	Type-A USB port
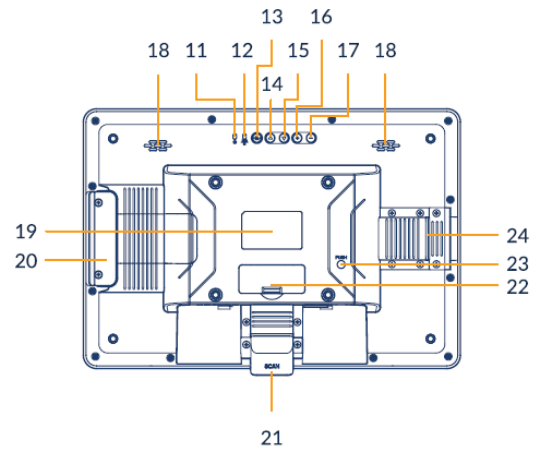
11	Power LED indicator	12	Ethernet LED indicator
13	Menu key	14	Up key
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21	Barcode scanner (option)	22	Expansion slot cover
23	Push-to-release-hole	24	Scanner connector cover

Hardware Instruction & Operations

(Installation & Uninstallation)

1. LED Indicator

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


```
1、 GND
2、 GND
3、 USB_DM
4、 USB_DP
5、 OUT_5V
6、 OUT_5V
7、 UART_RX
8、 UART_TX
9、 GPIO1_3V3
10、 GPIO2_3V3
11、 GPIO3_3V3
12、 GND
```
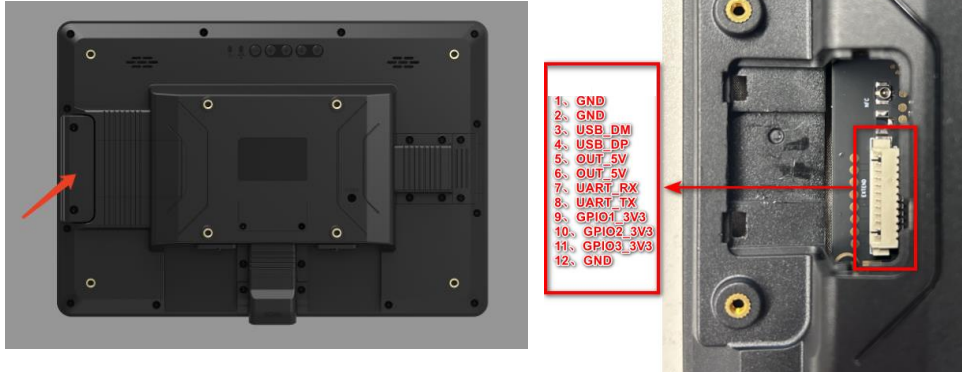
ADD-ON MODULES

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.
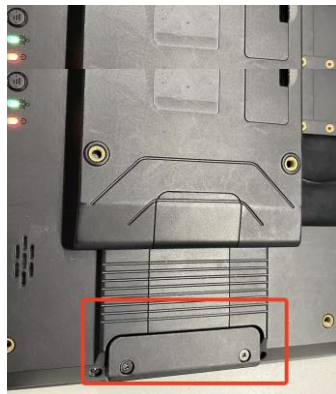
2. Gently lift the cover up with your hand.

3. Plug the jack of the antenna into the socket, then install the cover.
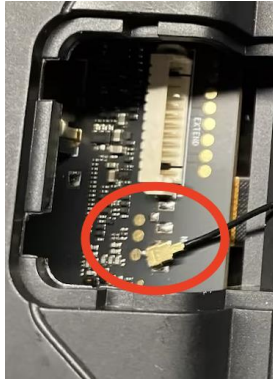
4. Remove the cover of the NFC antenna and secure it with a screw to ensure the fixation of NFC and NQuire

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
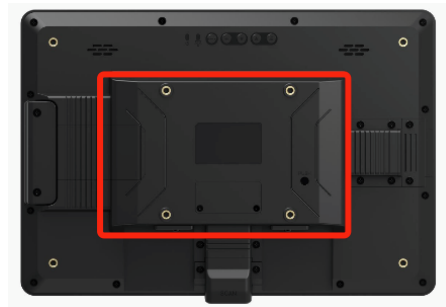
7. DC-In Jack

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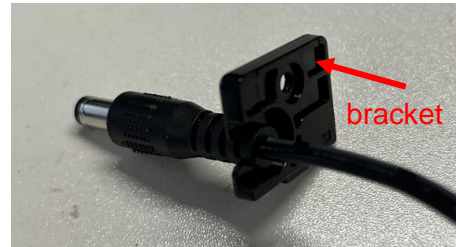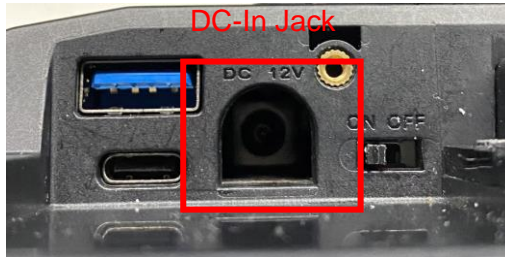
8. Barcode Scanner

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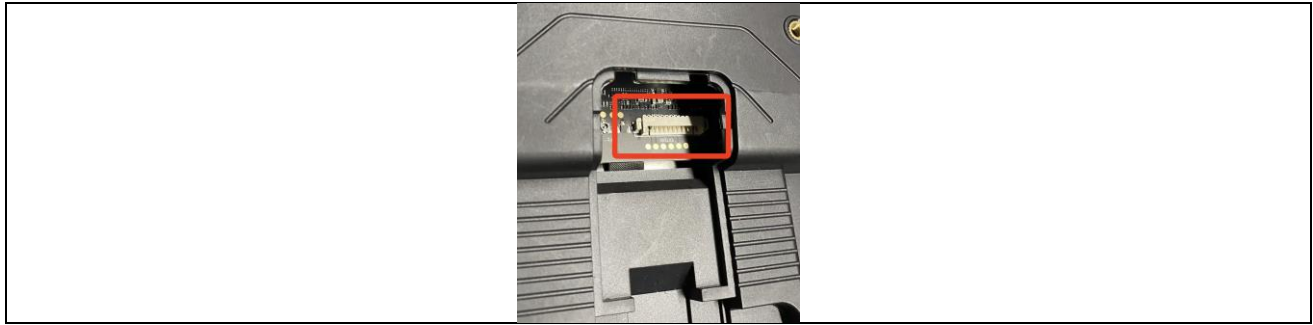
Notes: The scanner head can be changed from horizontal to vertical use:

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.

From left to right

1、 INPUT_A
2、 GND_EXT_INA
3、 INPUT_B
4、 GND_EXT_INB
5、 OUT_A
6、 GND_EXT_OUTA
7、 OUT_B
8、 GND_EXT_OUTB

From left to right

1、 GND
2、 UART_RX
3、 UART_TX
4、 GND
5、 OUT_3V3
6、 OUT_3V3
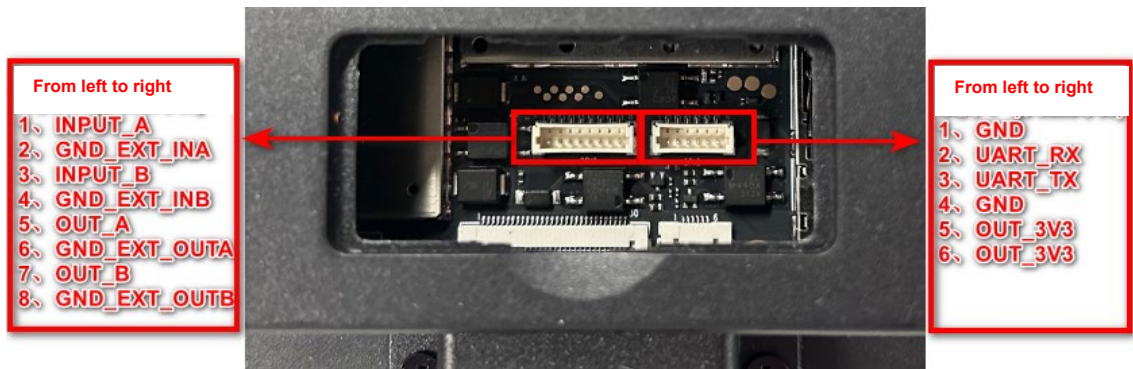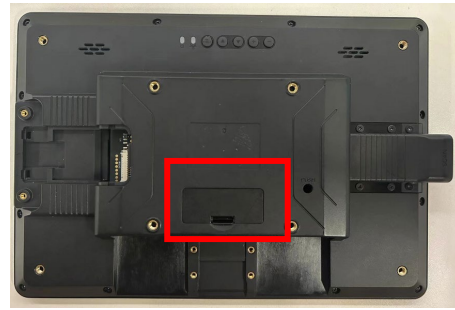
8-pin connector   6-pin connector

Typical Application Circuit for GPIO:

VIO18_PMU
[1,2,3,4,5,6,7,9,10,11,13,14,16,17,18]

Q1802

10K 2   0201 R1802   VSYS_3V3   [6,10,15,18]

[1]   GPIO1

1   D   3   GPIO1_3V3   [18]

MOSFET_179036238

VIO18_PMU
[1,2,3,4,5,6,7,9,10,11,13,14,16,17,18]

Q1803

10K 2   0201 R1803   VSYS_3V3   [6,10,15,18]

[1]   GPIO2

1   D   3   GPIO2_3V3   [18]

MOSFET_179036238

VIO18_PMU
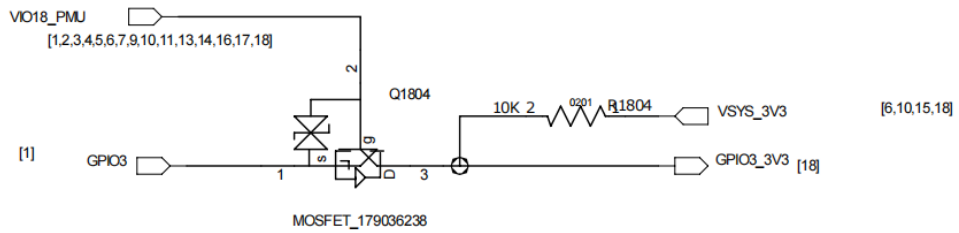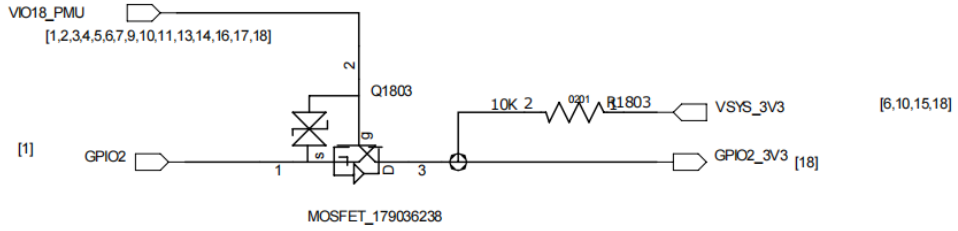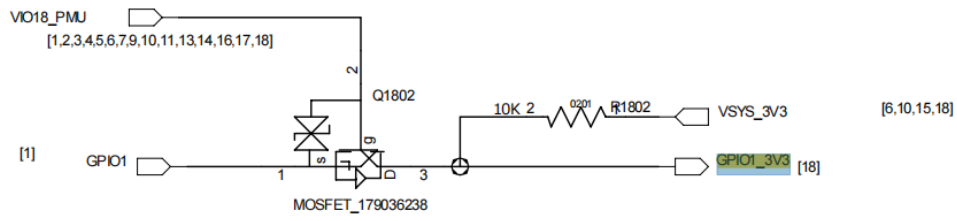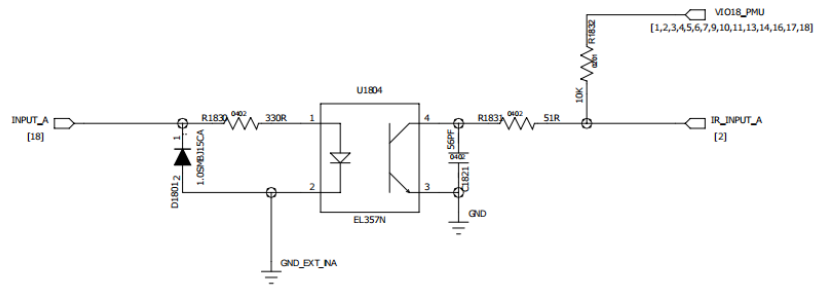[1,2,3,4,5,6,7,9,10,11,13,14,16,17,18]

Q1804

10K 2   0201 R1804   VSYS_3V3   [6,10,15,18]

[1]   GPIO3

1   3   GPIO3_3V3   [18]

MOSFET_179036238

INA

VIO18_PMU
[1,2,3,4,5,6,7,9,10,11,13,14,16,17,18]

10K   0603 R1832

INPUT_A   R1833 0402 330R   U1804   R1831 0402 51R   IR_INPUT_A
[18]   [2]

D1801   1.0SMB015CA

C1821   56PF 0402

EL357N   GND

GND_EXT_INA

INB

VIO18_PMU
[1,2,3,4,5,6,7,9,10,11,13,14,16,17,18]

10K   0603 R1855

[18]   INPUT_B   R1835 0402 330R   U1805   R1834 0402 51R   IR_INPUT_B
                                                                        [2]

D1802   1.0SMB015CA

C1822   56PF 0402

EL357N   GND

GND_EXT_INB

OUT_A

OUT_B

NET NAME	CONDITION	RESULT	REMARK
GPIO1_3V3	GPIO1_3V3=L/H	GPIO1=L/H	
	GPIO1=L/H	GPIO1_3V3=L/H	INPUT & OUTPUT PS:It is used as an interface for purchasing accessories
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_A=GND_EXT_INA	IR_INPUT_A=H	INPUT
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	
	IR_OUT_A=H	OUT_A=GND_EXT_OUTA	OUTPUT
OUT_B	IR_OUT_B=L	OUT_B=OUT_VCC	
	IR_OUT_B=H	OUT_B=GND_EXT_OUTB	

Figure 1. Load current vs Ambient temperature
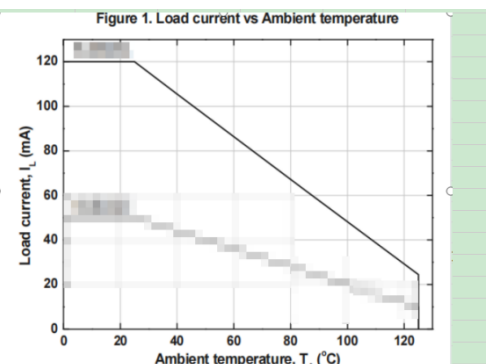
Electrical Characteristics:

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.

Notes: For safety, it is advisable not to install the product at a height exceeding 2 meters.

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.
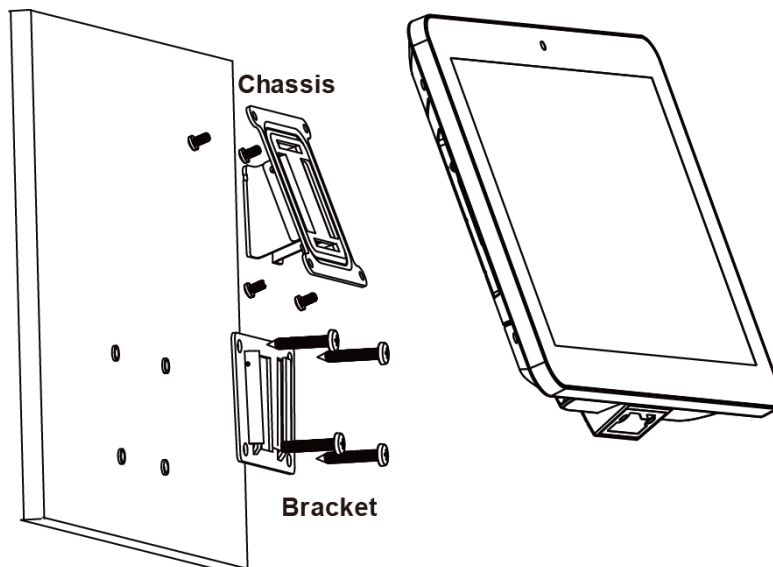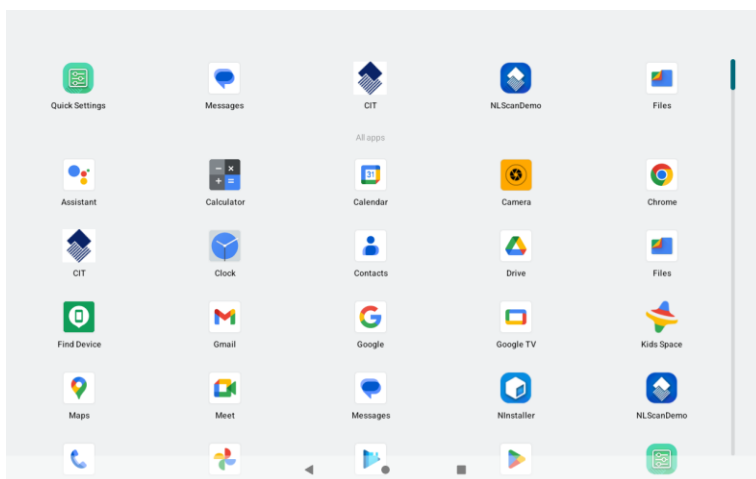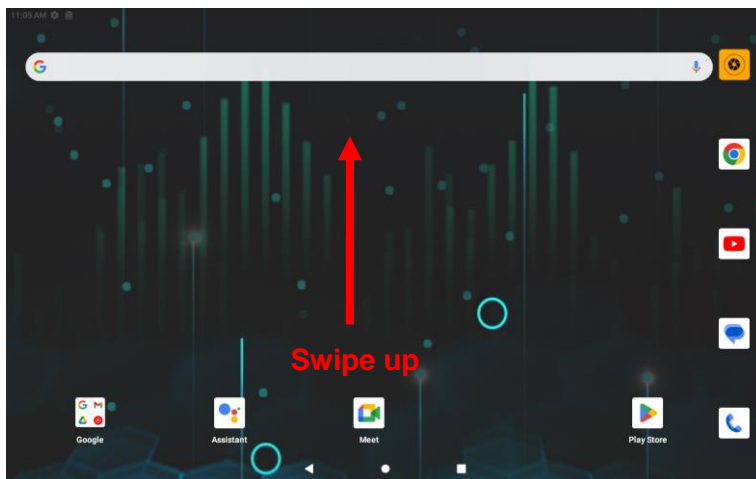
Home Screen
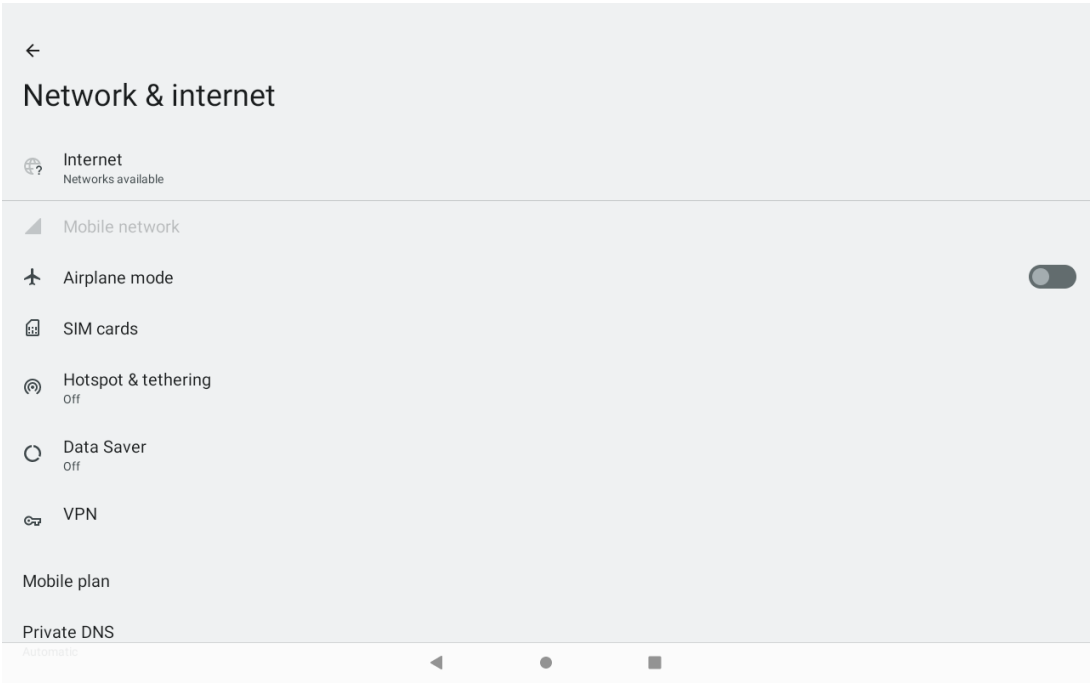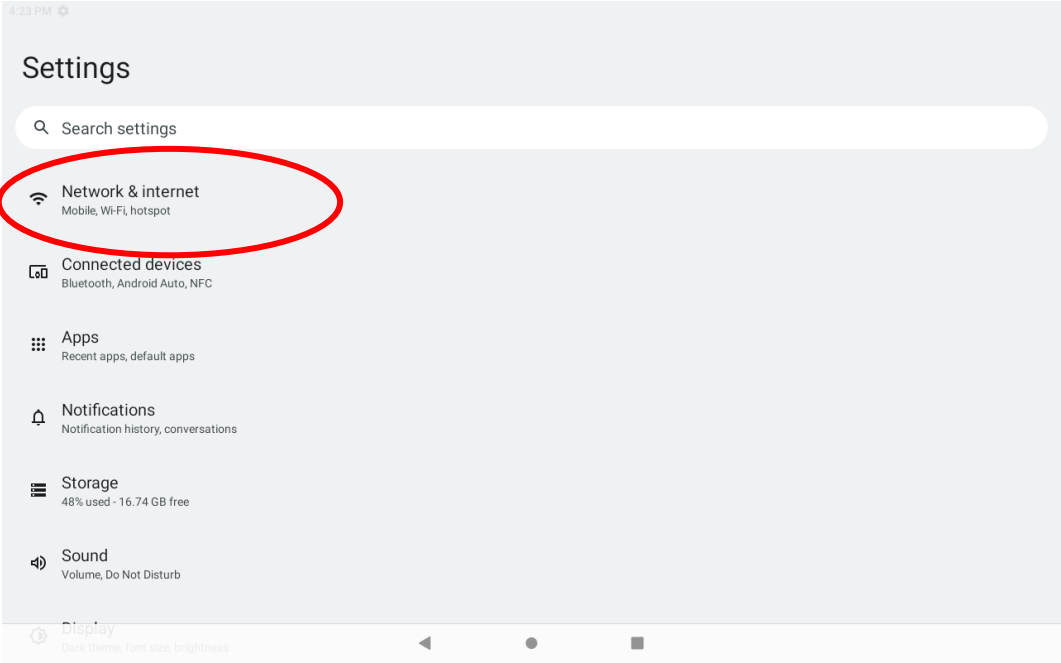
Open an app: Tap it.

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, Mobile Network, Hotspot & Tethering, and VPN according to your needs.
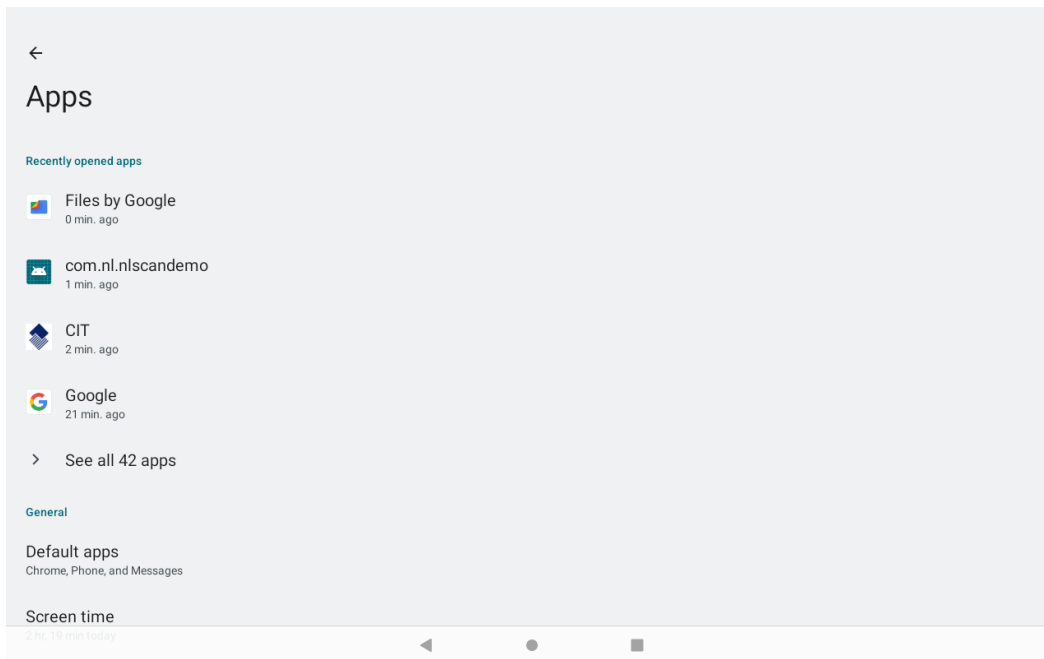
Connected Device

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.
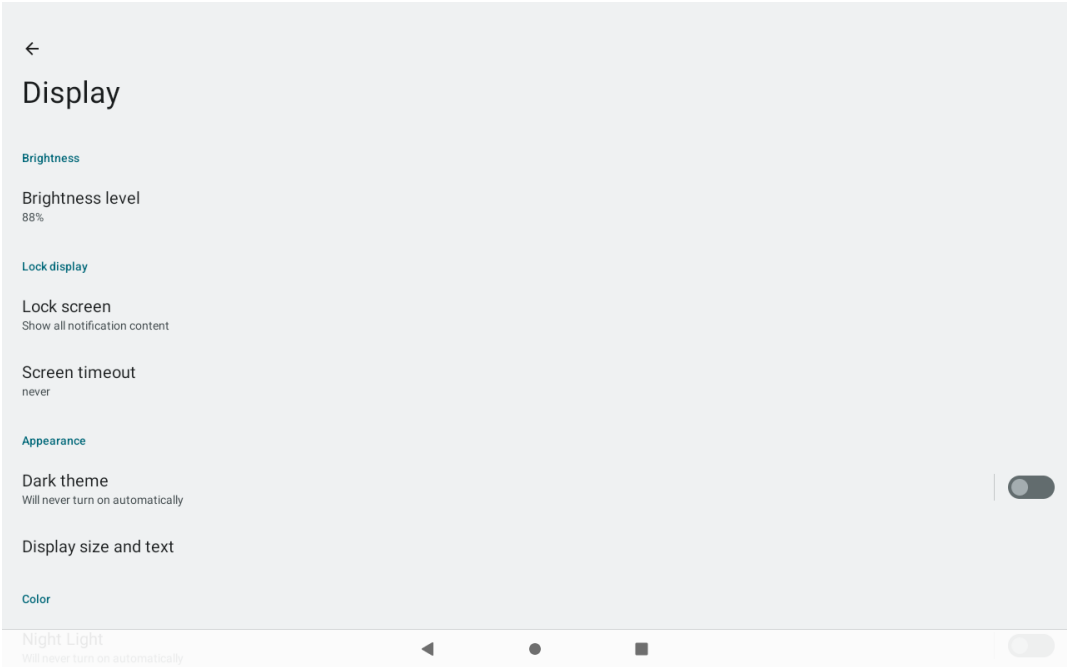
Storage

Tap the app icon ⚙ then "Storage" to display the current device storage status and manage storage.
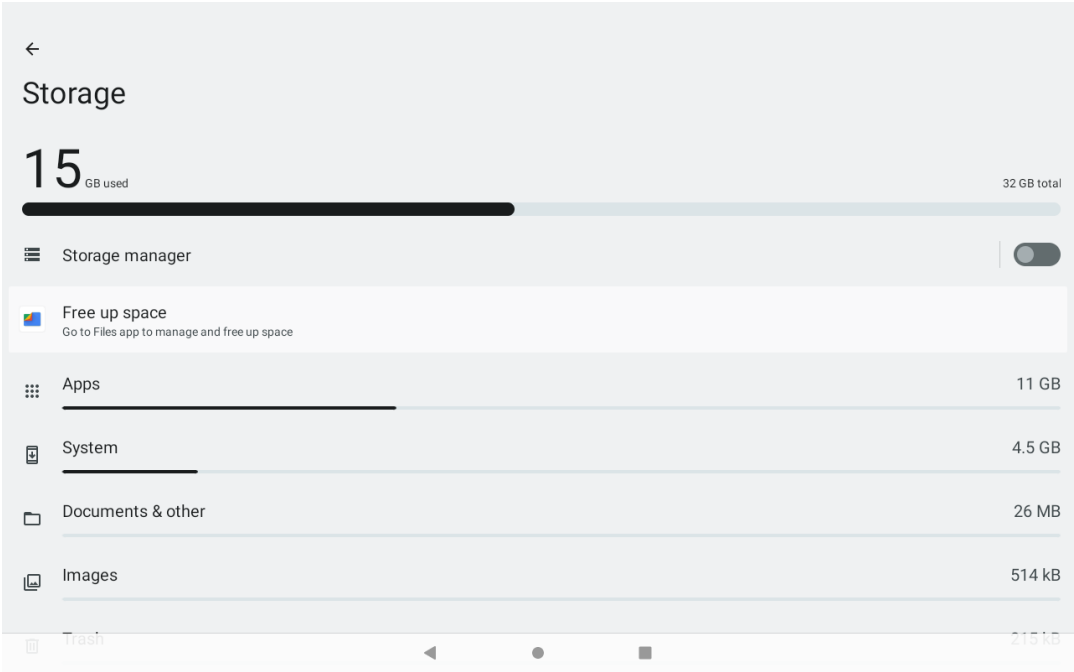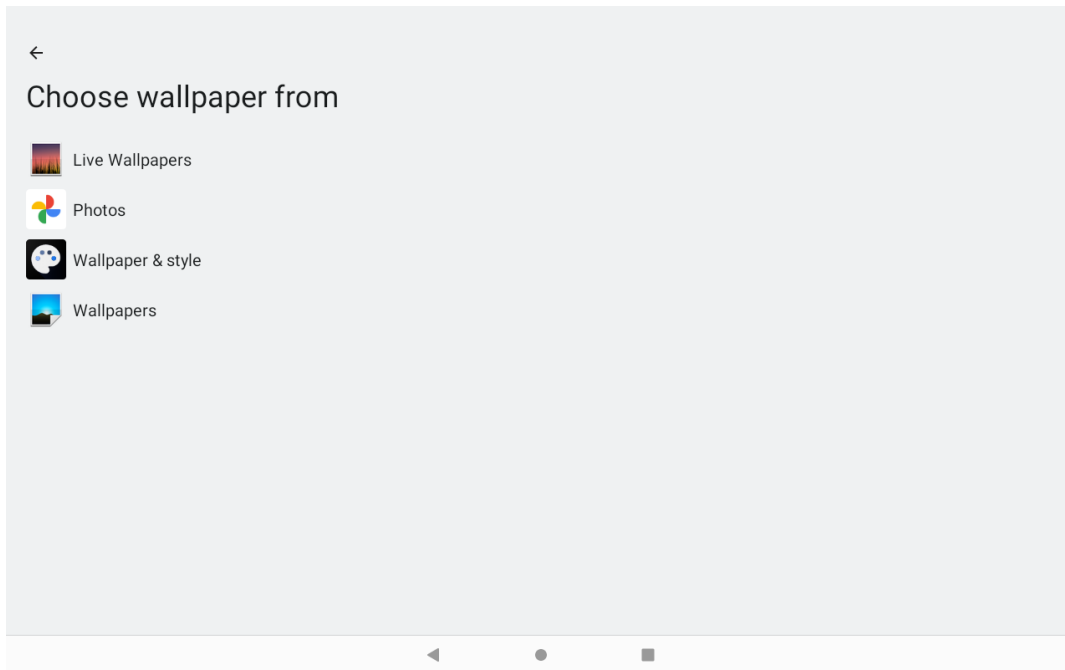
Display

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.

←
Choose wallpaper from

Live Wallpapers

Photos

Wallpaper & style

Wallpapers

Security

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

←

Security

Security status

🛡 Google Play Protect

📍 Find My Device
No Google account on this device

📱 Security update
December 5, 2023

Device security

Screen lock
None

More security settings
Encryption, credentials, and more

Privacy

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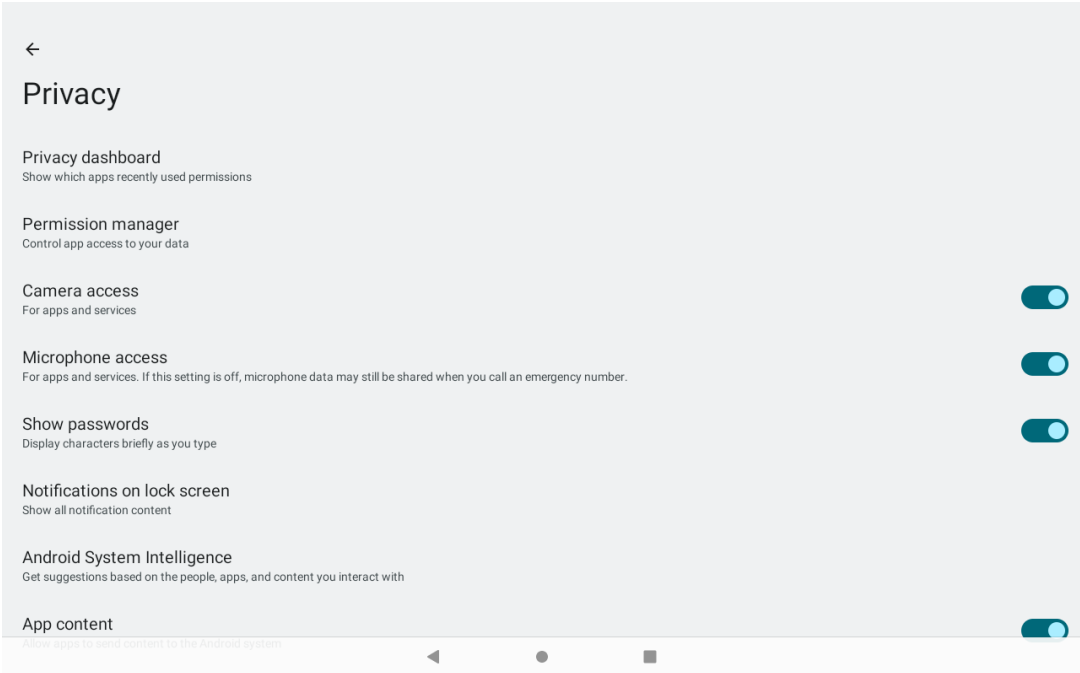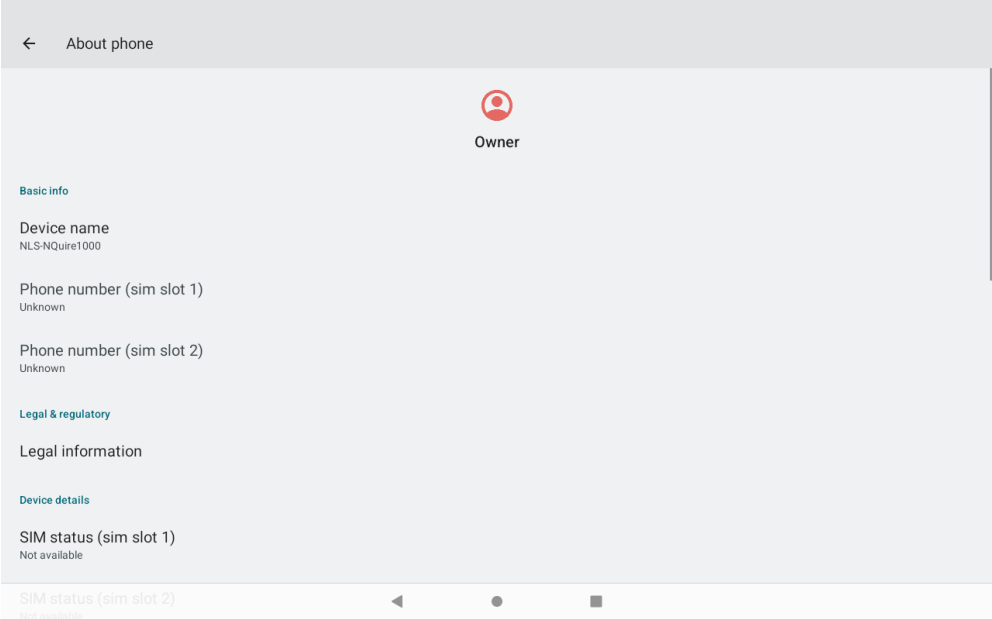
System

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

←

System

🌐 Languages & input

🕐 Date & time
    GMT+08:00 China Standard Time

☁ Backup

📱 System update
    Updated to Android 13

👤 Multiple users
    Signed in as Owner

🕘 Reset options

◄   ●   ■

About Phone

Tap the app icon ![icon] -> "About phone", then view information such as the device name, product model, MEID, Android version, build number, and software updates.
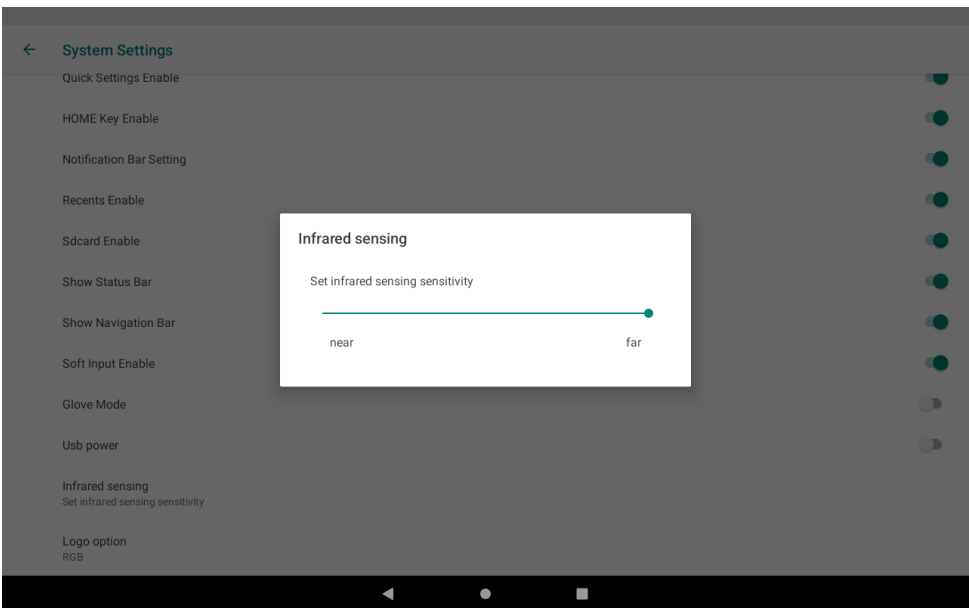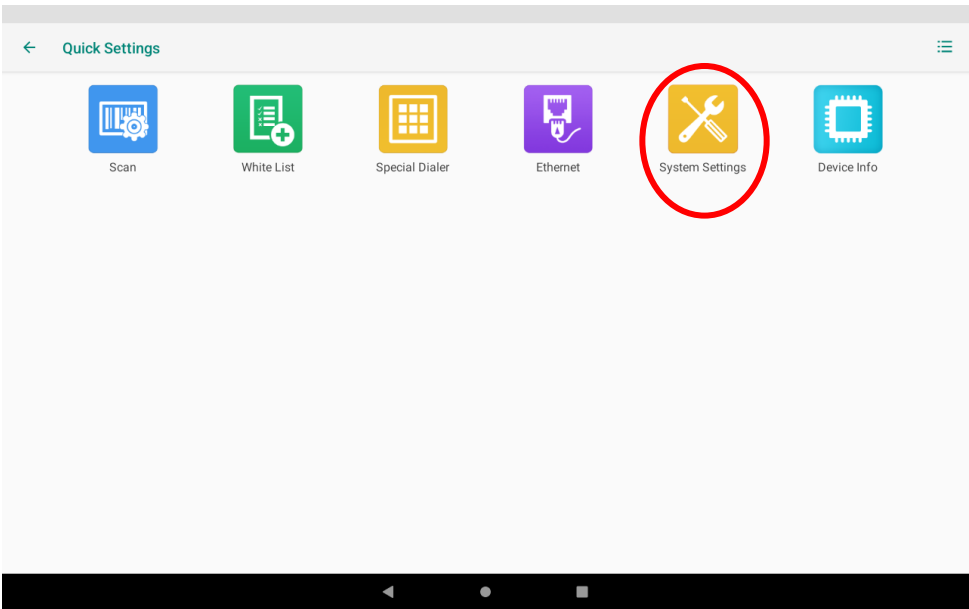
File Management

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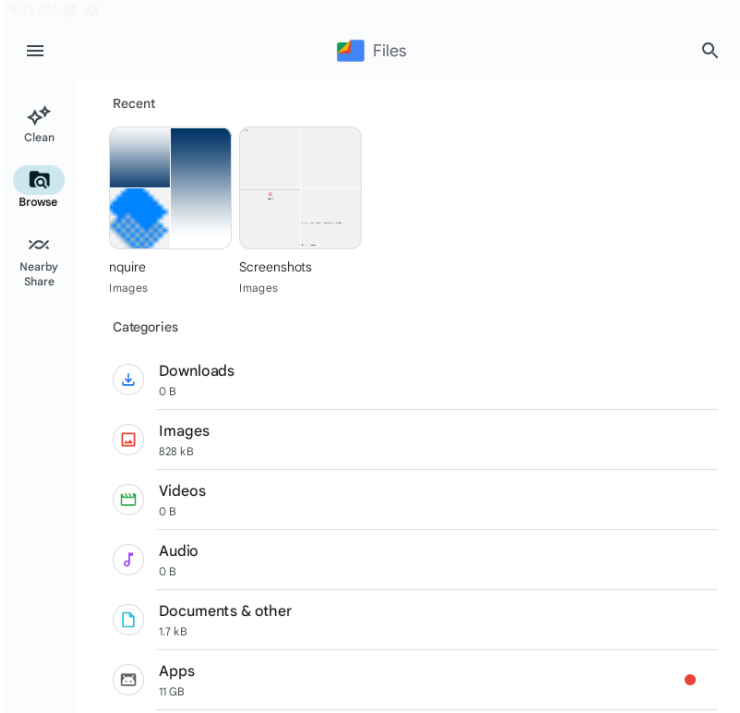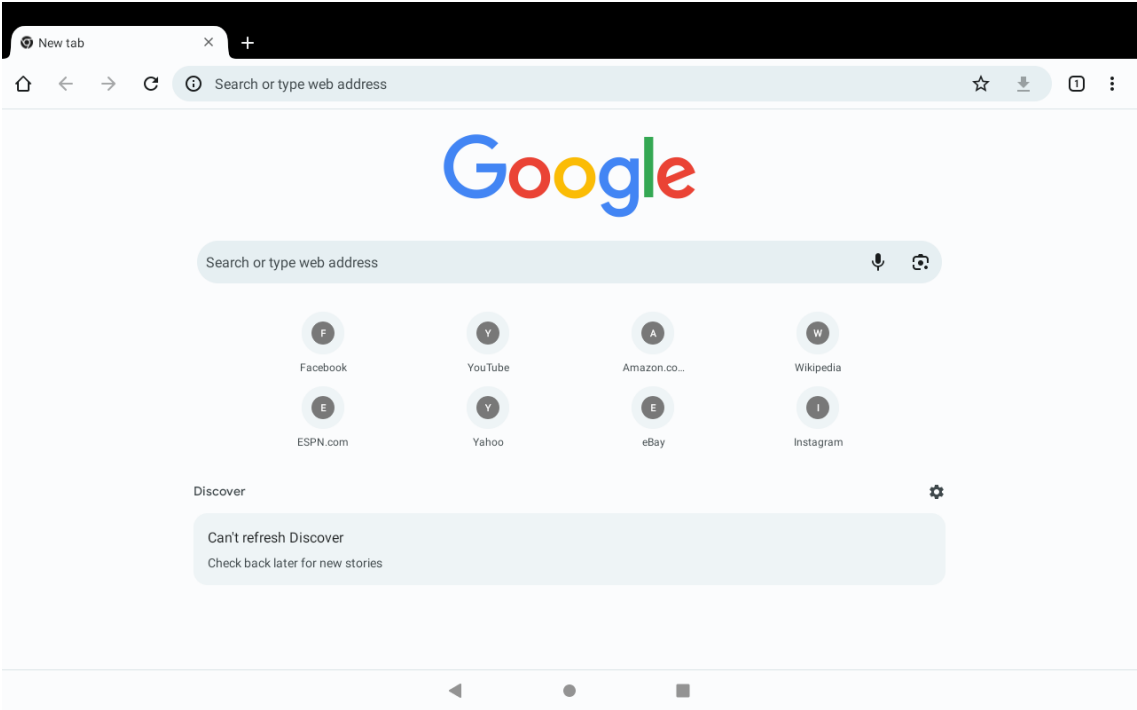
Infrared Sensing

Tap the app icon ![icon] on the Home screen then ![System Settings] , 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 ![Ethernet] 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.

Chpter 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.**

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