

MB545A User Manual

Warnings

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,
- (2) this device must accept any interference received, including interference that may cause undesired operation.

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.

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

FCC RF Radiation Exposure Statement:

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

Content

Declaration	1
Product Instruction.....	1
Power on the Product.....	3
Insert MicroSD Card.....	3
Home Screen	3
System Bar	7
Applications.....	10
HDMI Output	11
HDMI IN	12
Language.....	14
Date & Time.....	15
Volume	16
Wi-Fi.....	17
Ethernet	17
Bluetooth.....	18
Virtual Keyboard	20
Switch Input Methods	20
Scheduled Power On/Off	21
Surf Online.....	25
Browse Files.....	26
Play Media.....	28
Install & Uninstall Apps.....	29
Reset to Factory Default	35
Basic Specification	38

Declaration

- ✓ Please read the instructions carefully before equipment installation and using the device.
- ✓ Do not put the product in 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 operation system error.
- ✓ This product is not waterproof.
- ✓ Use only approved add-on enhancements.

Product Instruction



1. LTE Antenna
2. WI-FI Antenna
3. Power Slide Switch: Switch On/Off

LED Indicator:

Blue	Power supply is on.
------	---------------------

Light Off	Power supply is off.
------------------	----------------------

4. USB Type-C: Support OTG, support DisplayPort 1.2 (up to 2K 60Hz)

5. USB 3.0

6. USB 2.0

7. UART: RS232 x 1 (3 pin, GND/TX/RX)



8. Earphone Jack

9. HDMI IN

10. HDMI Output

11. RJ45 : Support Ethernet 10/100/1000M

12. DC in : AC 100-240Vac, 2A max. 50-60Hz, DC 12V±5%

13. GPIO Output

14. PIR (for Motion Detection - connected with extension cable)

15. IR (for Remote Control – connected with extension cable)

16. MicroSD Card



Power on the Product

Step 1 Connect the HDMI port (#10 in **Product Instruction**) of MB545A to the monitor by a HDMI cable.

Step 2 Connect the power adapter into the DC In jack (#12) of MB545A and power on it, then turn on the power switch (#3).

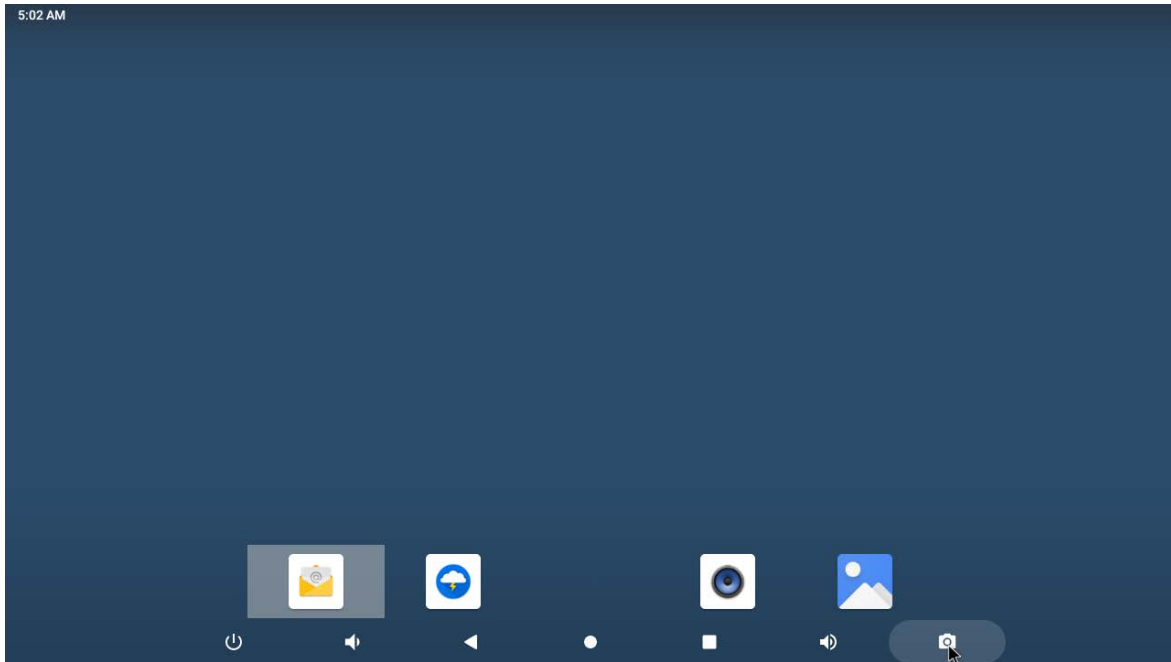
Step 3 Use a remote control or plug a mouse or keyboard by USB (#5 or #6) to operate. Mouse left button for “Enter”, right button for “Back”.

Insert MicroSD Card

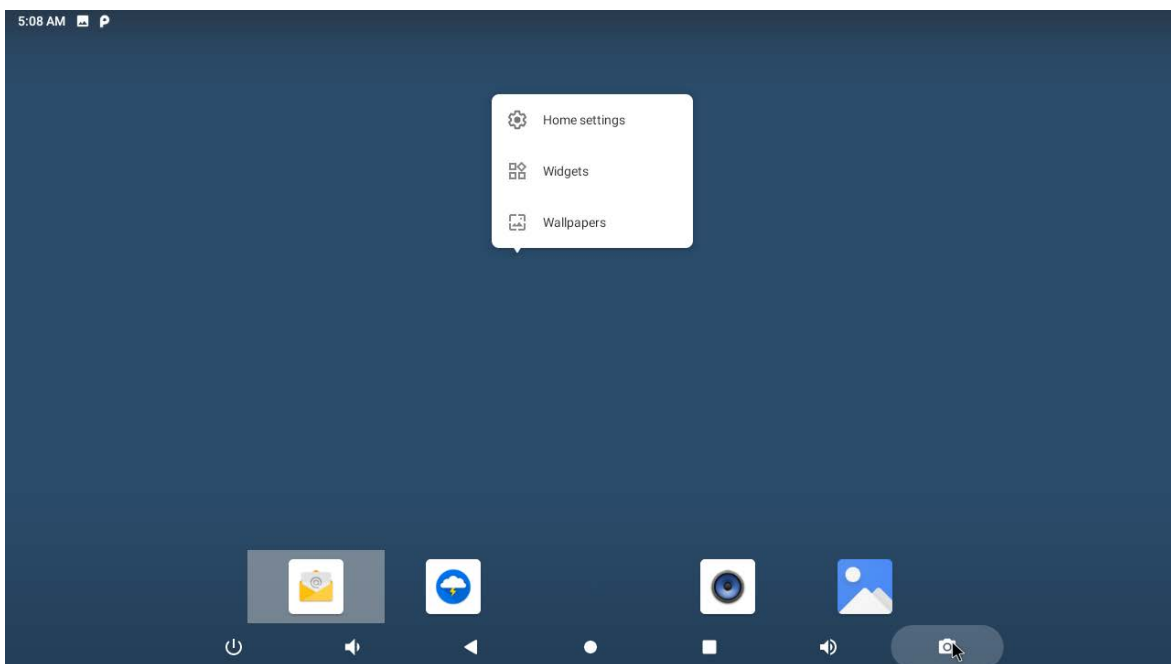
This product supports external MicroSD card. Please insert your SD card into the MicroSD Card Slot (#16 in **Product Instruction**) on the side of this product.

Home Screen

After boot up completed, you will see the system desktop.

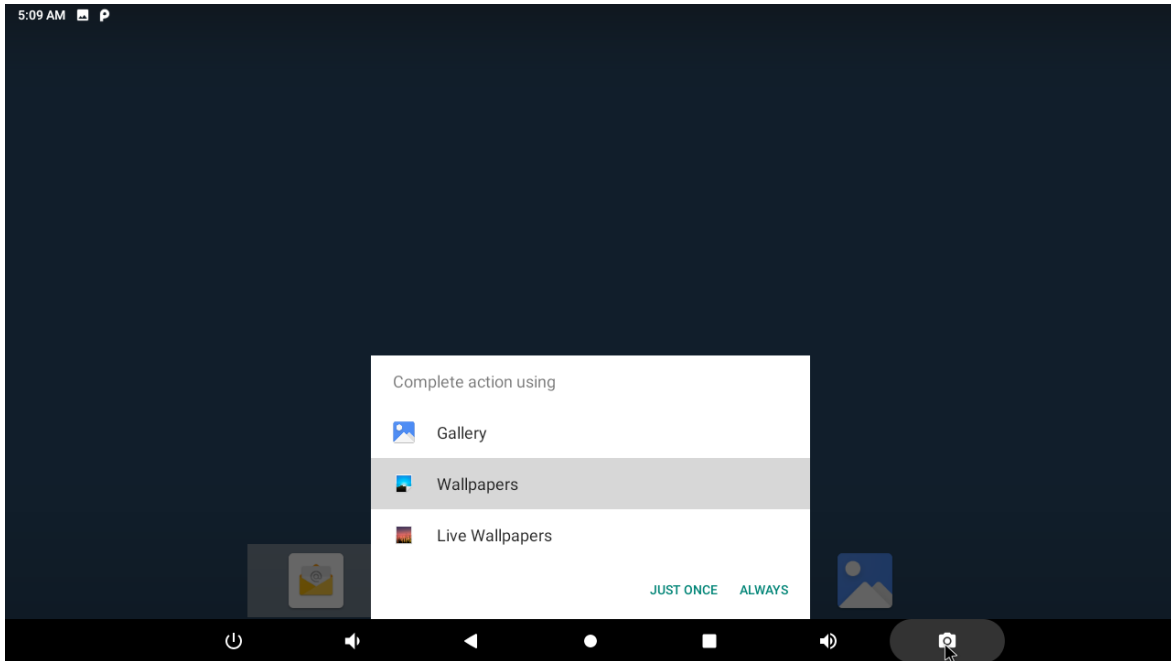


On the home screen, you can press the spacebar to open the wallpaper or widget dialog, then go to options and drag the widget onto the desktop.

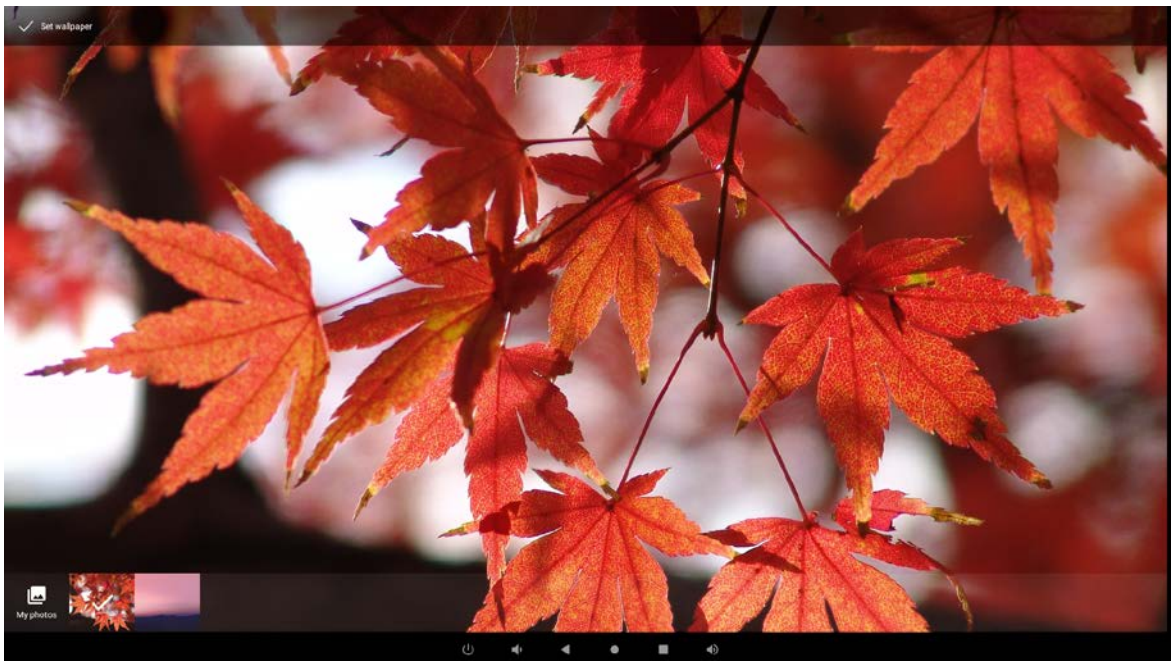


Change Wallpaper:

1. Click "WALLPAPER".



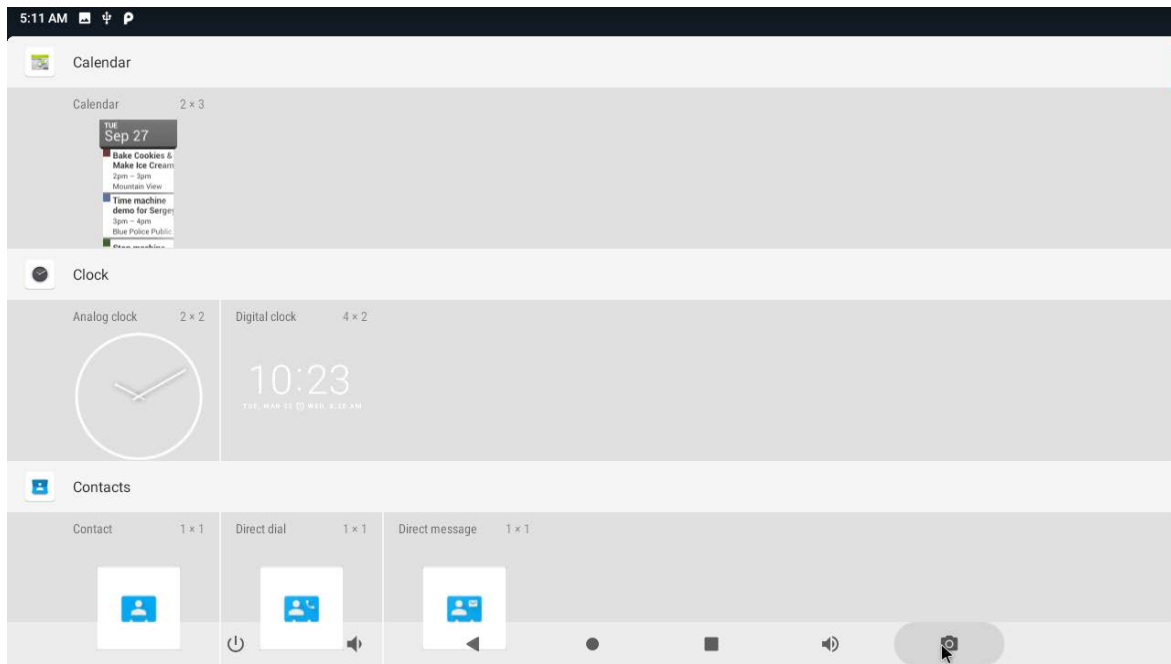
2. Select one picture from system presets or your own pictures.



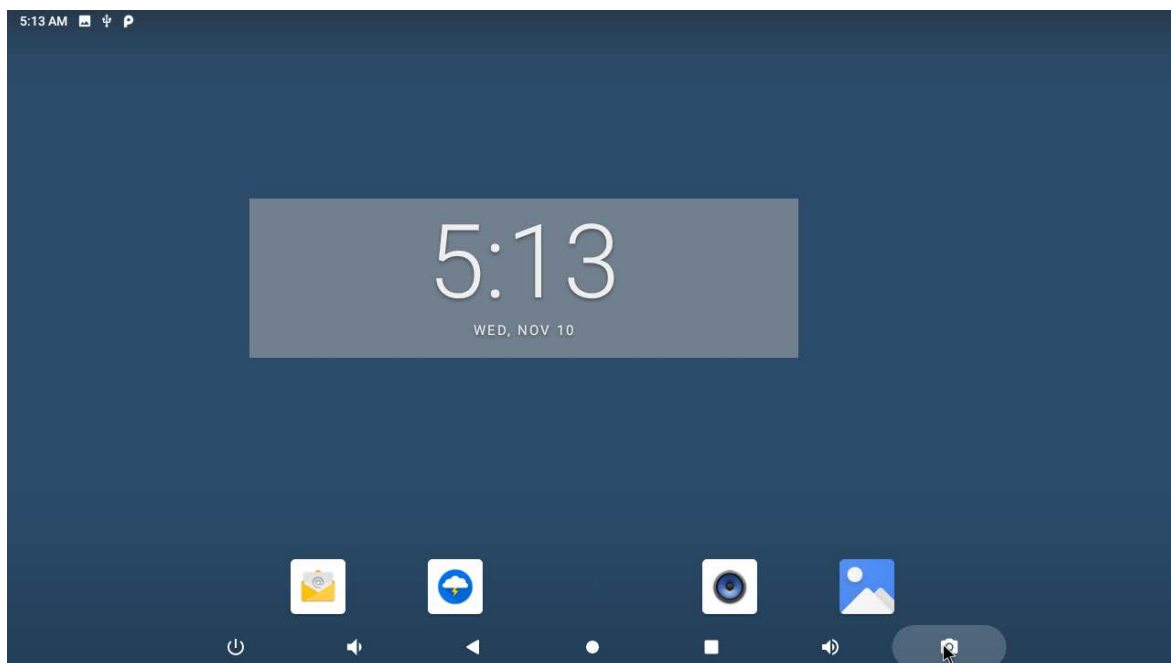
3. Click "Set wallpaper" on the upper-left corner of the screen to apply the wallpaper.

Add Widgets:

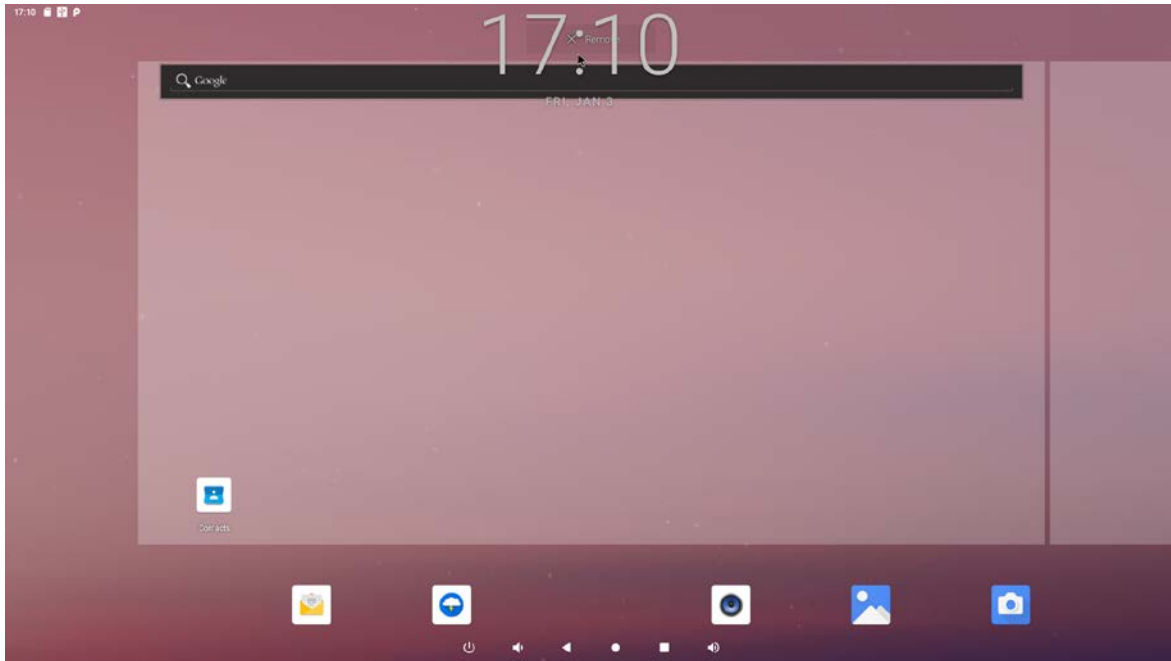
1. Click "WIDGETS".



2. Long-press a widget and drag it to desktop.



4. If you want to remove an icon, long press the widget and drag it to "xremove" at the top of the screen, then drag it onto the screen.



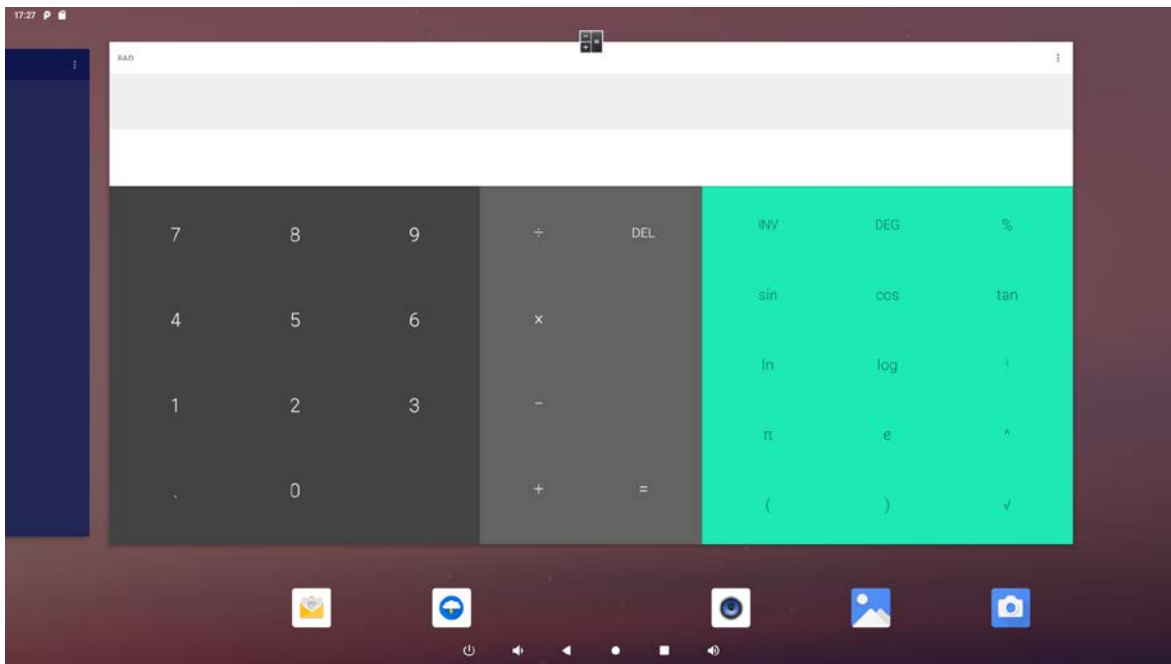
System Bar

Navigation Buttons

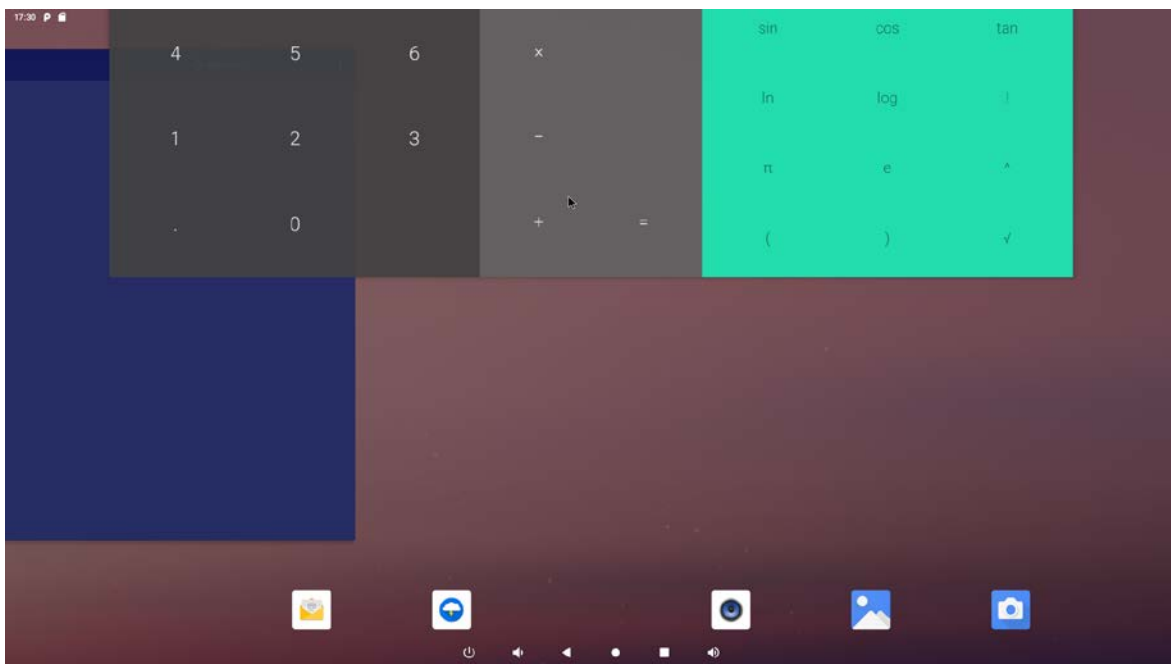


1 2 3 4 5 6

1. **Shutdown:** Confirm shutdown.
2. **Volume-:** Decrease the system volume.
3. **Back:** Return to the previous page.
4. **Home:** Return to the home screen.
5. **Recents:** Switch between recently used apps.



To remove the application from the list, swipe up to remove it from the list.



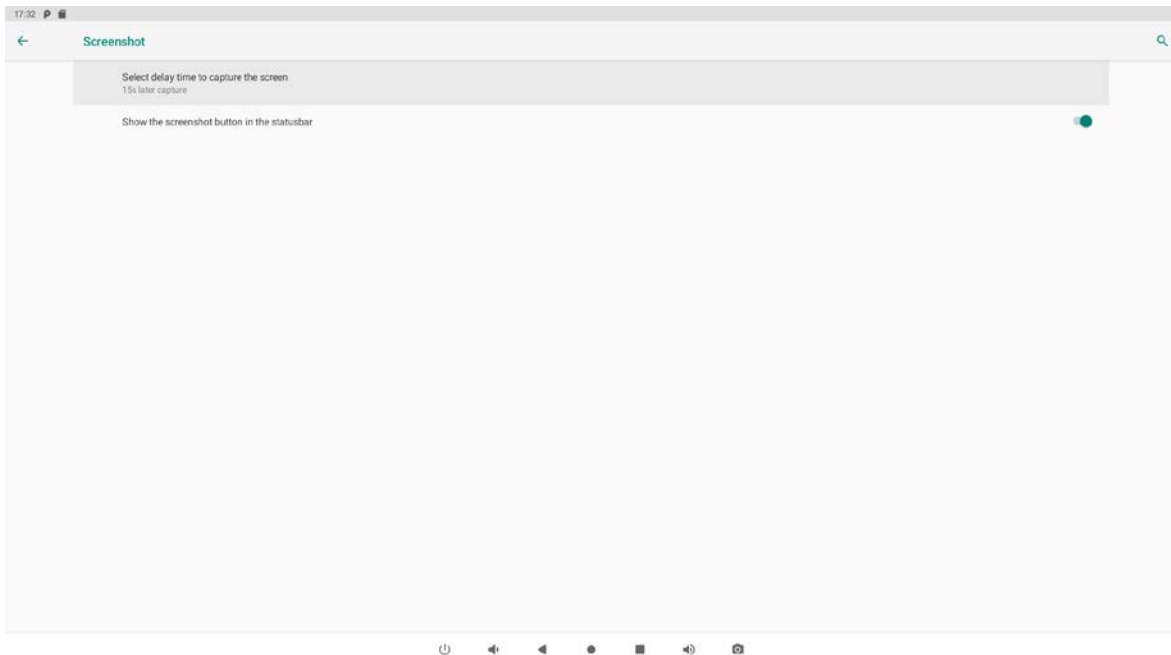
6. Volume+: Increase the system volume.

Optional button: Screenshot

System also provides a screenshot button that can be added to navigation bar.

To add the screenshot button, click “**Settings**”  to open the system

setting app, and select the option “ScreenshotSetting”.



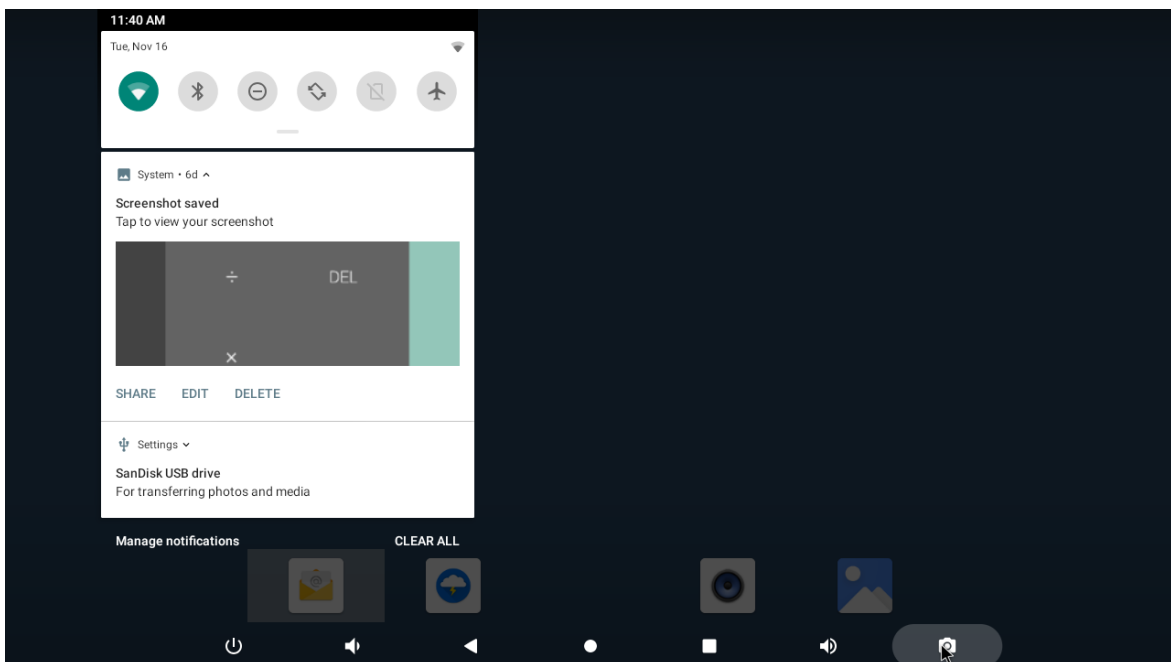
Select show screenshot button in status bar, and the screenshot button will be displayed on the far right of the navigation bar.

Status Notifications



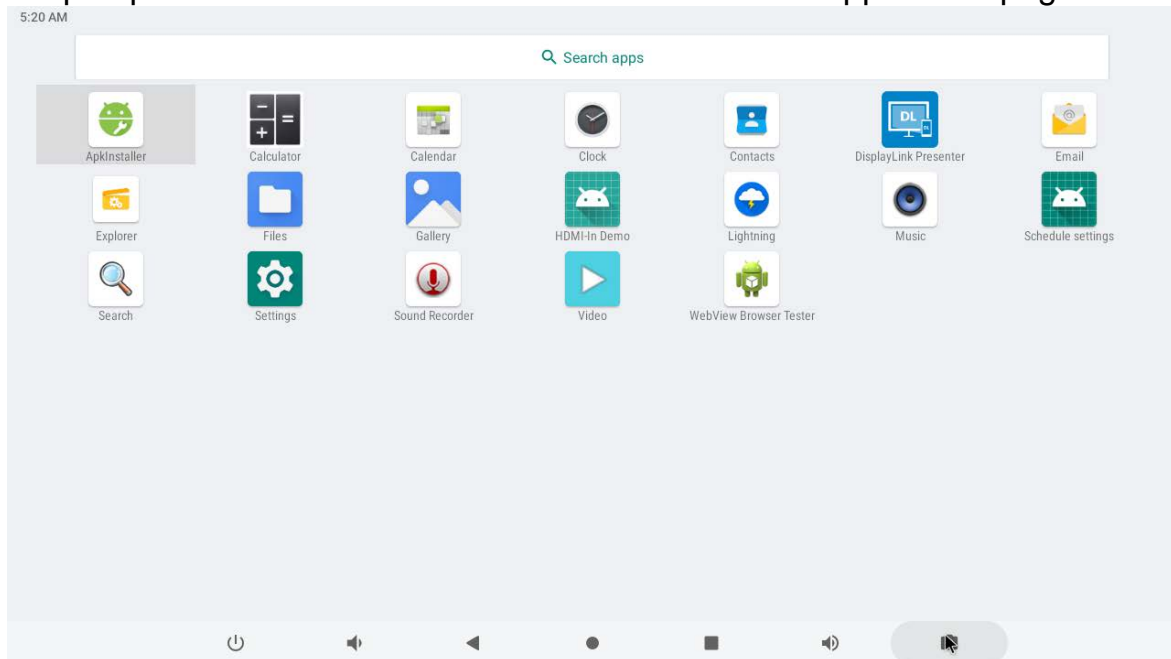
Status bar at top of the screen displays system status, such as time, Wi-Fi, SD card and USB connection etc.

Pull down to open the status window.



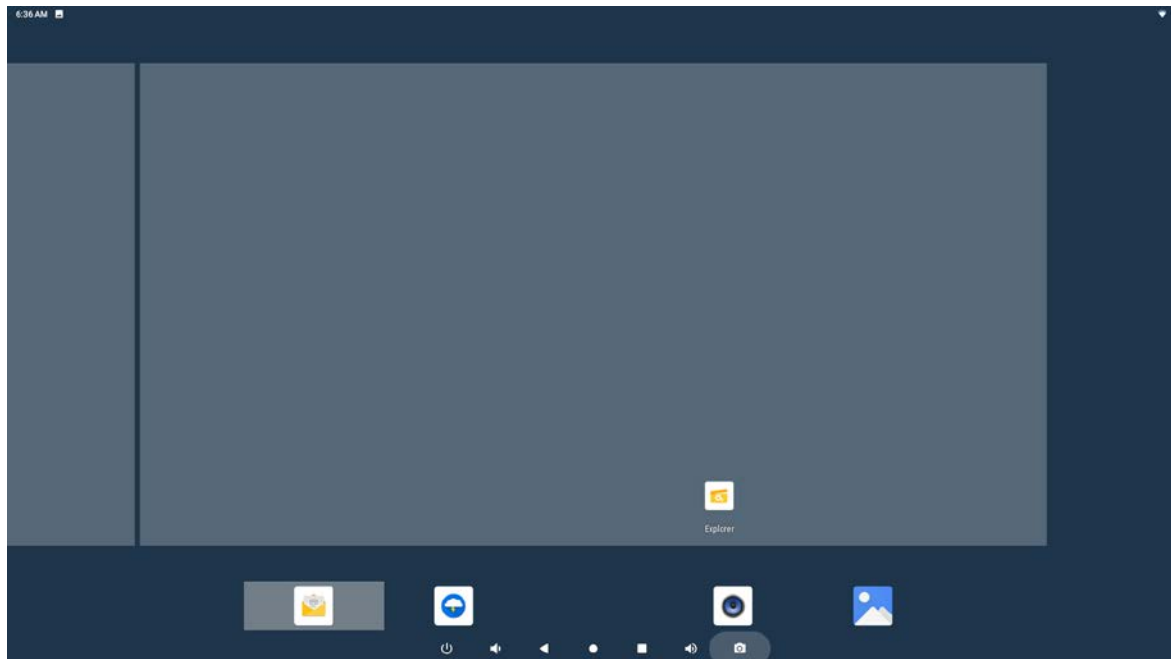
Applications

Swipe up the bottom of the home screen to enter the application page.




The installed applications will be shown here and you can open an app by clicking its icon.

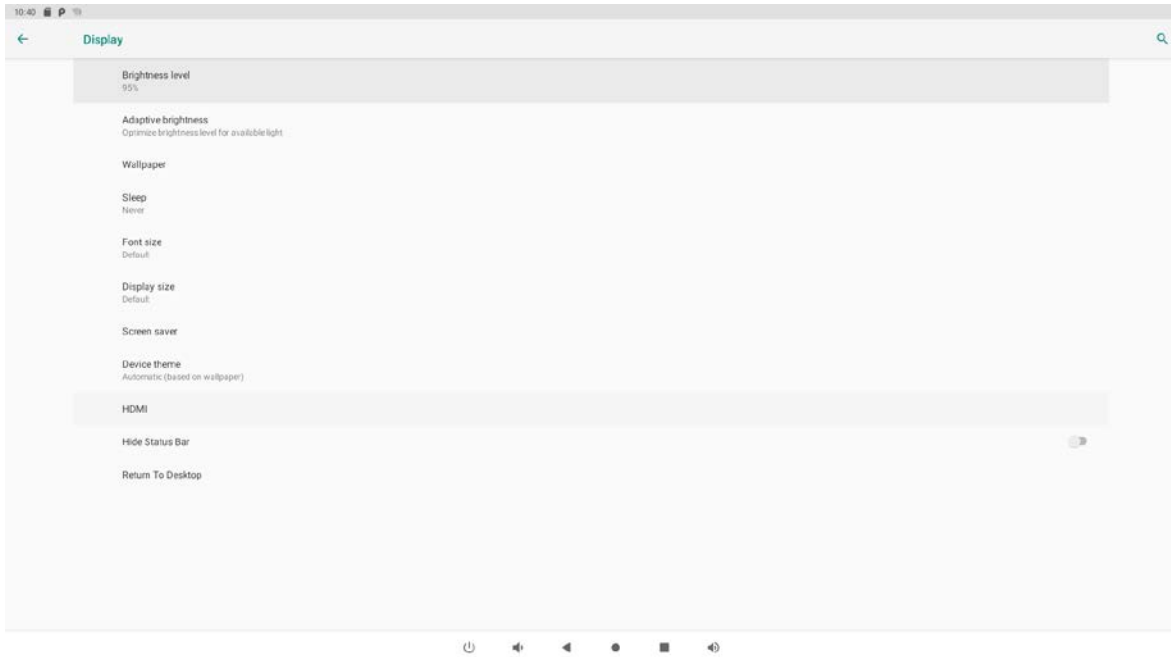
To find an app easily, you can create a shortcut by long-pressing of the icon and drag it to the home screen.



HDMI Output

HDMI output display can be adjusted in system settings.

In the App list, click “**Settings**”  to open the system setting app, and select the option “**Display**”.



In this option, you can set screen “Resolution and screenzoom”.



HDMI IN

HDMI-IN can project the UI from one device to another and see all the mouse action on the interface. The operation steps as follows:

1. Prepare Resources

DUT: MB545A device *1

Auxiliaries: MB545A device *1 / PC *1

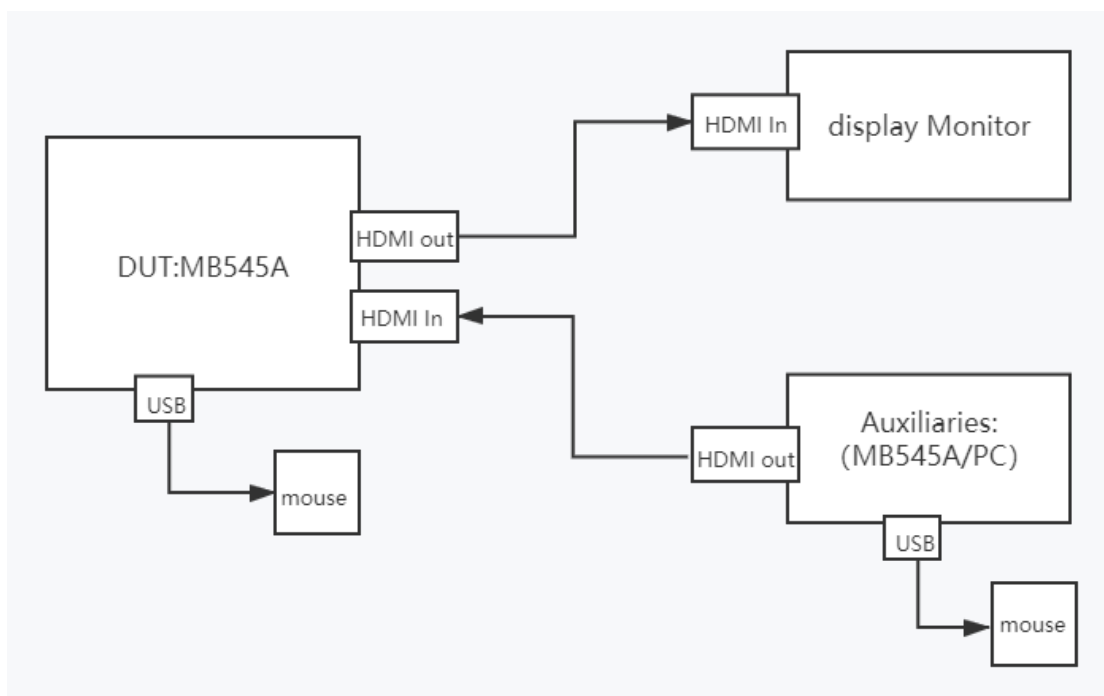
HDMI Cable *2

HDMI Monitor *1

Mouse *2

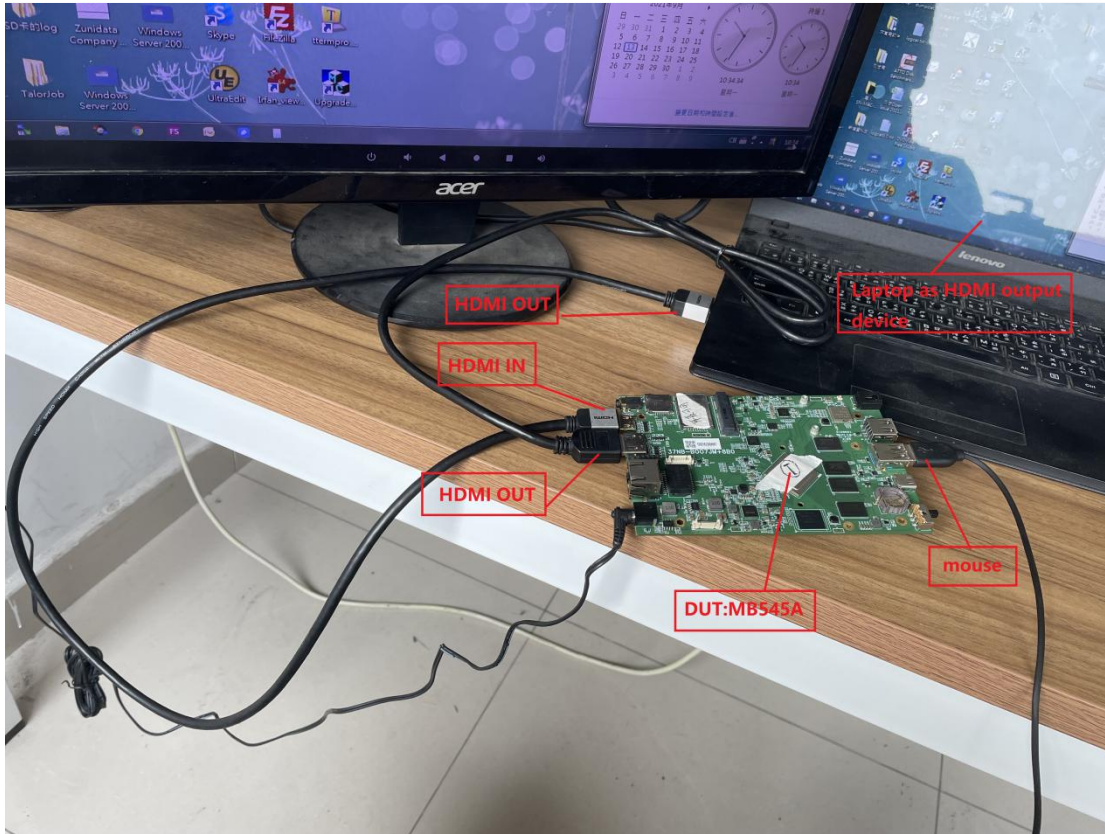
2. Setup test environment

Setup the device according to the diagram.

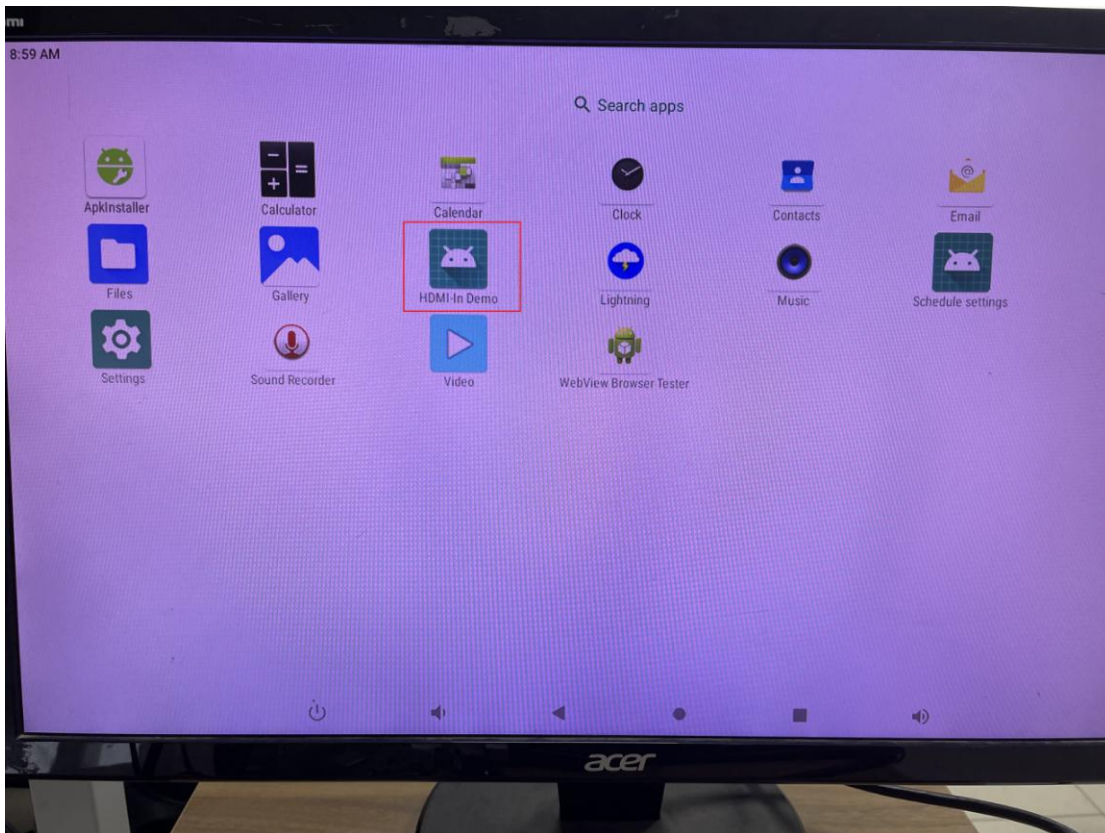


3. Test Steps

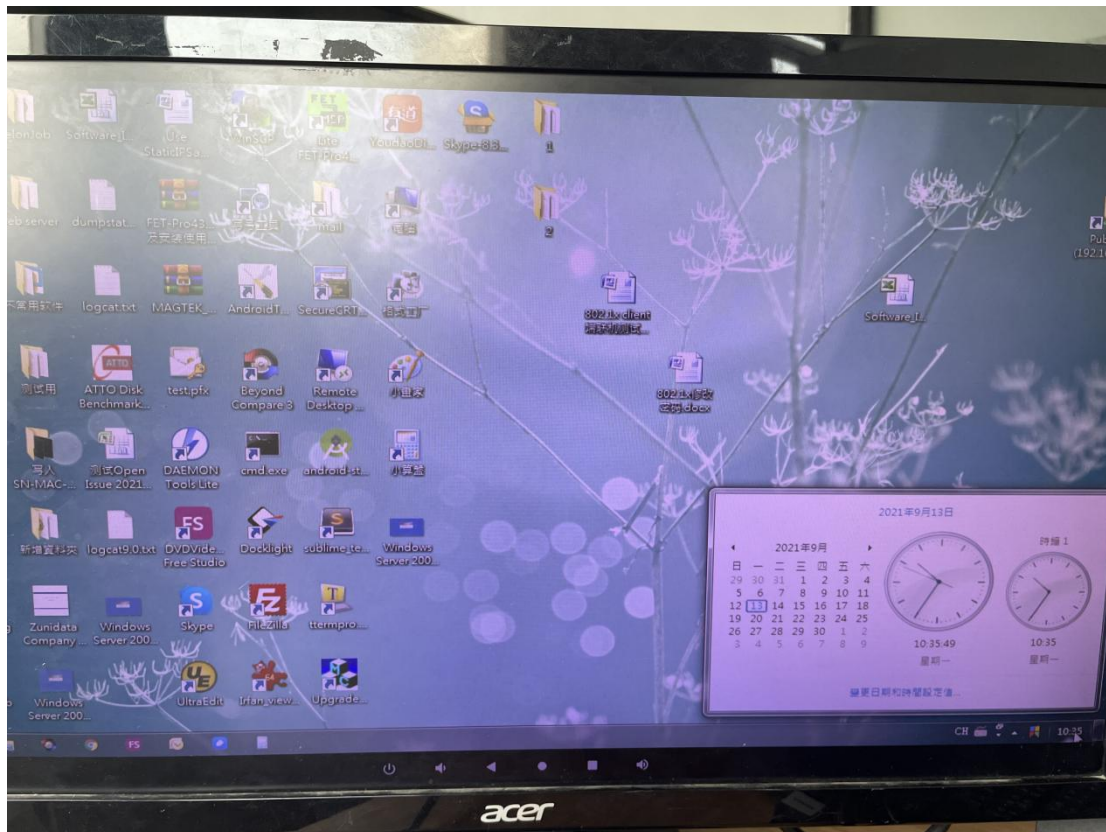
3.1. Turn on the power of MB545A, connect the HDMI-In interface of MB545A to the laptop through the HDMI cable, and insert the mouse into the USB interface of MB545A.




3.2 Open the HDMI-IN Demo APK on MB545A with the mouse.

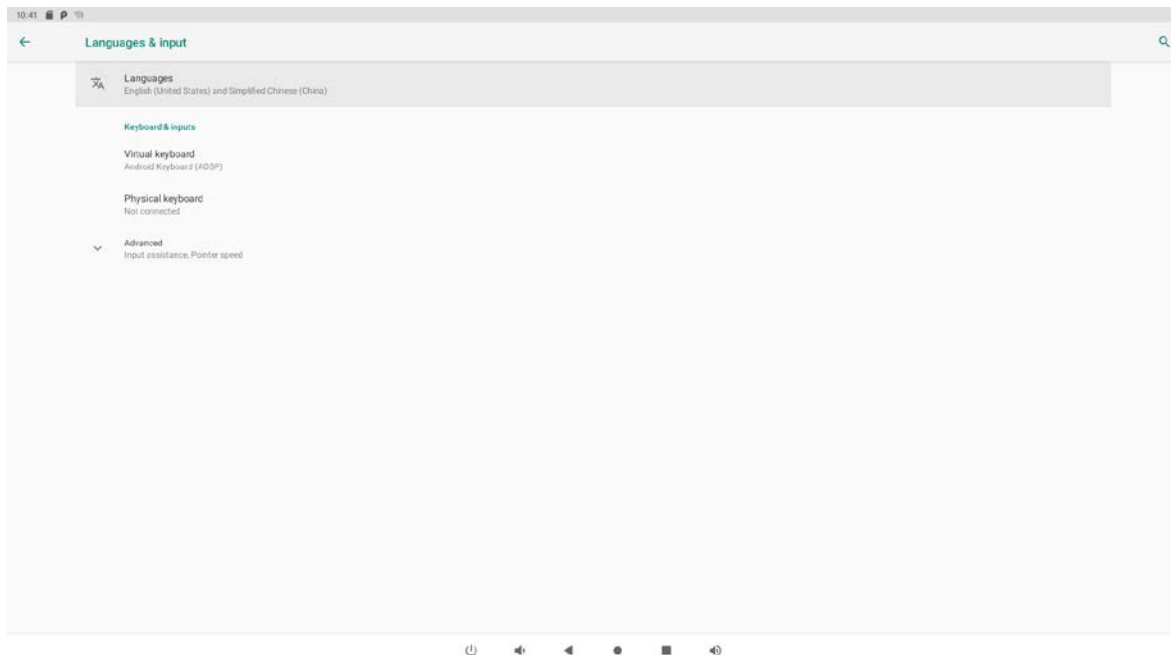


You'll notice that the monitor display switches to the laptop's desktop.



Language


In the App list, click **“Settings”**  to open the system setting app, and select the option **“Language & input”**.

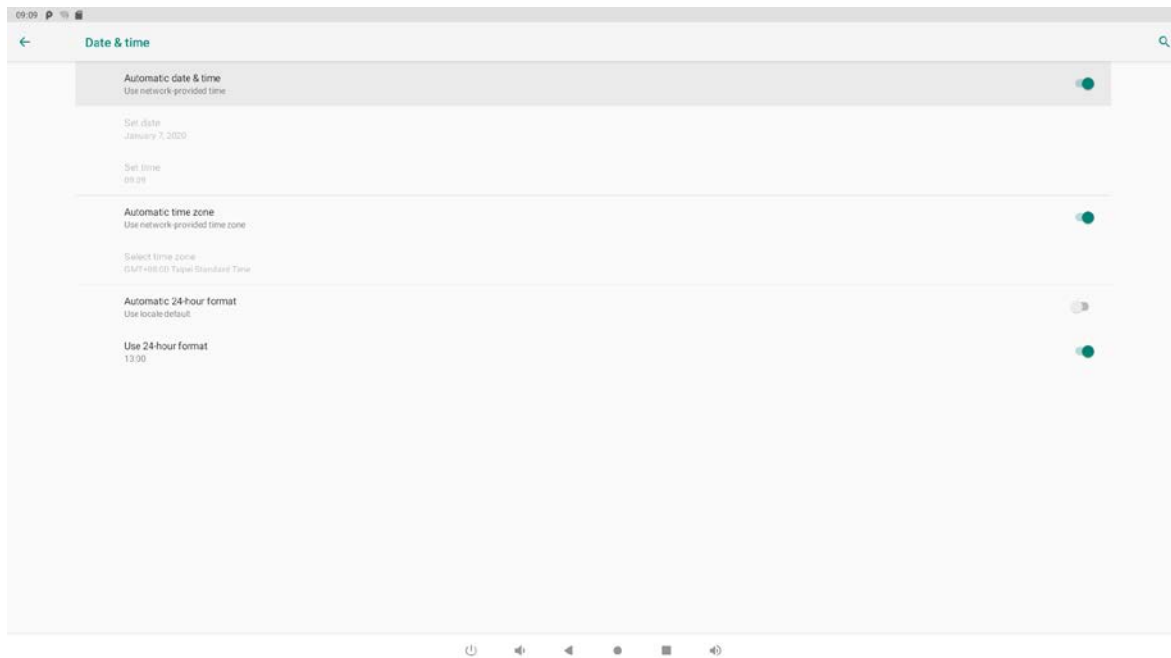


Click the first option "**language**" under "**language and input**" and select "**Add a language**" to change the system language according to your preference.



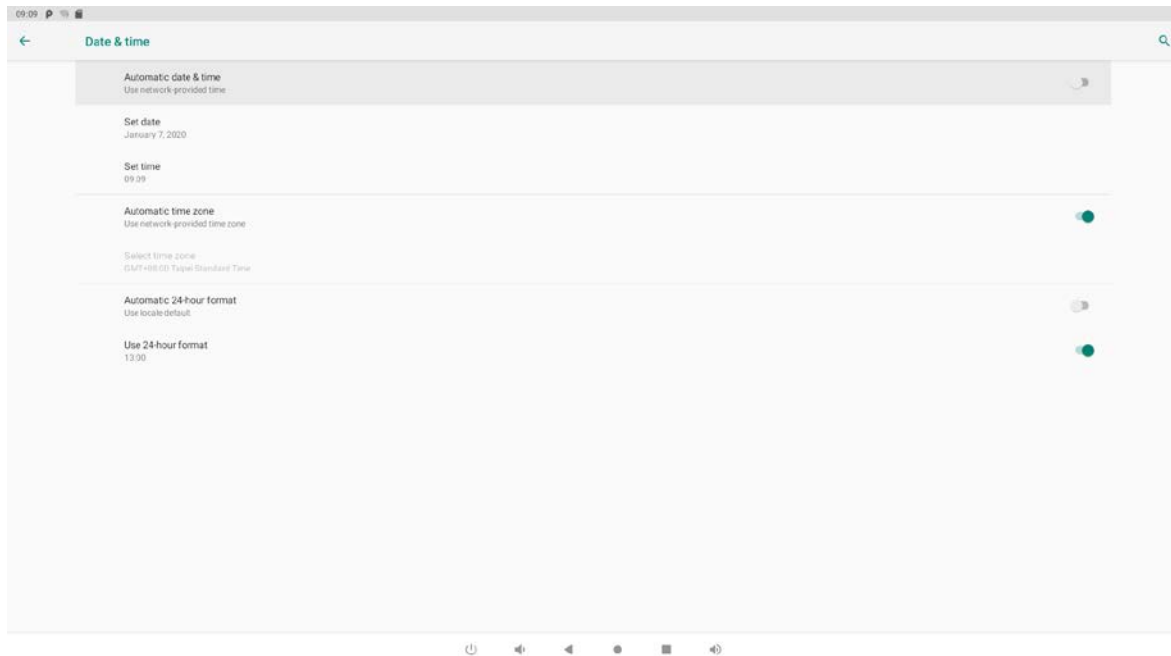
Date & Time

In the App list, click "**Settings**"  to open the "**System**" setting app, and select the option "**Date & time**".



If you enabled the option “**Automatic date & time**” under “**Date & time**”, system date and time will be synchronized automatically with network time when you connected to Internet.

If you want to set the time manually, you need to disable “**Automatic date & time**”.




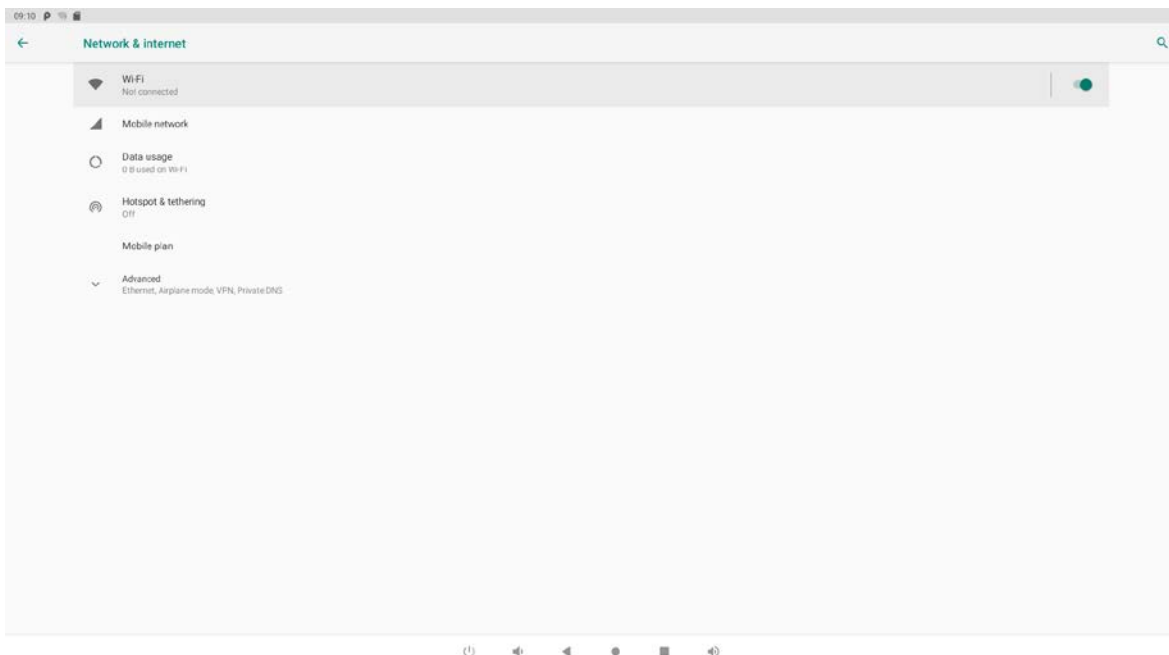
In this option, you can also set time zone, time notation and date format.

Volume

On the system bar, click the **Volume-** icon  to decrease the system volume, and click the **Volume+** icon  to increase the system volume.


Wi-Fi

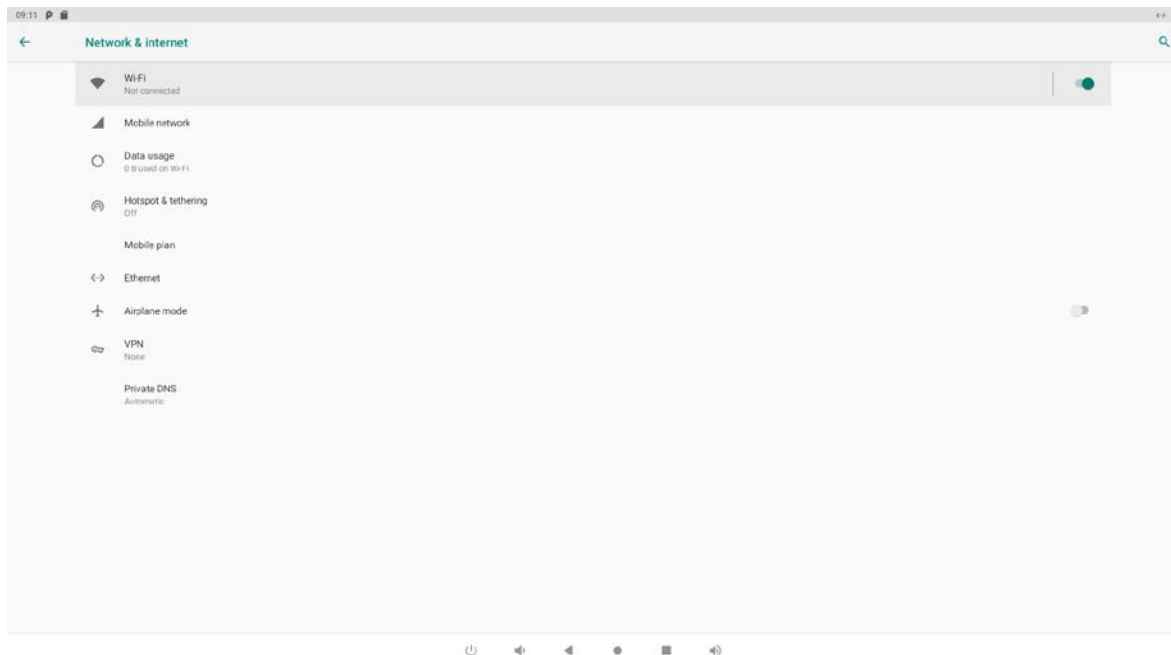
In the App list, click “**Settings**”  to open the “**Network&internet**” Settings, and select the option “**Wi-Fi**”.



Turn on the Wi-Fi button and enter. The product will automatically scan the available wireless network. Select the network under the Wi-Fi network and enter a password to connect.


Ethernet

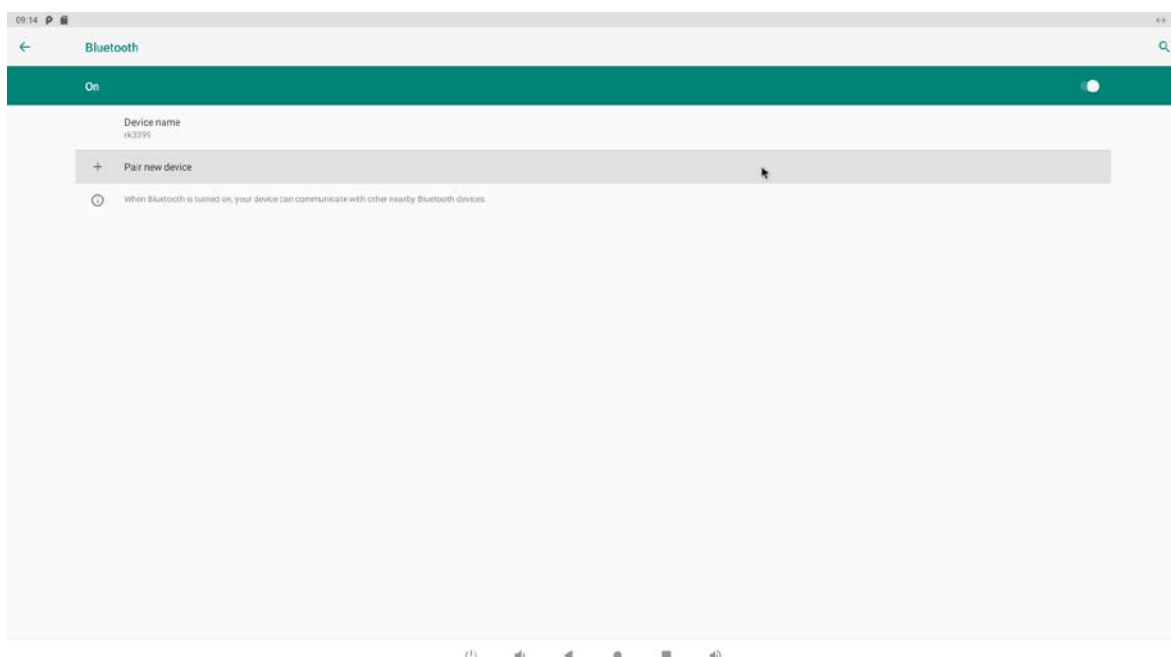
In the App list, click “**Settings**”  to open the “**Network&internet**” Settings, select “**Ethernet**” to enter the IP that can be viewed automatically.



Plug the Internet cable into the Ethernet port (**#11** in **Product Instruction**), and the Ethernet will connect automatically.
If you are Static IP user, please set the configurations manually.

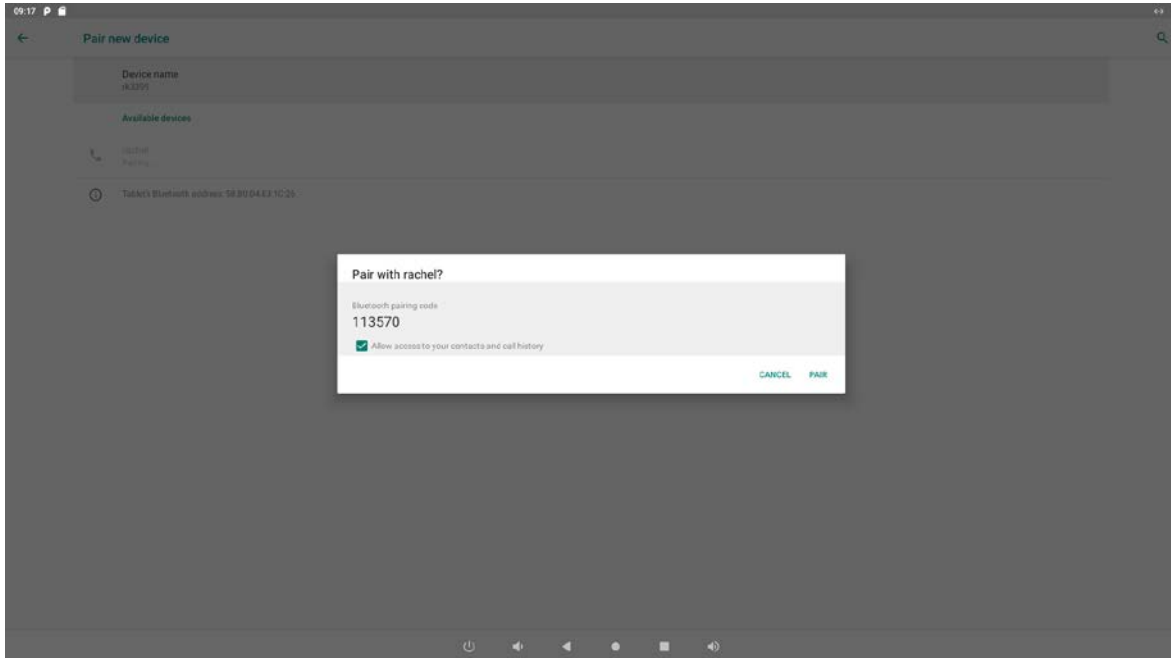
Bluetooth

In the App list, click **“Settings”**  to open the **“Connect device”** option, select **“Connect preferences”**, and select the option **“Bluetooth”**.

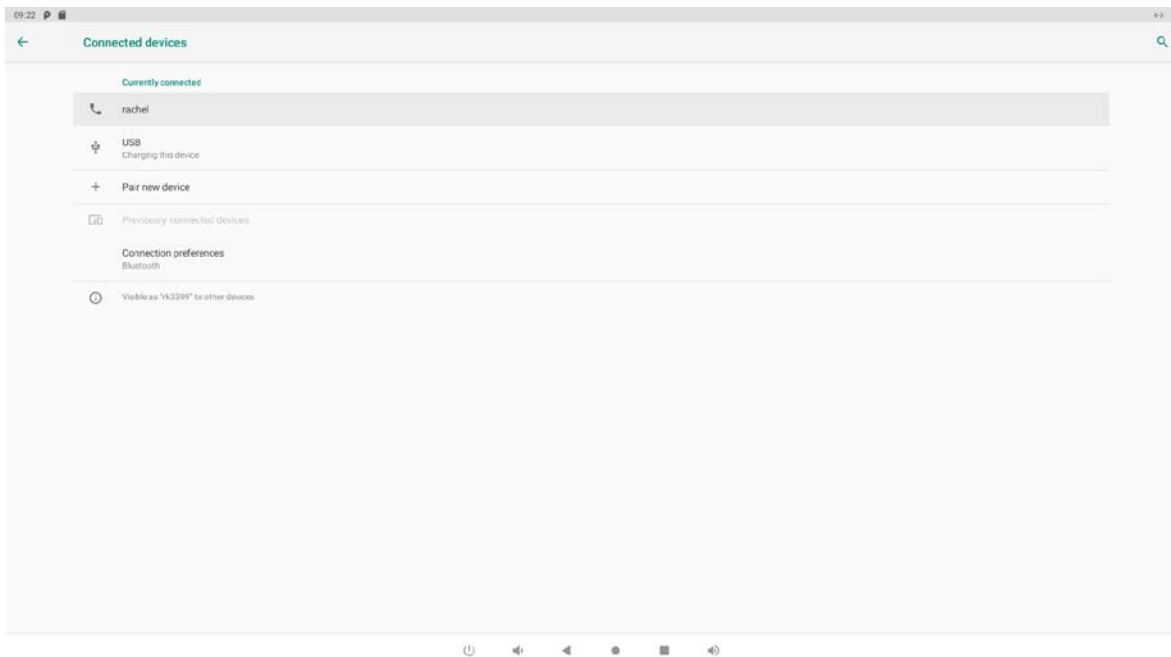


Switch the Bluetooth button to **ON**, and go to the "Pair new device" option to view the available bluetooth devices around you.

Select the bluetooth device to be paired from the available devices list, send a matching request, and then click "match" in the pop-up window. In the meantime, confirm the pairing on another bluetooth device.



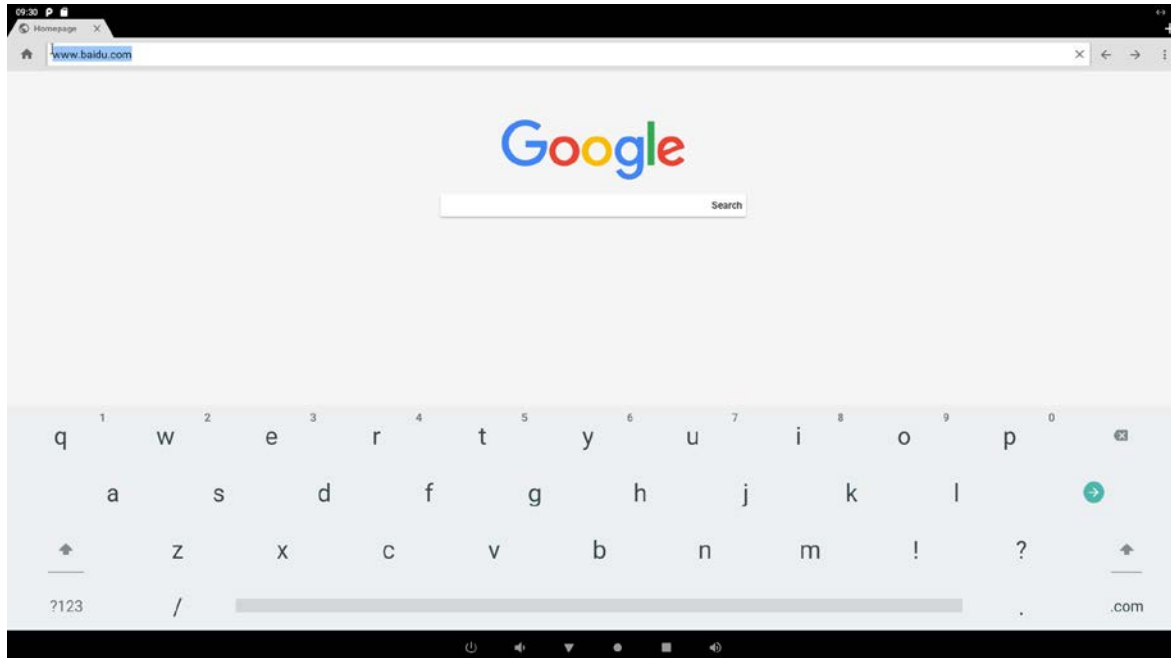
After pairing, the paired device will be moved to the "Currently connected" list.




Virtual Keyboard

The device provides a virtual keyboard for typing.

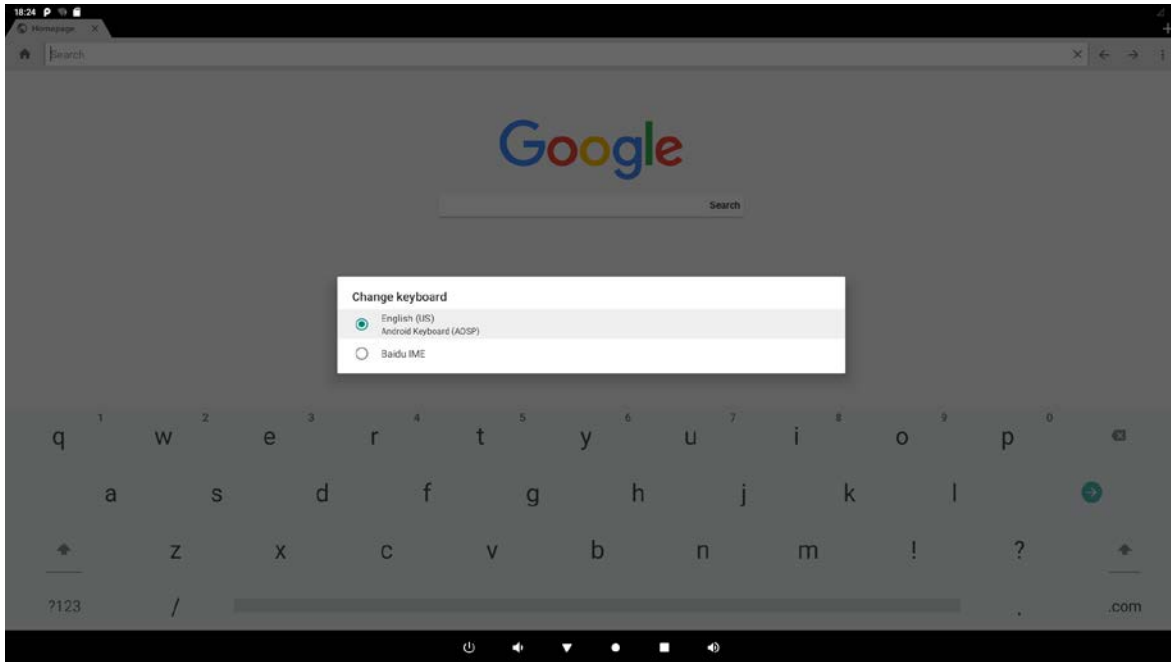
When you click in a text input box, the virtual keyboard will appear at the bottom of the screen.



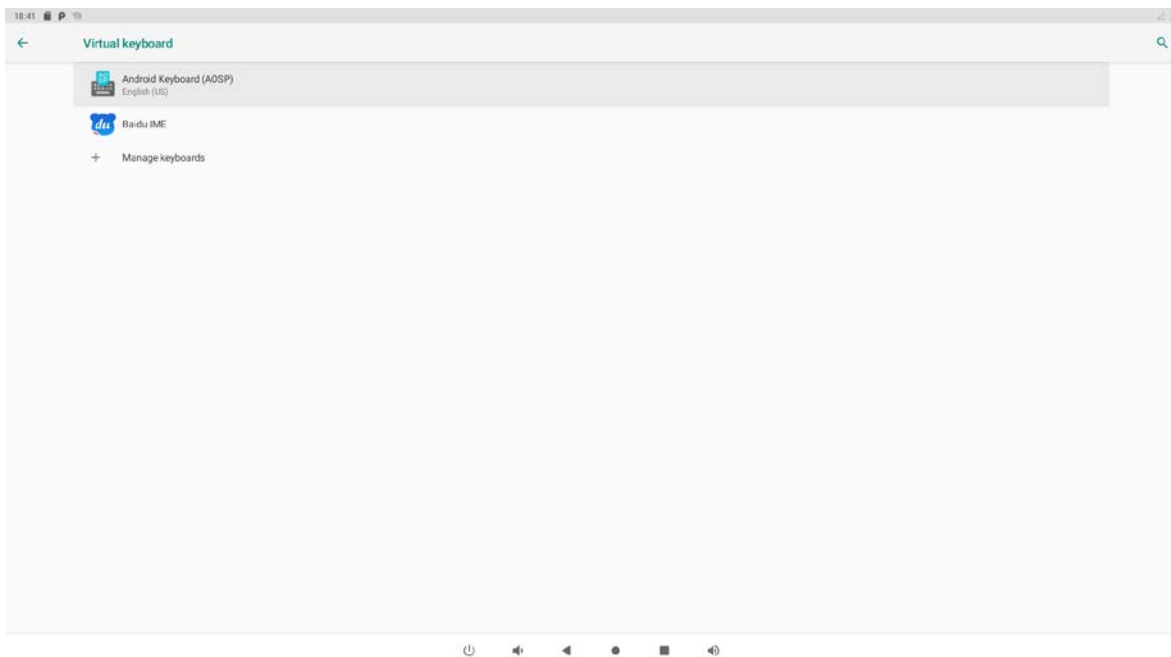
When you don't need the soft keyboard, you can click the icon  on the navigation bar to collapse it.

Switch Input Methods

Long press the space bar to bring up "Change keyboard".




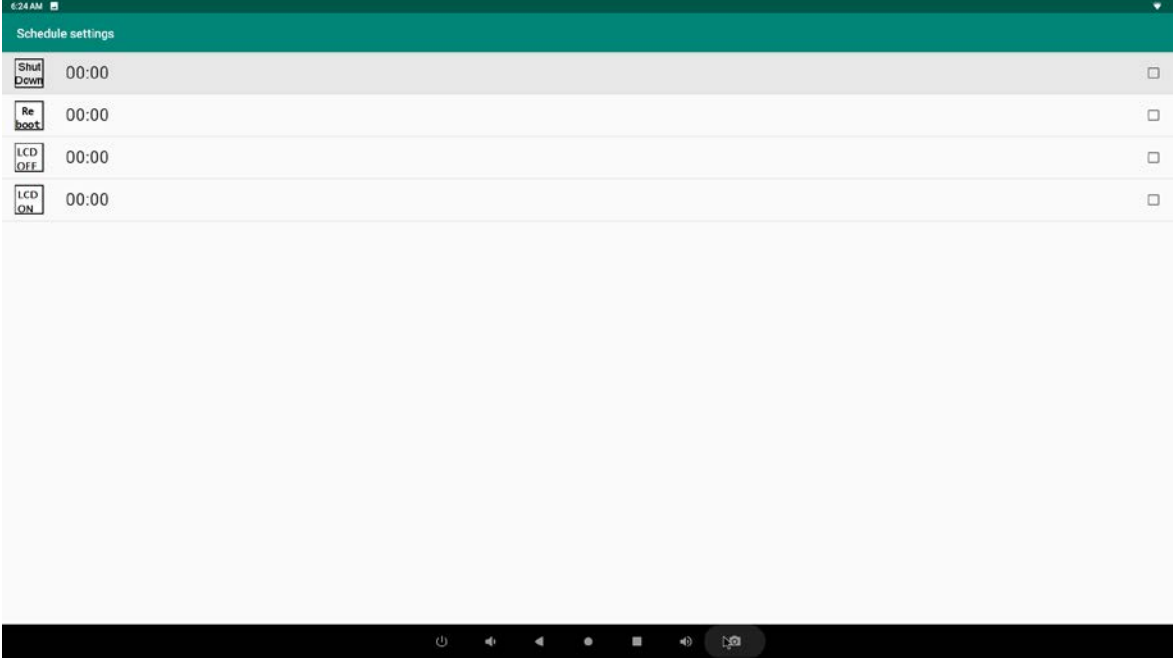
If the long press of the space bar "Change keyboard" is not visible, please check whether the installed input method is in the "Virtual keyboard" in the "language and input" option of the system Settings app.



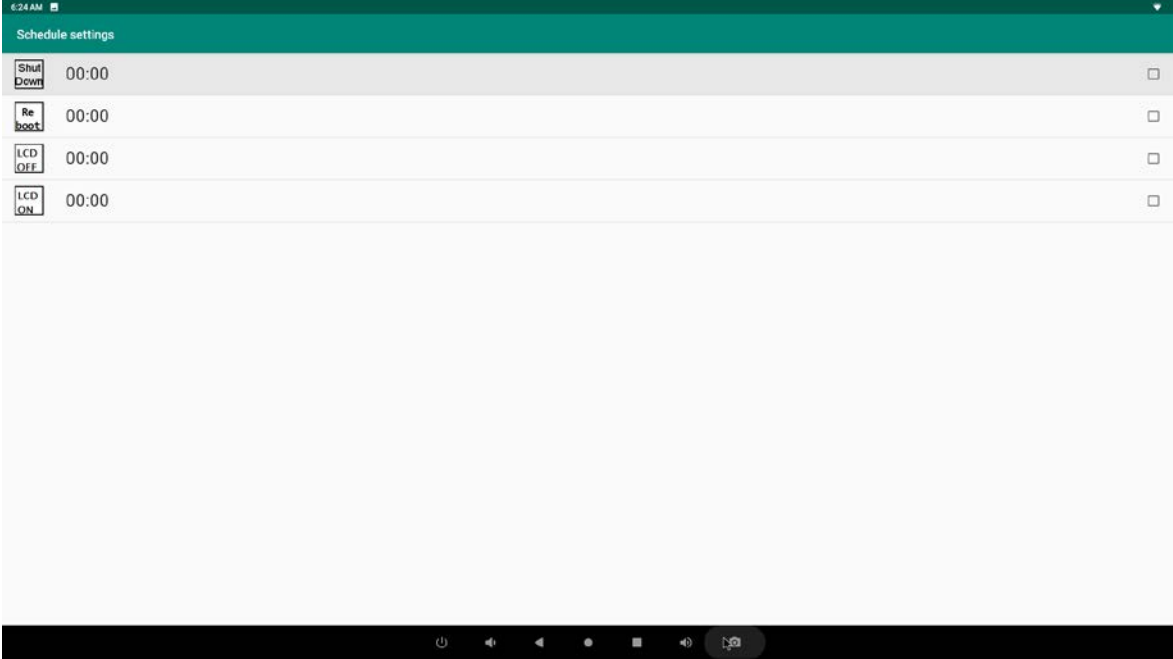
Scheduled Power On/Off

This function is used to power the device on and off automatically at the set time.

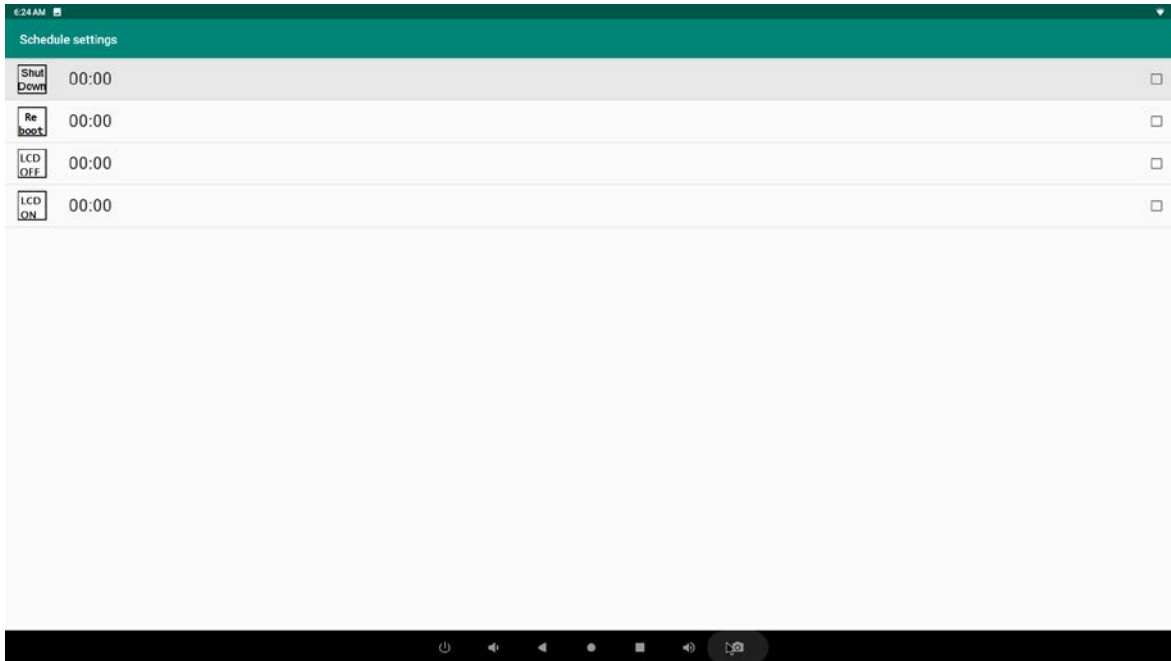
In the App list, click “**Settings**”  to open the system setting app, open the "**Digital signage options** "under" **Advanced** ", and select the "**Scheduled**" option.



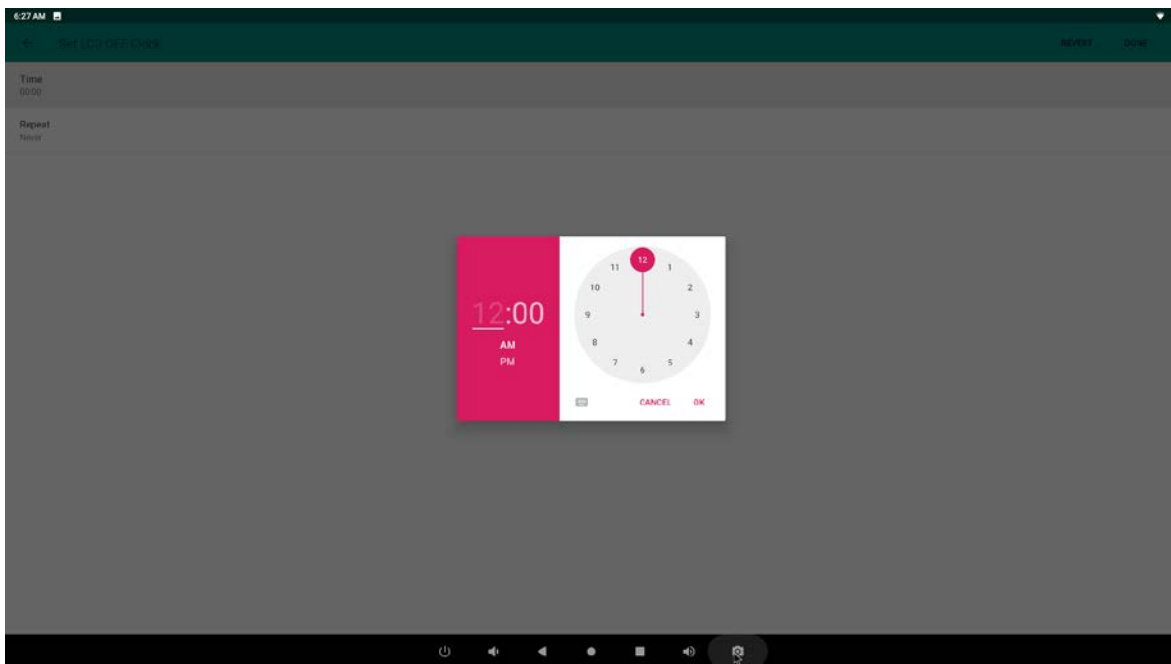
Click the single option “**Set Scheduled Sleep On/Off Clocks**”.



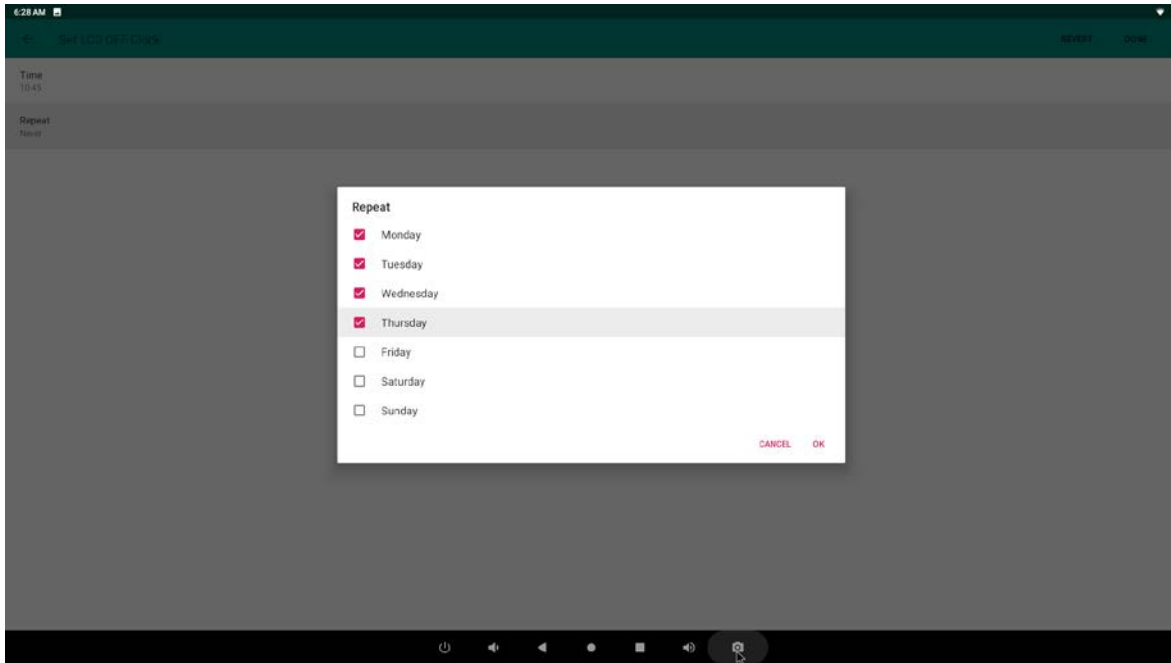
“**Sleep ON**” is when the device starts to fall asleep, and “**Sleep OFF**” is when the device wakes up from sleep.



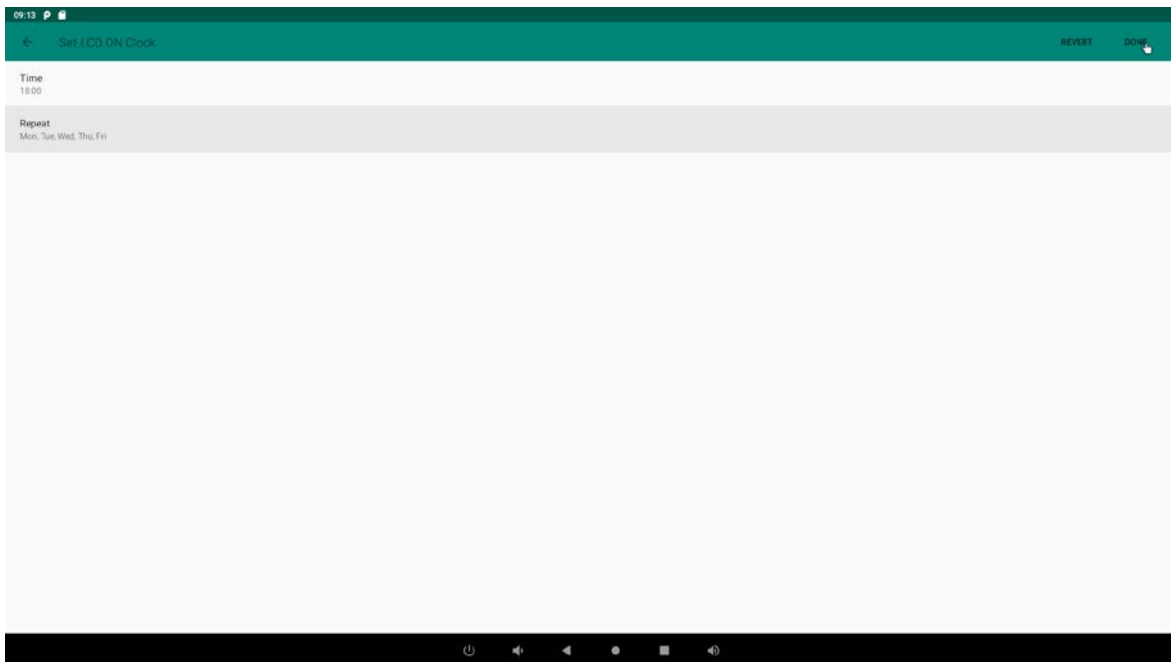
Click the option “**Time**” to set the sleep on time of this device.



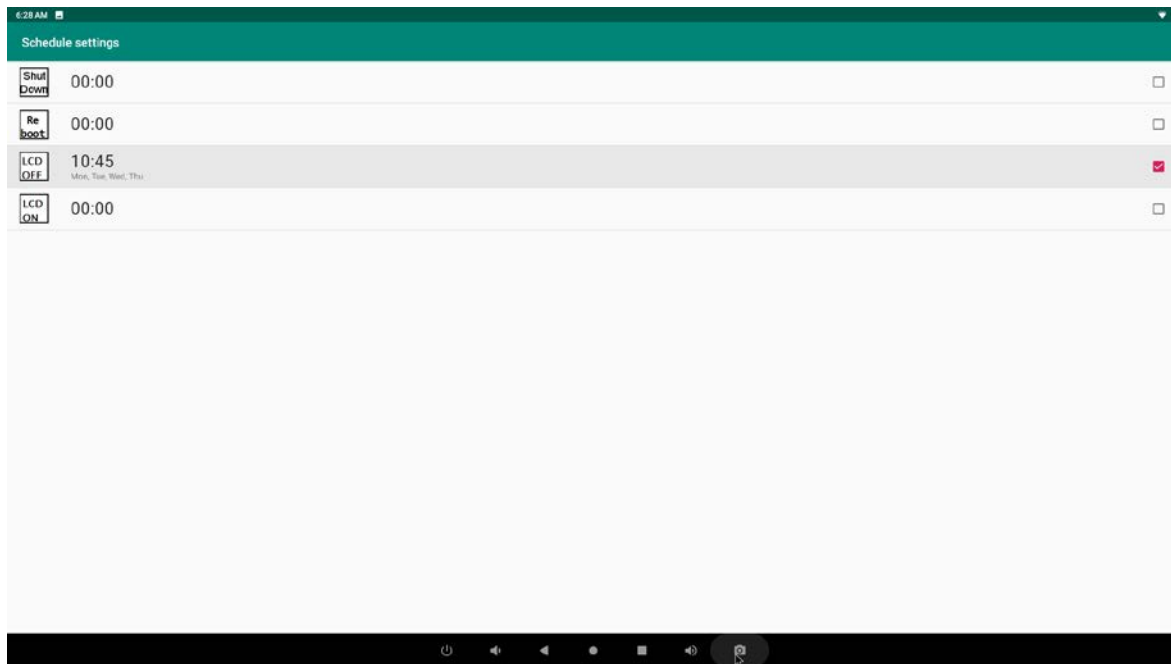
Click the option “**Repeat**” to select the days which will power on this device at the set time.



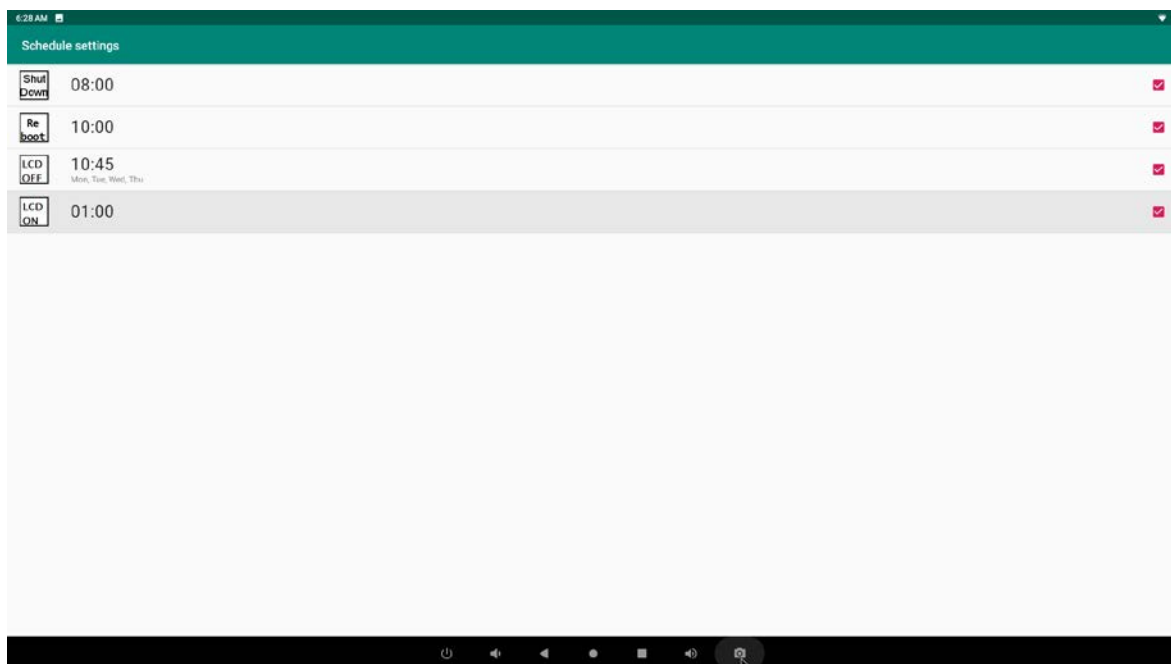
After setting, click “**Done**” at the upper-right corner of the screen to save them.



You will see the sleep on option checked after saving the settings.



For Sleep OFF, Reboot, Shut Down, you can set them as same as sleep on clocks. Note that the restart and shutdown times are performed outside of sleep hours.




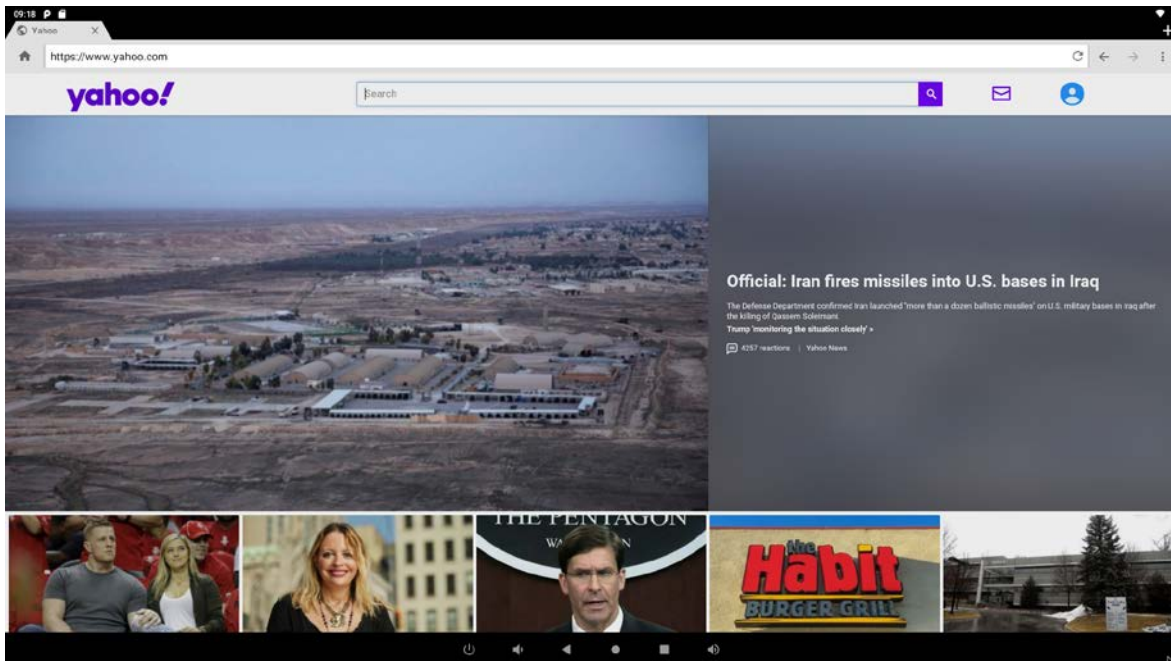
After the settings, the device will be powered off at set time, and powered on again when achieves the appointed time.

Surf Online

In the App list, open “**Browser**” .

When connecting the device to a network, you can visit websites, play online media or download files via the browser.

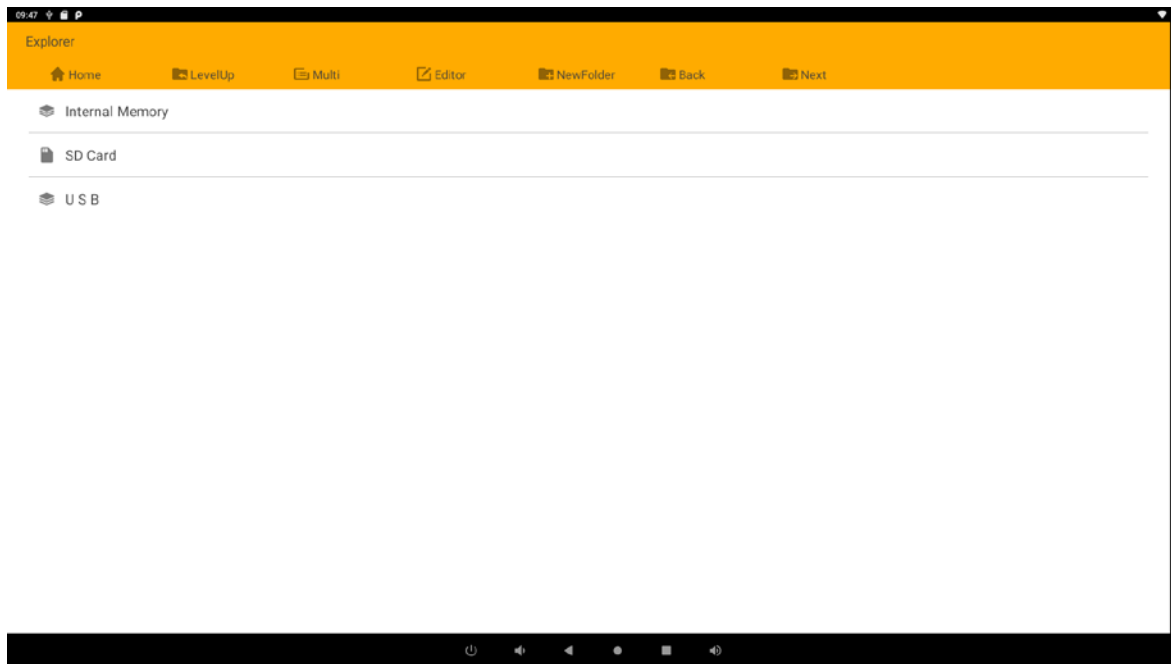
In a browser window, enter in a URL in the address bar and click “->” in the virtual keyboard to go. You can also click  to add new tabs to make multiple tabs opened simultaneously.



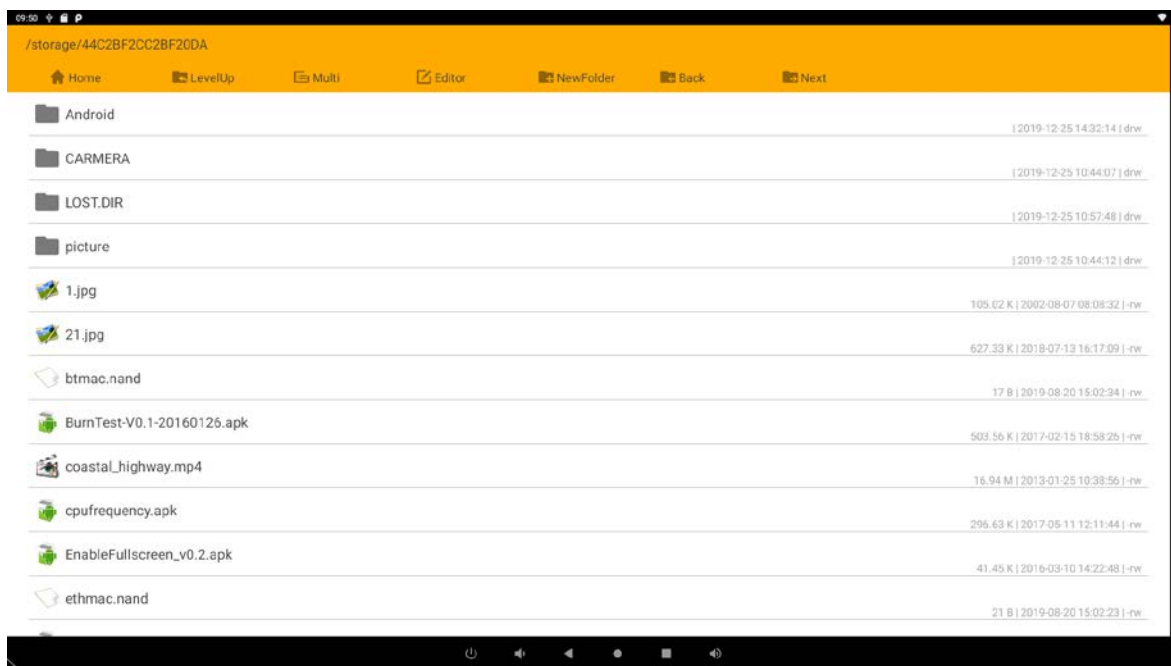
Browse Files

In the App list, open “**Explorer**” .

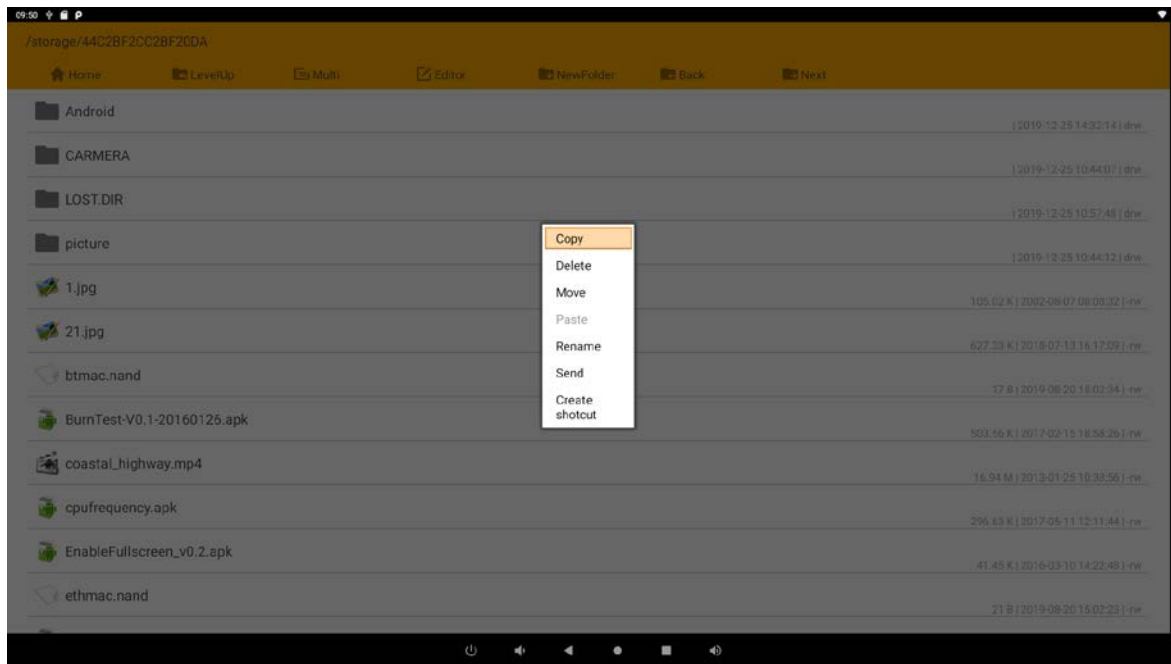
You'll find the menu at the top, which includes: Home, LevelUP, Multi, Editor, NewFolder, Back, Next.



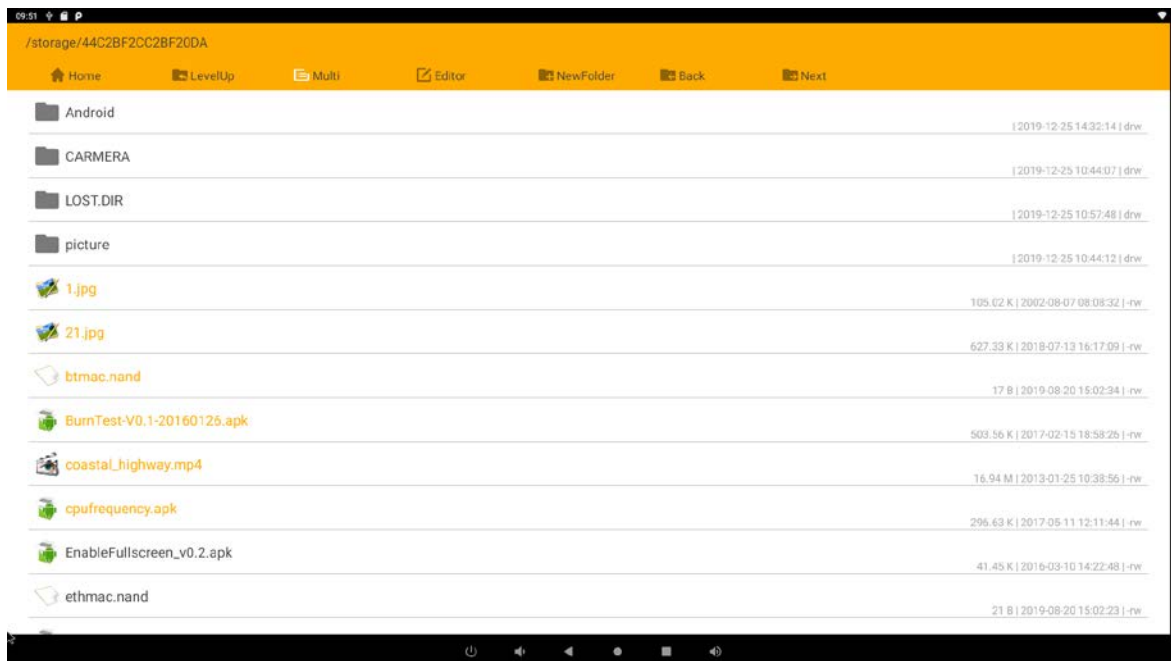
We can view local files through explorer.



Long-press a file or folder to do file operations, such as copy, delete, move (cut), paste, rename, send (share) and create shortcut.



If you want to select several files/folders at once, click “Multi” in the menu, and then select files/folders. The selected files/folders will be highlighted in orange.



Click “Editor” in the menu to operate the selected files/folders.

Play Media

With the provided apps, you can play your media files on your storage, such as pictures, music and videos.



Gallery

This app can be used to play pictures and videos.



Music Player

This app can be used to play music.



Video Player

This app can be used to play videos.

Supported media format:

Picture: HD JPEG, BMP, GIF, PNG, WEBP.


Music: MP3, WMA, AAC, WAV, OGG, FLAC.

Video: Avi, Ts, Vob, Mkv, Mov, ISO, wmv, asf, flv, dat, mpg, mpeg, mp4.

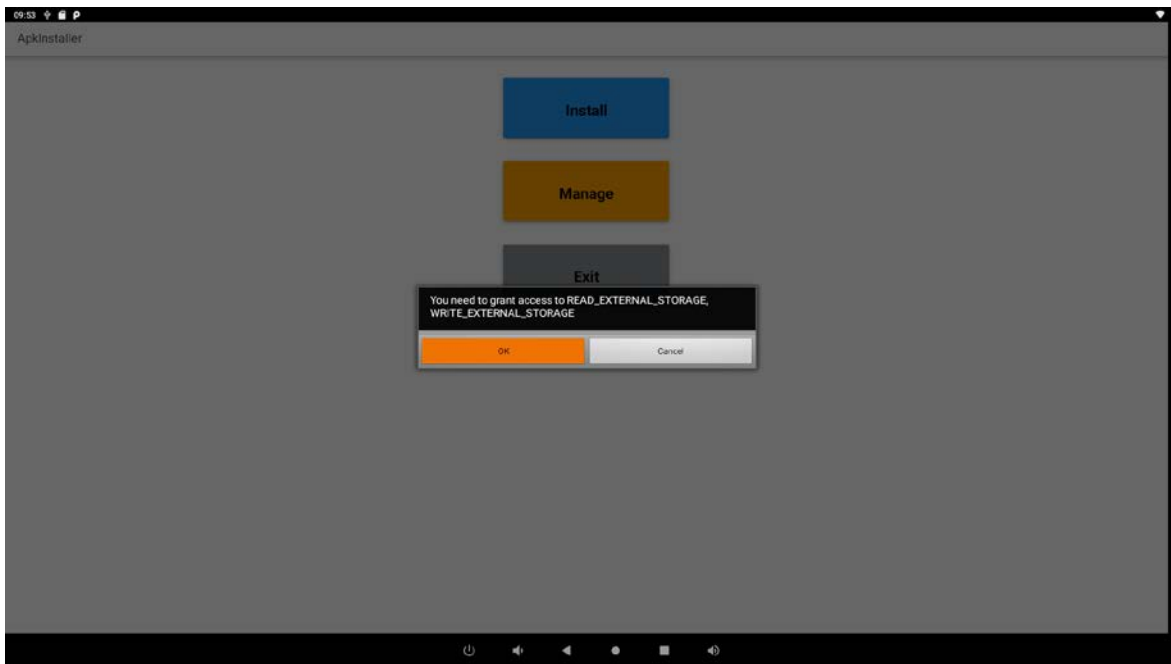
Install & Uninstall Apps

Install Apps

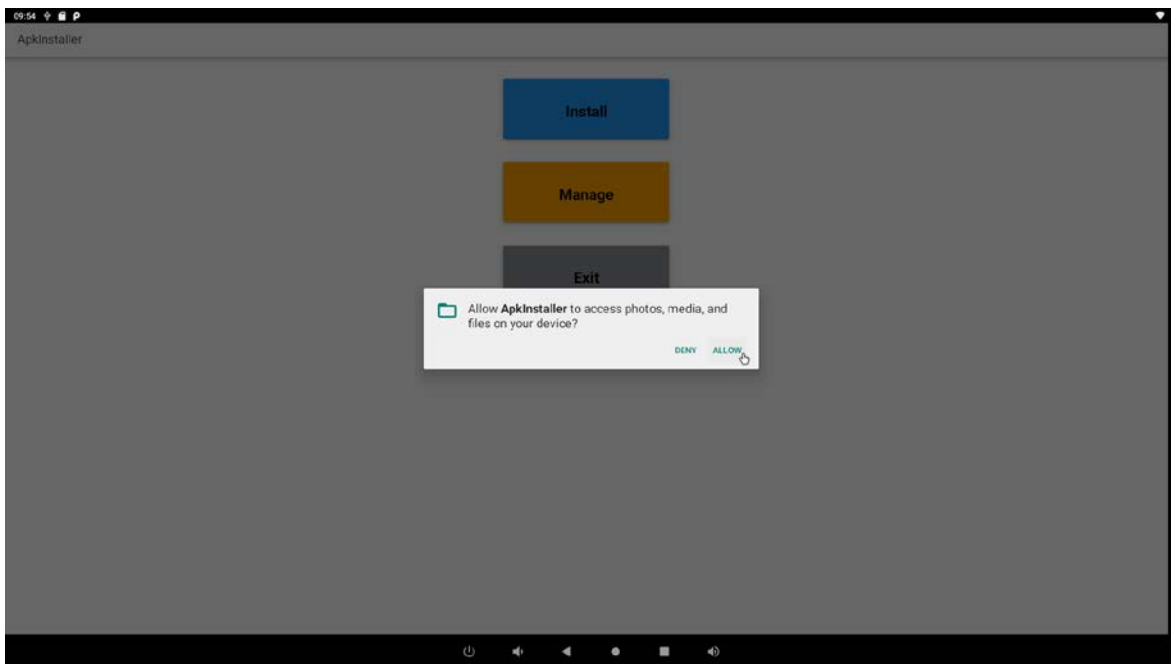
Before installing an app, please download the app (.apk) to via the browser, or copy a downloaded app to the device from your computer.

Then you can open “**ApkInstaller**”  in the App list to install the downloaded app.

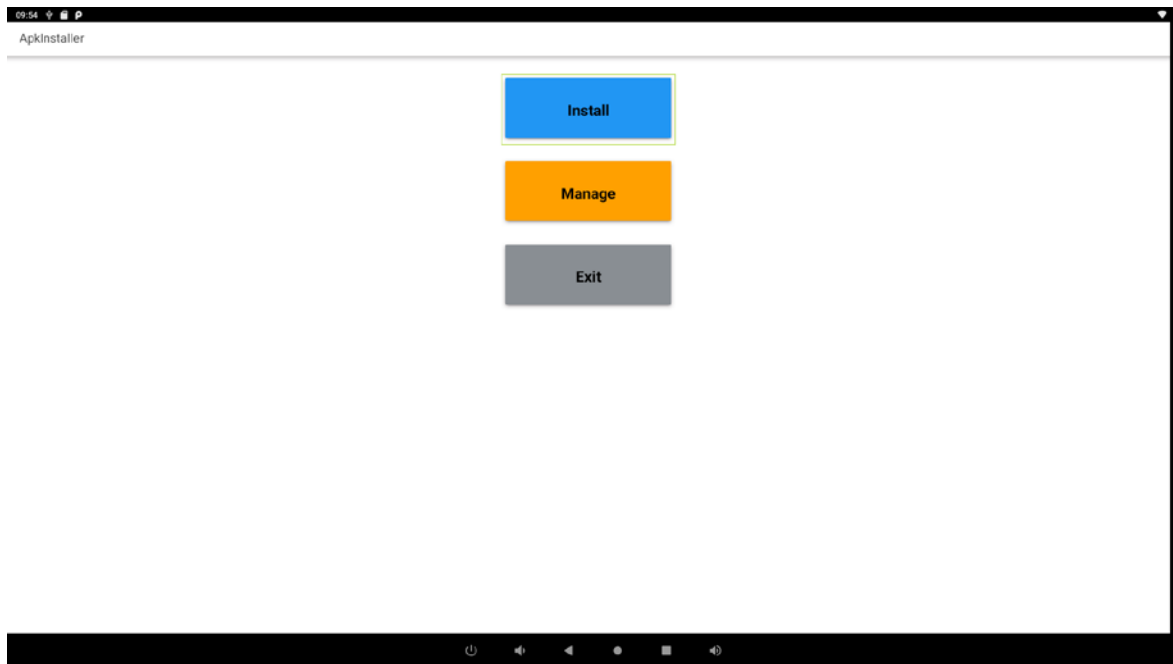
First installation prompt “you need grant access READ_EXTERNAL_STORAGE” select ok.



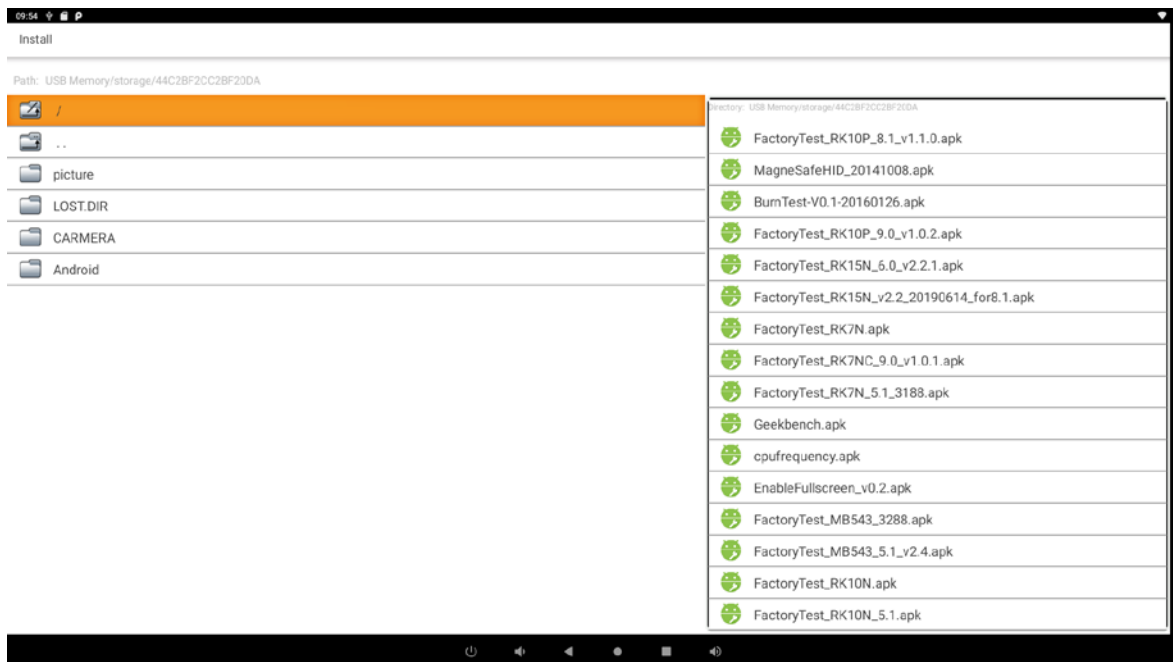
Choose "Allow".



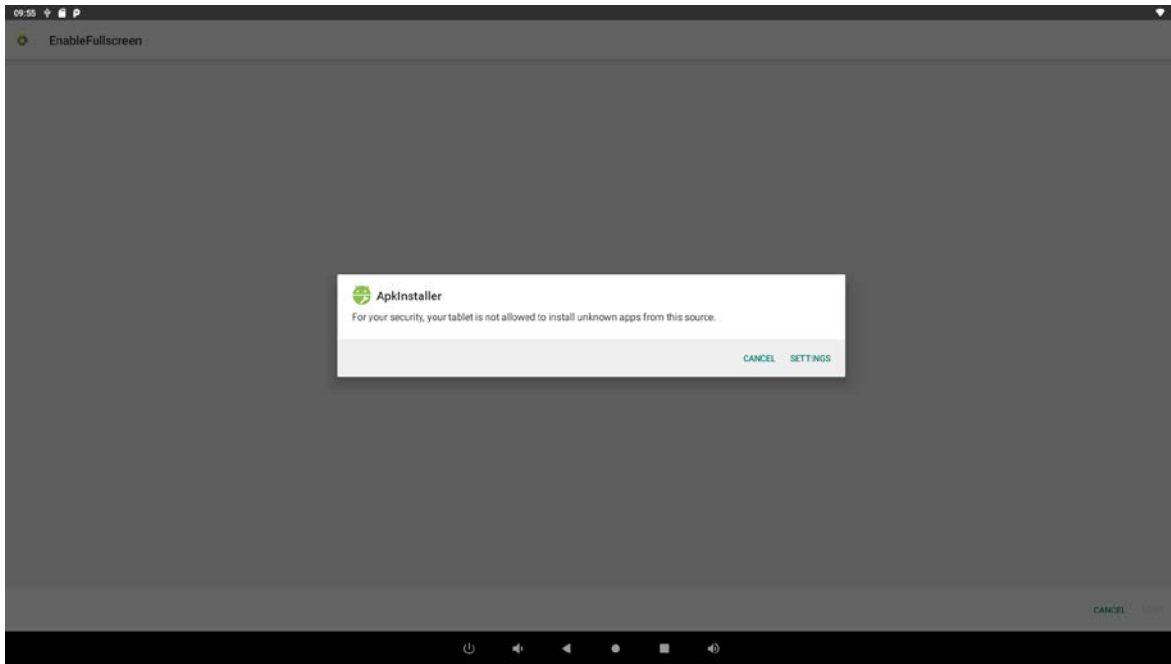
Enter the installation interface and click Install.



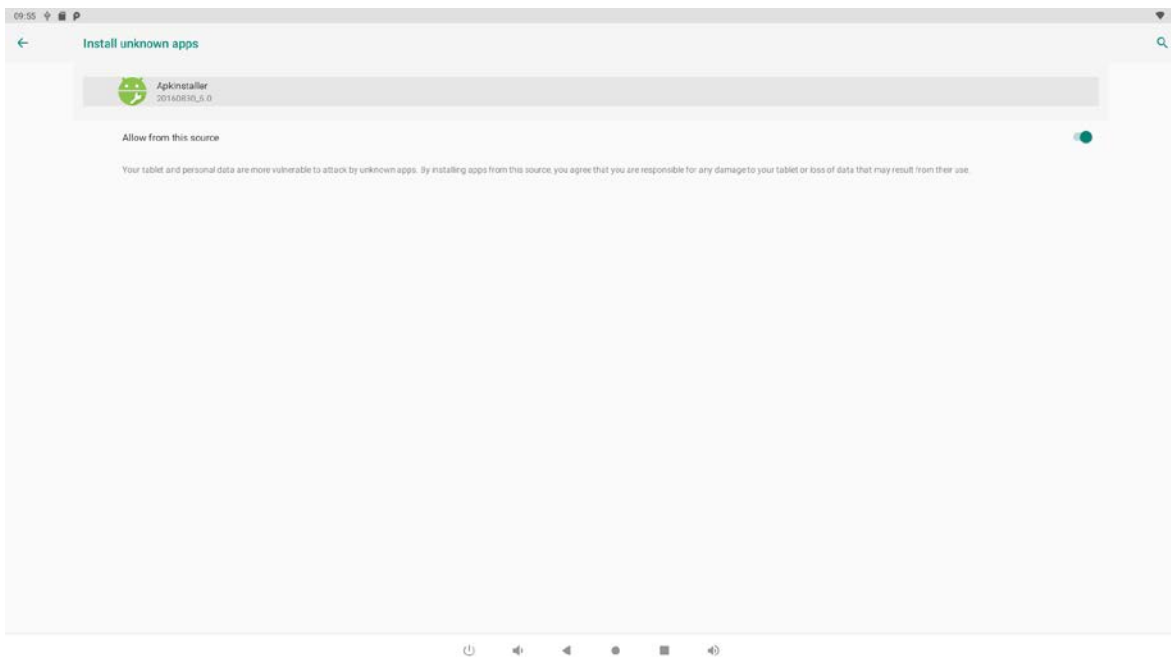
The apk files will be automatically scanned in the right side list.



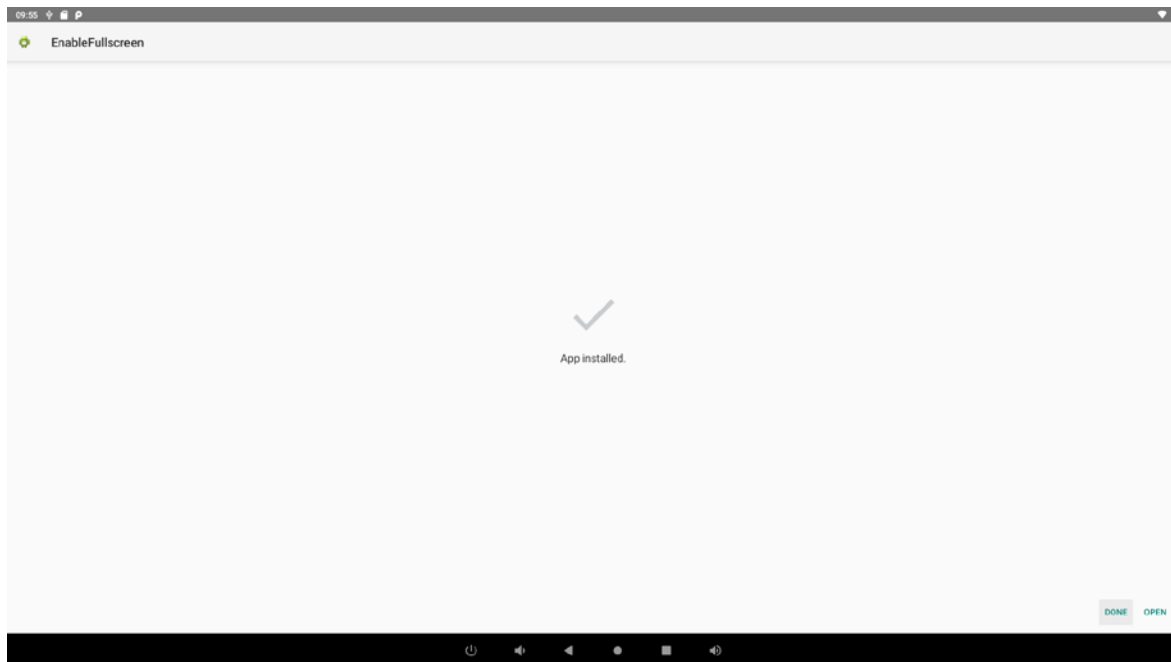
Click the apk you want to install.



If “Install blocked” is prompted when installing an app, please open “**Settings**” and select the option “**Allow from this sources**” and then back to reinstall the app.



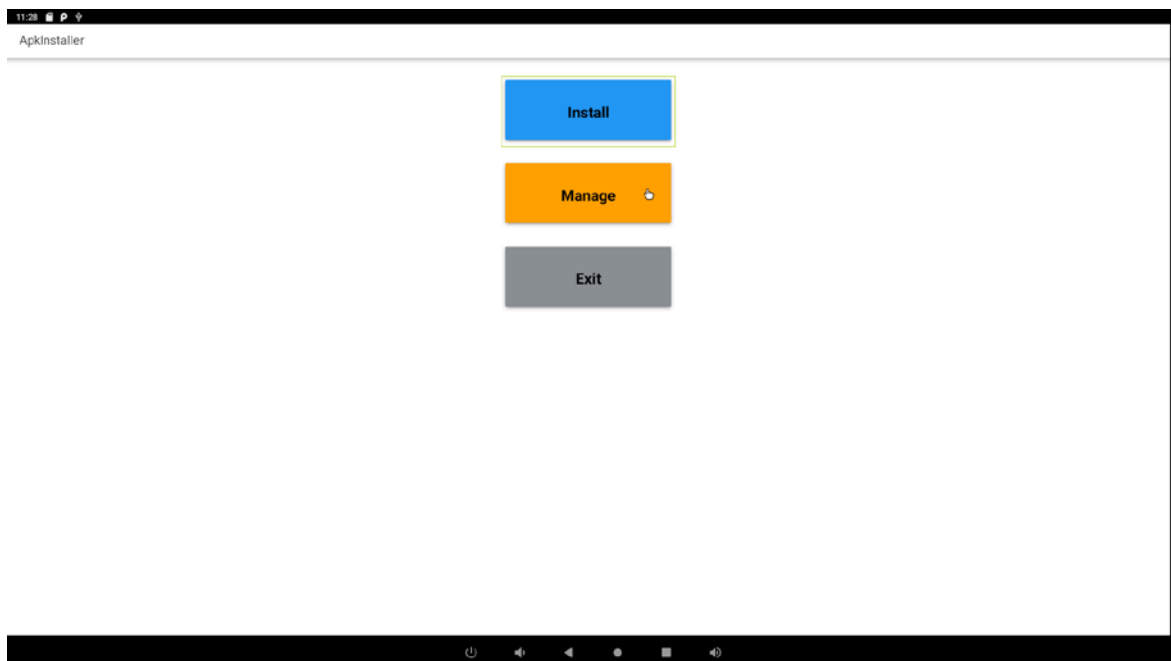
Click “Install” or “Next” until it turns to “Install”, and then waiting for installation finished.



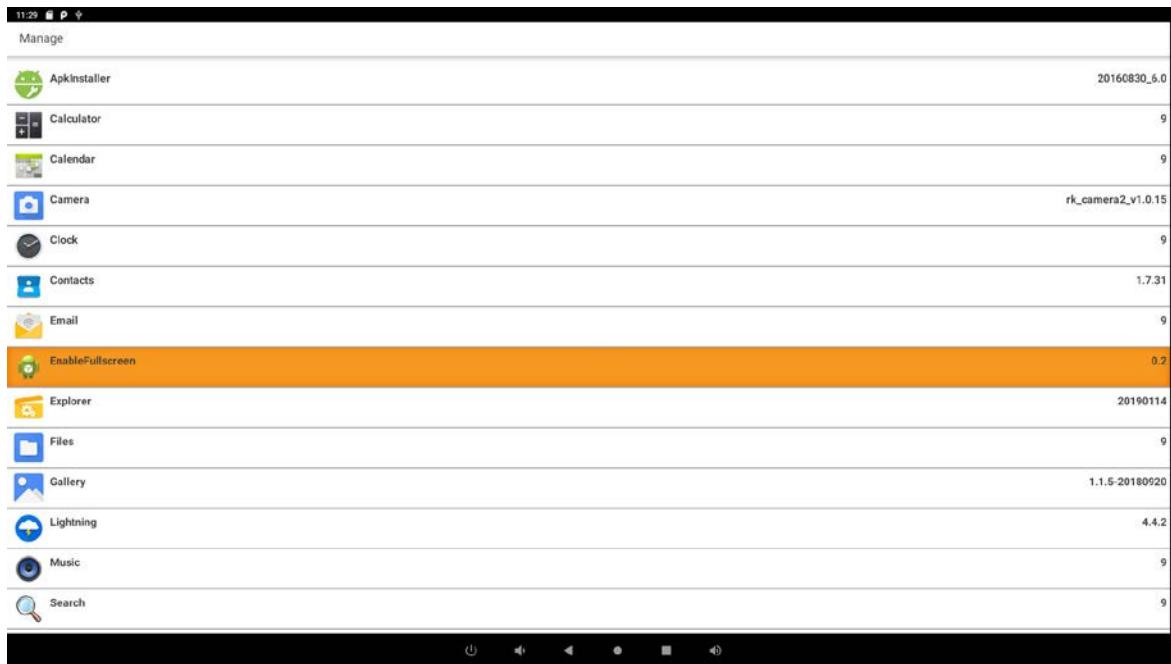
You can also download an android app market, and install the apps via the market.

Uninstall Apps

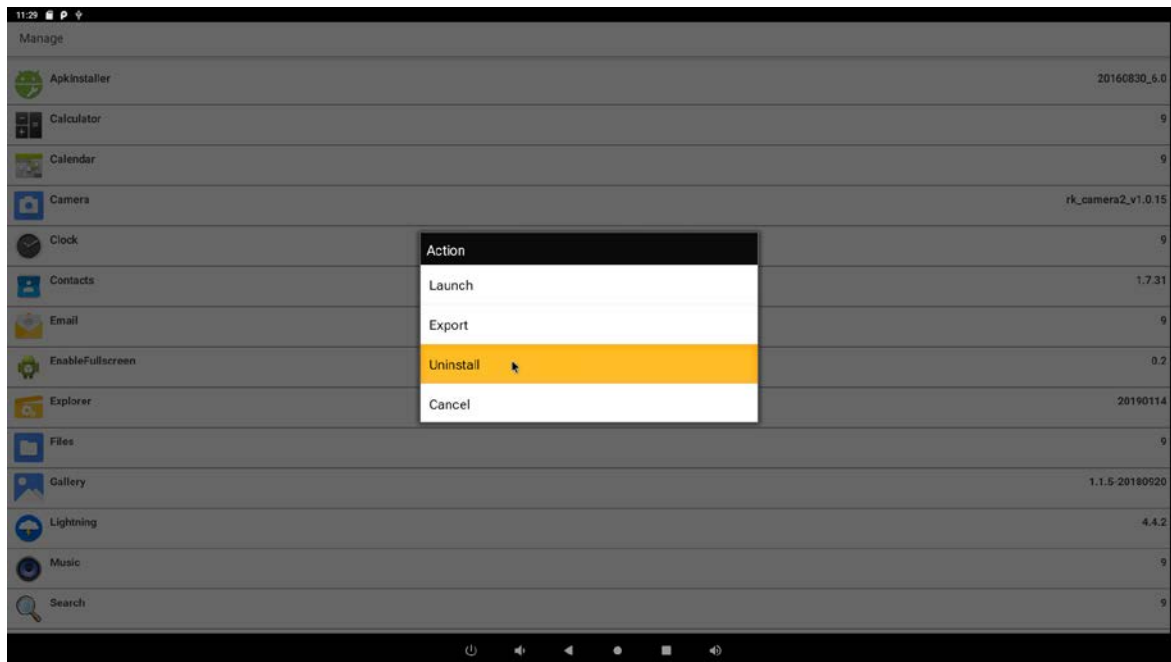
Method 1: Use the app “**ApkInstaller**” to uninstall
Double click to enter “**Manage**”.



Find the app you want to uninstall and select it.

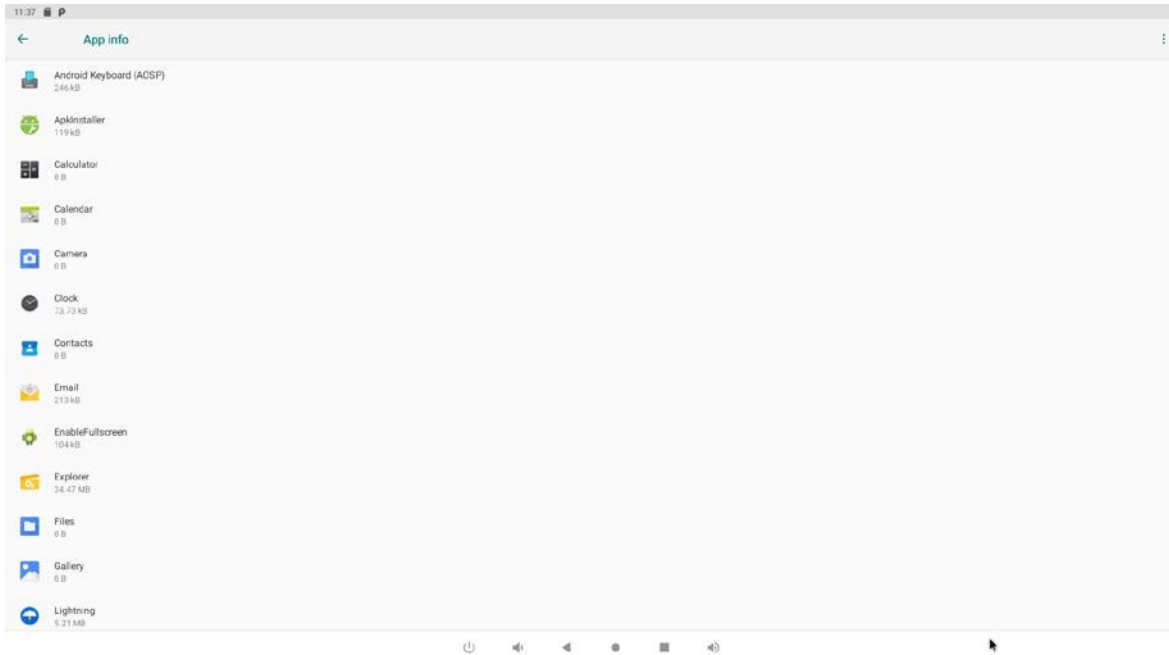


Select **“Uninstall”** in the pop-up window and confirm **“OK”** to uninstall the app.

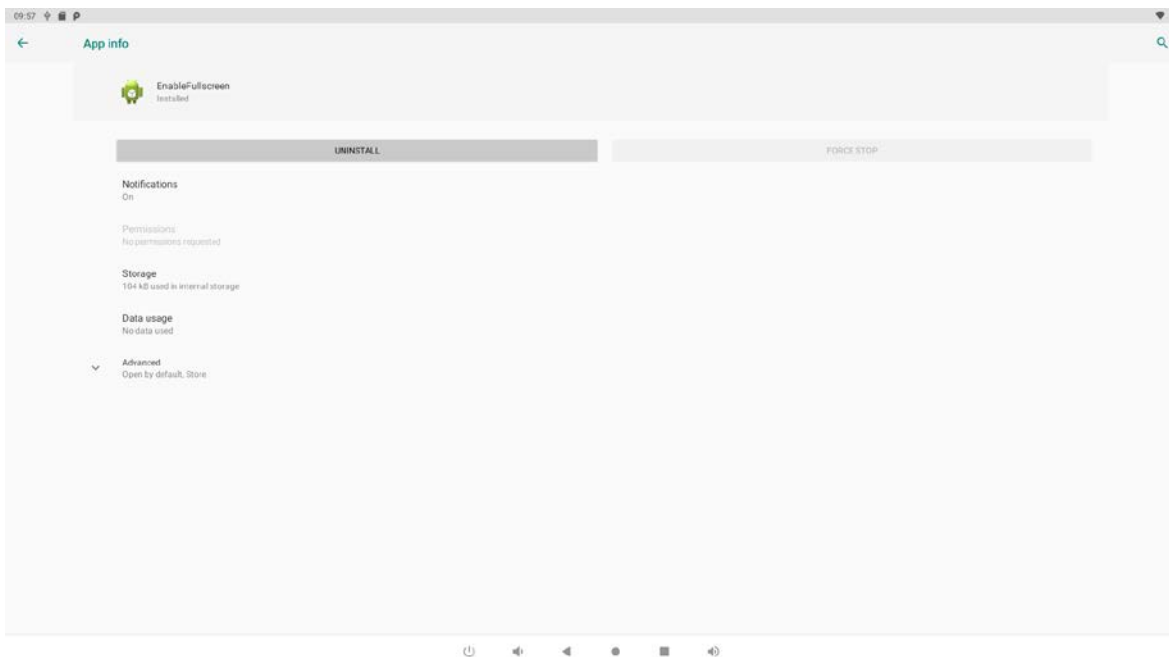


Method 2: Use Settings' App Management to uninstall

Open **“Settings”** in the App list and select the option **“Apps & notifications”**. In this option; Open "See all apps" in this option and you will see a list of installed applications.




Click the app you want to remove to enter the detail page.



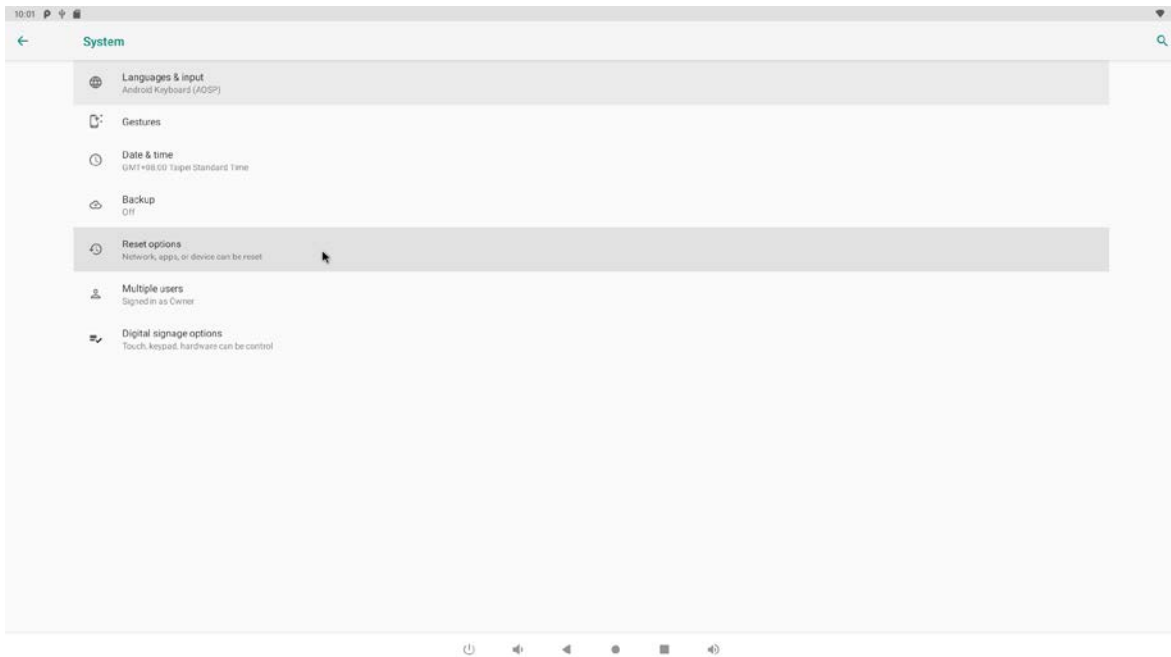
Click the **“Uninstall”** button and select **“OK”**, and then waiting for uninstallation finished.

Reset to Factory Default

Please make sure to back up the important data before resetting the device.

In the App list, click **“Settings”**  to open the system setting app, enter

"system" and select **"Reset options"**.



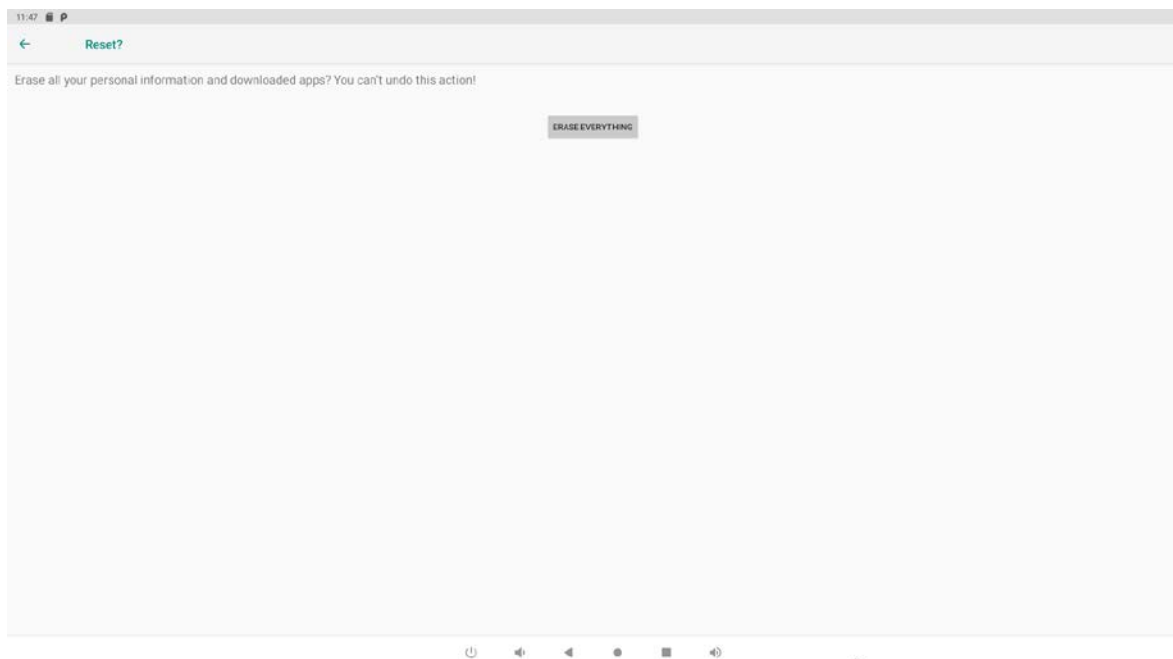
Click **"Erase all data (factory reset)"** option.



Click **"RESET TABLET"** button.



Click "Erase everything" button, and then waiting system reboots and resets to factory default.



Basic Specification

Hardware Specifications	
Chipset	Rockchip RK3399 Hexa-core 2x Cortex-A72 + 4x Cortex-A53
GPU	Mali-T860MP4
SDRAM	2GB/4GB(Optional)
FLASH	eMMC 16GB/32GB(Optional)
Power Supply Specifications	
Power Supply	DC 12V/2.0A adapter (CE, FCC, PSE certified)
Power Indicator (LED)	Power supply ON: Green; Power supply OFF: LED light off
Main Features	
OS	Android9
Support Decoder Format	4K VP9 Video decoder, H.265/H.264 video decoder 1080P other video decoders (VC-1, MPEG-1/2/4, VP8)
Support Media Format	Avi/Ts/Vob/Mkv/Mov/ISO/wmv/asf/flv/dat/mpg/mpeg/mp4
Support Music Format	MP3/WMA/AAC/WAV/OGG/FLAC
Support Photo Format	HD JPEG/BMP/GIF/PNG/WEBP
HDR	HDR10 and HLG modes
USB	Type-C x 1 – support OTG Type-A USB 2.0 x 1 Type-A USB 3.0 x 1
Card Reader	Micro SD card, Maximum support 128GB
HDMI Output	HDMI 2.0, support 4K 60Hz display
HDMI In	HDMI 1.4, Support 1080P
LAN	Ethernet 10/100/1000M standard RJ45
Wireless	Wireless 2.4G/5G dual-band Wi-Fi, IEEE802.11 a/b/g/n/ac
Bluetooth	V4.2
4G module (optional)	EC25-E-MINIPCIE / Mini-PCIE
UART	RS232 x 1 (3 pin, GND/TX/RX) - settings: baud rate: 115,200bps, stop bit: 8, parity: N.
Audio	Earphone + MIC(Headset)
Comm.	Remote Control – connected with extension cable (optional)
Human Detection	Motion Detection - connected with extension cable (optional)

Sensor	
GPIO	1* Output/Input pin connector
Antenna	Wi-Fi & Bluetooth x 1, LTE(optional) x 1
Mouse / Keyboard	Support mouse and keyboard via USB; Support 2.4GHz wireless mouse and keyboard via 2.4GHz dongle
Temperature	Operation: -10°C ~ 60°C Storage: -20°C ~ 65°C
Accessories	Power adapter x 1