

MORNVOY

Automobile Smart Screen

manual

Contents

1 Product Overview 3

2 Product Composition List 4

3 Product Parameters 5

4 Wiring Instructions 7

5 Installation of reverse camera (optional) 11

6 Interface specification 12

 6.1 Gemini 14

 6.2 Half Screen mode 15

 6.3 Connect to the network 17

 6.4 Recent Task Button 18

 6.5 Startup Wizard 21

 6.6 Carplay 23

 6.7 Android Auto 28

 6.8 Audio output 30

 6.9 Help Center 32

 6.10 Files 38

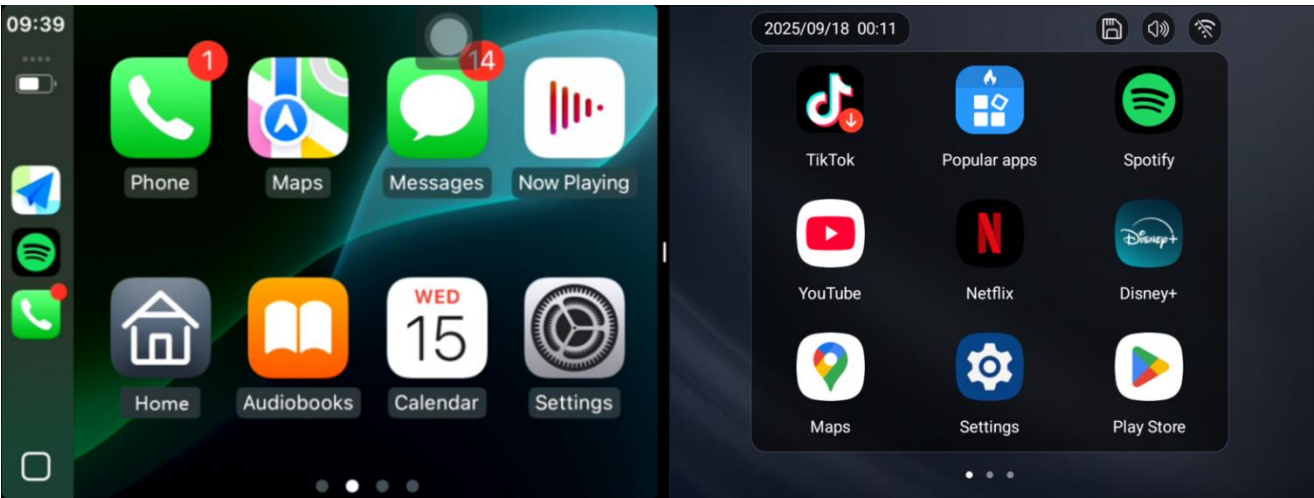
 6.11 Settings 39



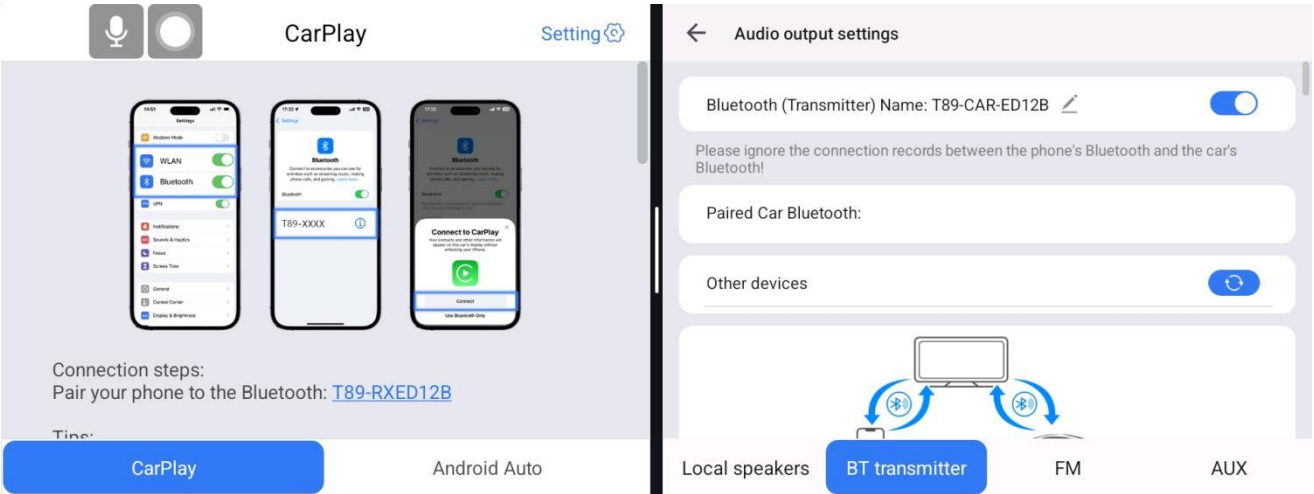
[在此处键入]

1 Product Overview

MORNVOY Smart Screen has true dual 5G WiFi, supporting wireless WiFi connection to Carplay, Android Auto for mobile phone connectivity. At the same time, WiFi function can be used in settings to connect to personal hotspots on the phone and use applications such as YouTube, Netflix, Gemini, etc.



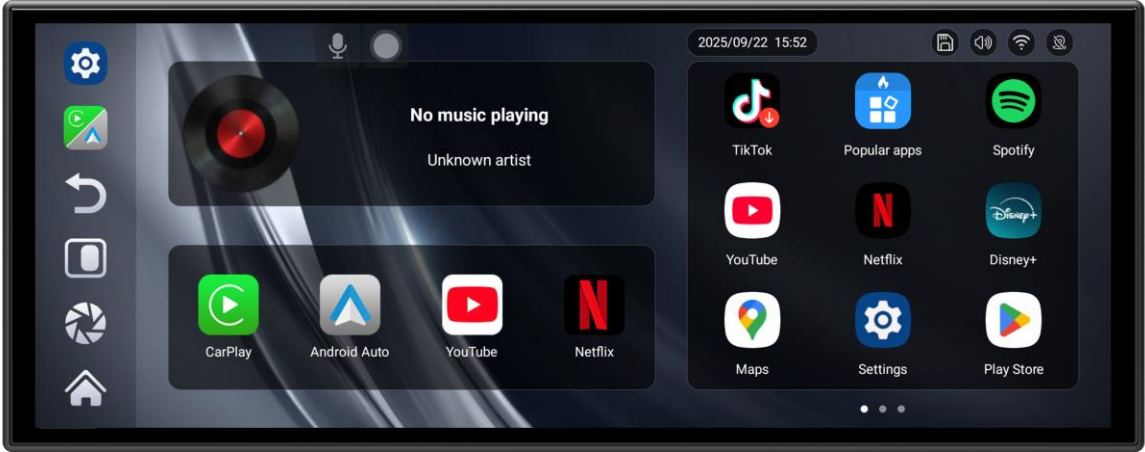
In addition, it also adopts a true dual Bluetooth chip design, which can receive Bluetooth from mobile phones to complete mobile phone interconnection, and can also transmit independent Bluetooth audio to car systems.



[在此处键入]

[在此处键入]

2 Product Composition List



Name	Graphic	Instructions	Number
The host		10.25-inch HD display (1920x720) / touch control / dual Bluetooth / dual WIFI / audio output / powered by Type C interface.	1
The power cord		Type C power cable / 12-24V / 3A current / integrated cable / cigarette lighter power supply.	1
Pull back camera		AHD FHD (1080P)/4PIN BMW camera	1
Pull the headphone extension cord back		Pull back headphone cable / 6m / 2.5mm headphone +4PIN BMW head/double shield/with reverse cable	1
AUX		After selecting the AUX audio output mode, use AUX to connect the smart screen to the car audio system.	1

[在此处键入]

3 Product Parameters

Project	Function introduction	Performance indicators
Network	Dual WiFi	Capable of connecting to WiFi, enabling internet connectivity
		Supports wireless connection to Apple Carplay, Android Auto
Input methods	Input methods	Google Input, other inputs.
More settings	Operating language	Default is English, can be customized to other multiple languages
	Operating interface	Graphical menu navigation
	Operation mode	Touch control
	Version upgrade	SD card upgrade/OTA upgrade
	Factory reset	Can restore to factory system settings
	Install apps	You can download applications from the Google Play Store
Video display	Real-time display	10.25-inch high-definition IPS screen, 1920X720
Reverse display	Reverse display	Automatically switches to the rear view
	Astern line adjustment	Adjust the reversing line for various models
Quick Access Menu	Quick Access Menu	Half/Full Screen Mode, Home Screen, Volume Down, Return, Volume Up, Backend application management, Brightness Adjustment
Third-Party Applications	Carplay	Carplay, Apple's in-vehicle system, seamlessly integrates functionalities such as telephony, music entertainment, and more, enabling intelligent connectivity and facilitating a convenient driving experience.



[在此处键入]

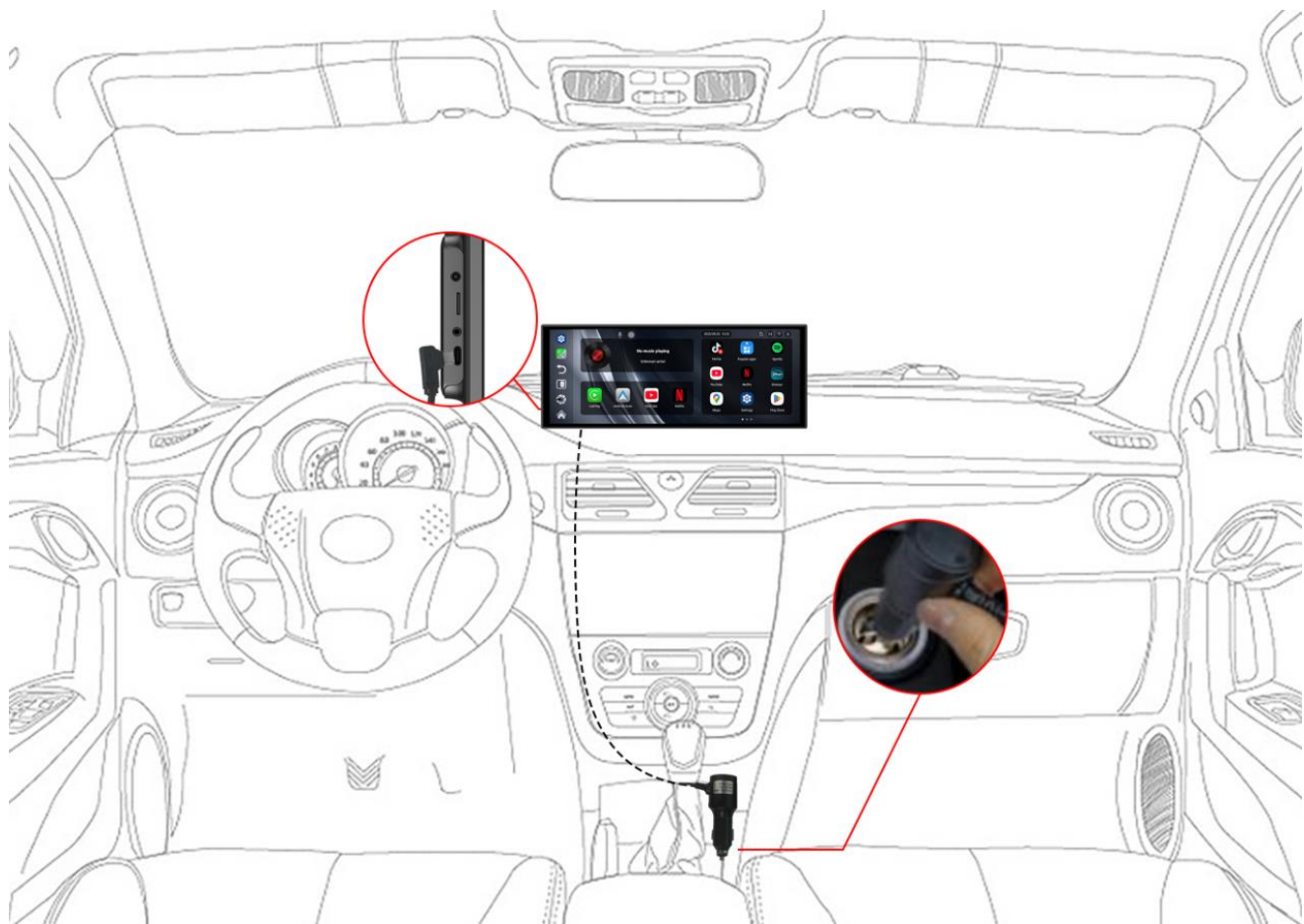
	Android Auto	Android Auto allows for effortless connection between Android smartphones and automobiles, providing easy access to navigation, music, telephony, and other essential functions while driving.
	YouTube	YouTube stands as the world's largest video-sharing platform.
	Netflix	Netflix is a pioneering global streaming entertainment service, offering an extensive library of movies, TV series, and other video content for online viewing.
	YT Music	YT Music, an independent music application launched by the YouTube team, offers both video and audio music modes for a versatile listening experience.
Power part	The power input	The step-down line supports a wide voltage range of 12-24V, and has car-grade anti-surge, anti-reverse connection and other power protection.
Other	Working temperature	-4~149 ℉
	Camera Mirroring	Camera mirroring inversion in up-down and left-right directions to fit various installation methods

[在此处键入]



[在此处键入]

4 Wiring Instructions



Serial number	Interface	Illustrate
1	Type C interface	Motherboard power supply interface
2	Cigarette lighter	Cigarette lighter takes electricity directly; Note: Please use our charger, otherwise it is easy to damage the machine or cause other injuries due to insufficient voltage and heat, and the frequency modulation transmission function will not work properly.

[在此处键入]

[在此处键入]



GPS: The T89 supports built-in GPS functionality. It can accurately locate the vehicle in real time and obtain its position through satellite signals. With intelligent route planning combined with real-time traffic data, it dynamically adjusts the route to avoid congested sections, thereby improving travel efficiency.

Install the product on the front center console of the car, beneath the front windshield! Do not attach the product to the car's air vents or place it under the air vents! (Also, please do not place any obstructions such as tissue boxes, decorative items, or hanging ornaments to the right of or above the product.)

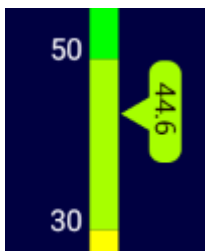


[在此处键入]

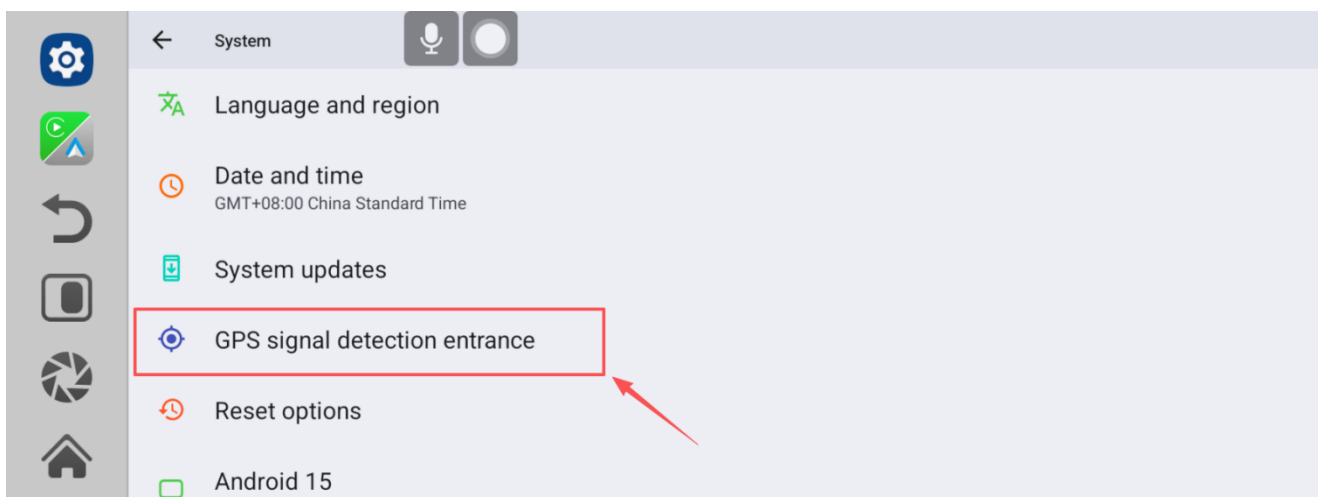
[在此处键入]

The green area is the GPS signal reception zone. Please do not obstruct it! Otherwise, the reception of GPS signals will be affected. Placing it in the middle of the dashboard will result in better signal reception!

Attention: The GPS locator can be installed on the center console next to the A-pillar of the car (if the car's front windshield is covered with film, it may affect the GPS signal, please find another place with good signal for installation). During installation, the antenna should face upwards and the adhesive should face downwards.

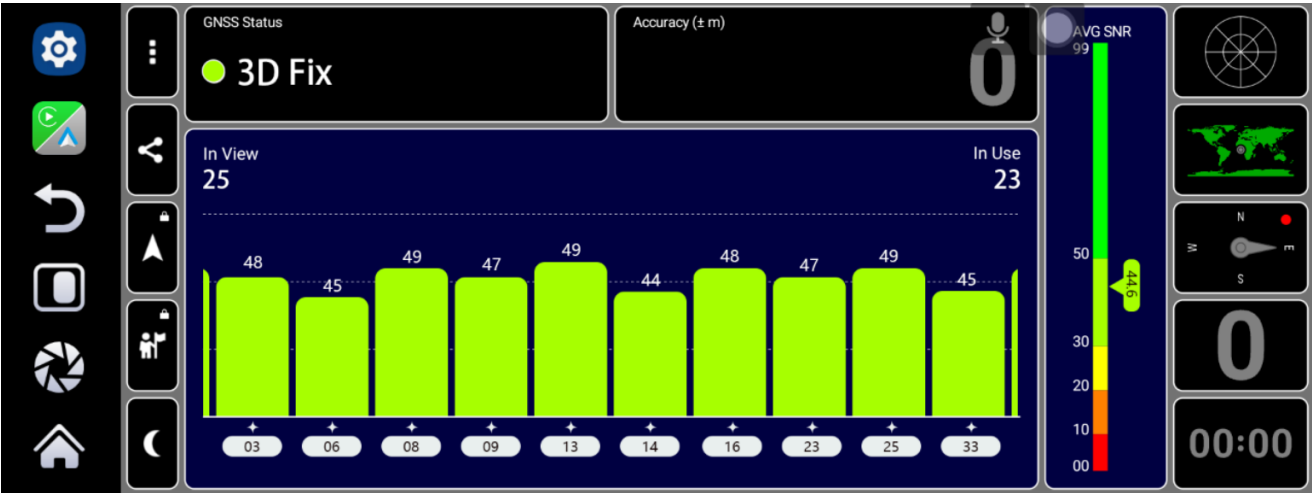


After installation, please click on Settings - System - GPS Signal Detection Entrance. If the detection signal score is above 35 points, the signal is normal.



[在此处键入]

[在此处键入]



Note: Some new energy electric vehicles may interfere with GPS, preventing the built-in GPS from receiving signals.

[在此处键入]

[在此处键入]

5 Installation of reverse camera (optional)

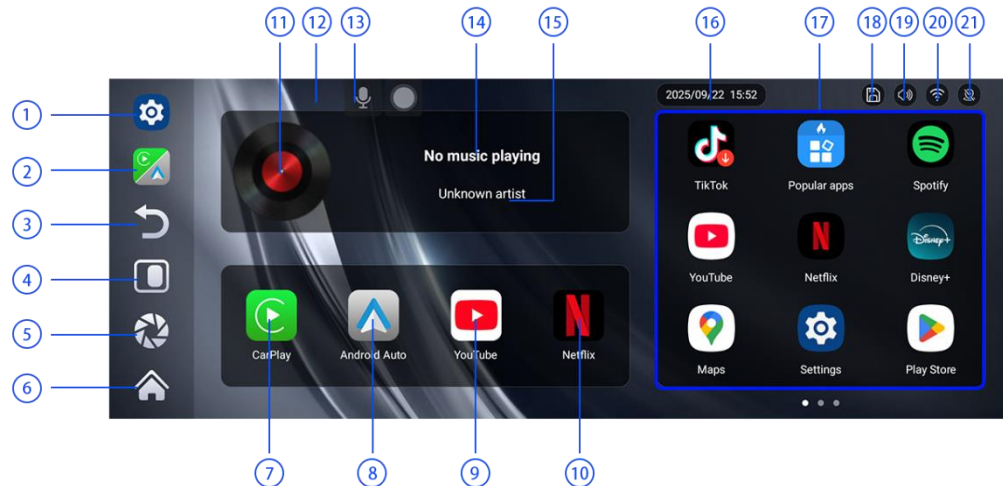
Find a suitable installation location near the license plate, mark it with a pen, and drill screw holes of appropriate size. Secure the camera to the rear of the car with screws, and finally connect it to the monitor with an extended camera cable.



[在此处键入]

[在此处键入]

6 Interface specification



1: Recently opened application 1

2: Recently opened application 2

3: Return button

4: Split screen mode button

5: Reverse screen button

6: Home button

7: Carplay button

8: Android Auto button

9: YouTube button

10: Netflix button

11: Audio player button

12: Quickly activate Gemini voice control function button

13: Shortcut menu (small white dot) auxiliary button

14: Song name

15: Songwriter

16: Time and Date

17: Application list (slide to flip pages)

[在此处键入]

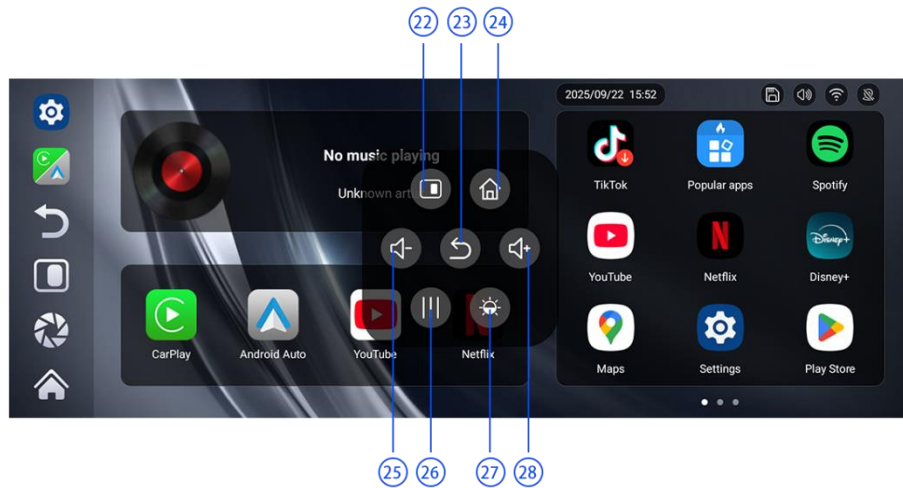
[在此处键入]

18: Storage card status

19: Audio transmission status

20: WiFi status

21: GPS status



22: Half screen mode button/Full screen mode button (detailed introduction as follows)

23: Return button

24: Home button

25: Volume down button

26: Recent Task Button (detailed introduction as follows)

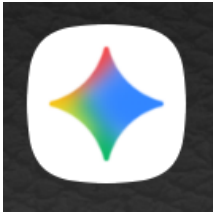
27: Brightness adjustment button

28: Volume Enhancement Button

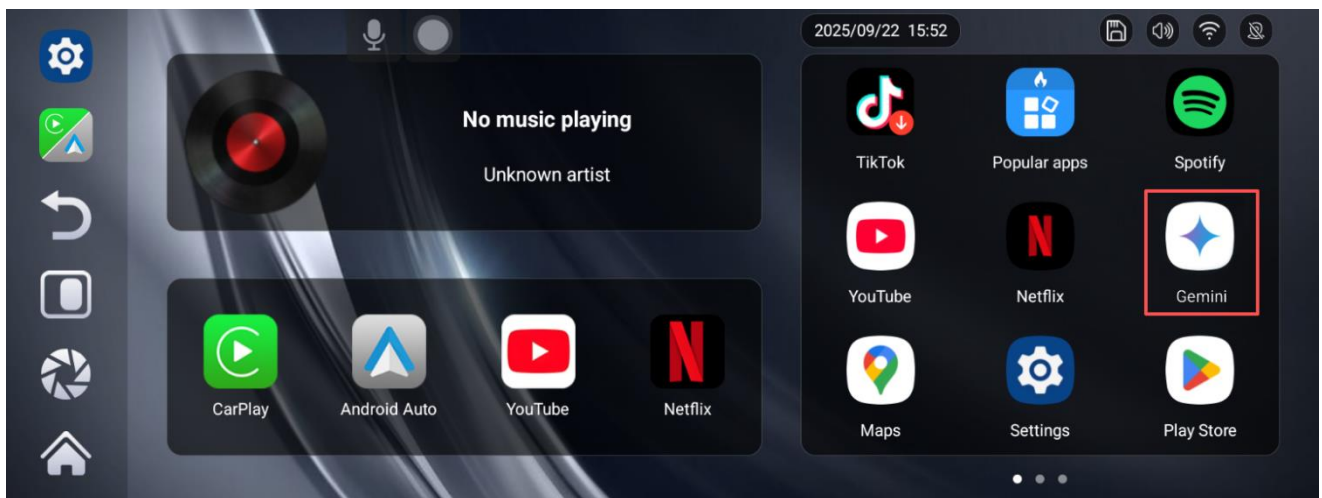
[在此处键入]

[在此处键入]

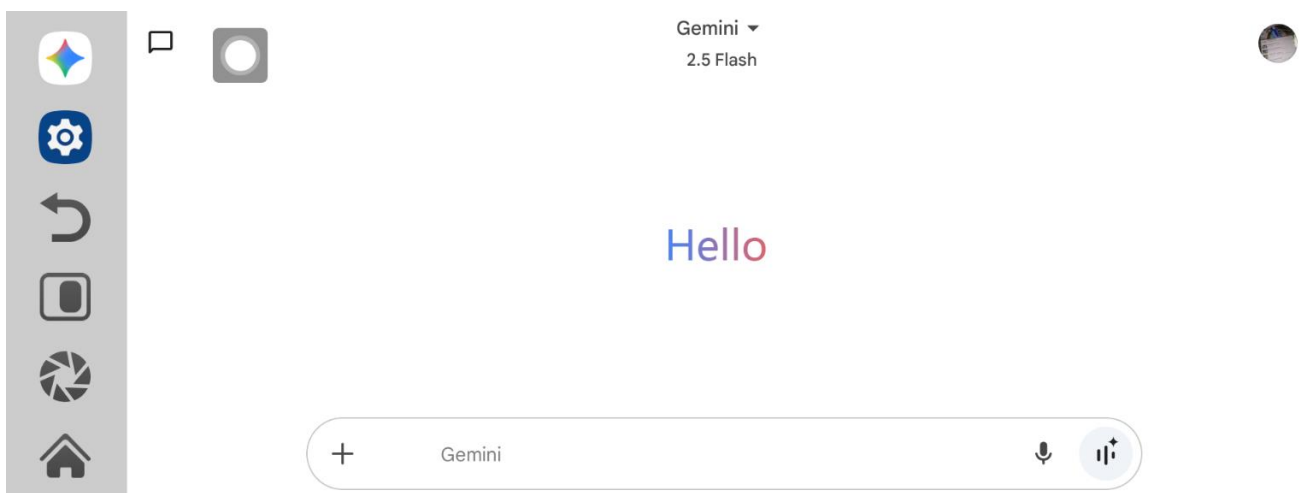
6.1 Gemini



MORNVOY Smart Screen can use Gemini voice control technology and support full language recognition. Use Gemini to implement voice controlled navigation, play music, open applications, and other operations.



Gemini needs to be connected to the network before it can be used normally. (Gemini supports most countries and regions' networks. If the Gemini icon cannot be found, it indicates that Gemini does not support the current regional network.)



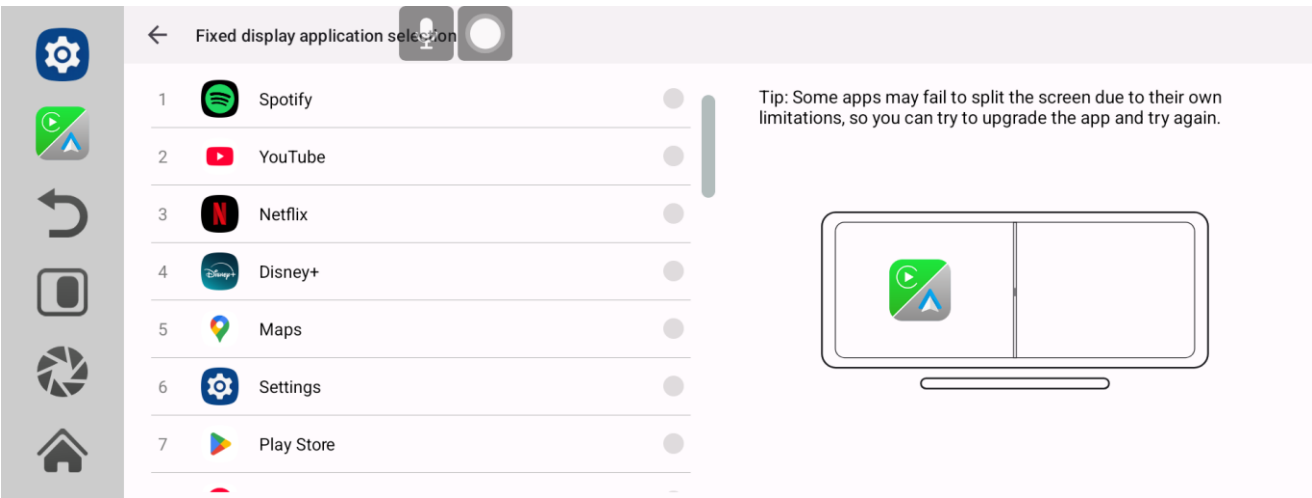
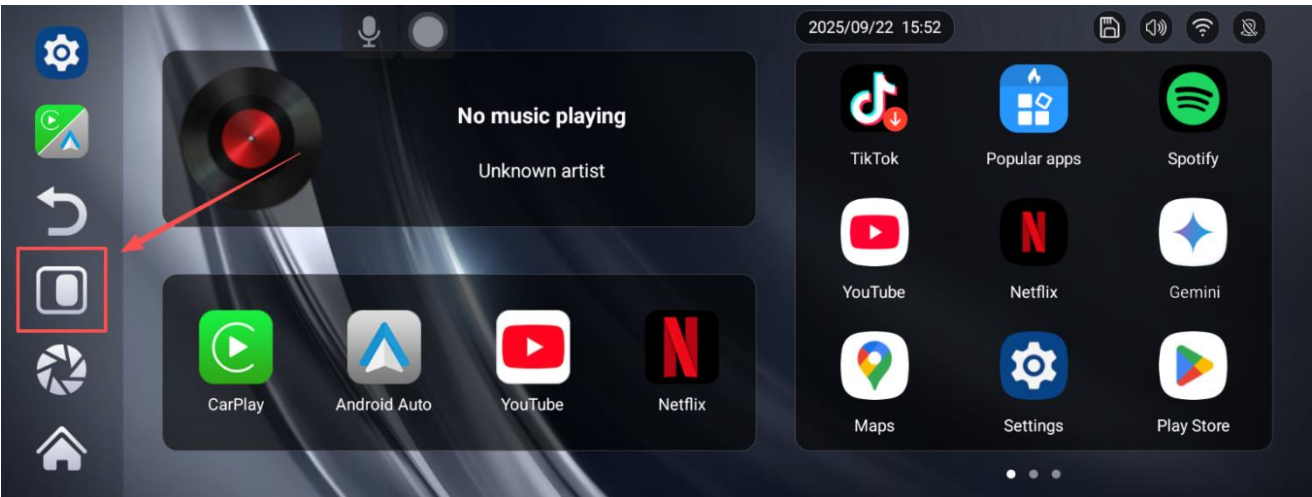
[在此处键入]

[在此处键入]

6.2 Half Screen mode

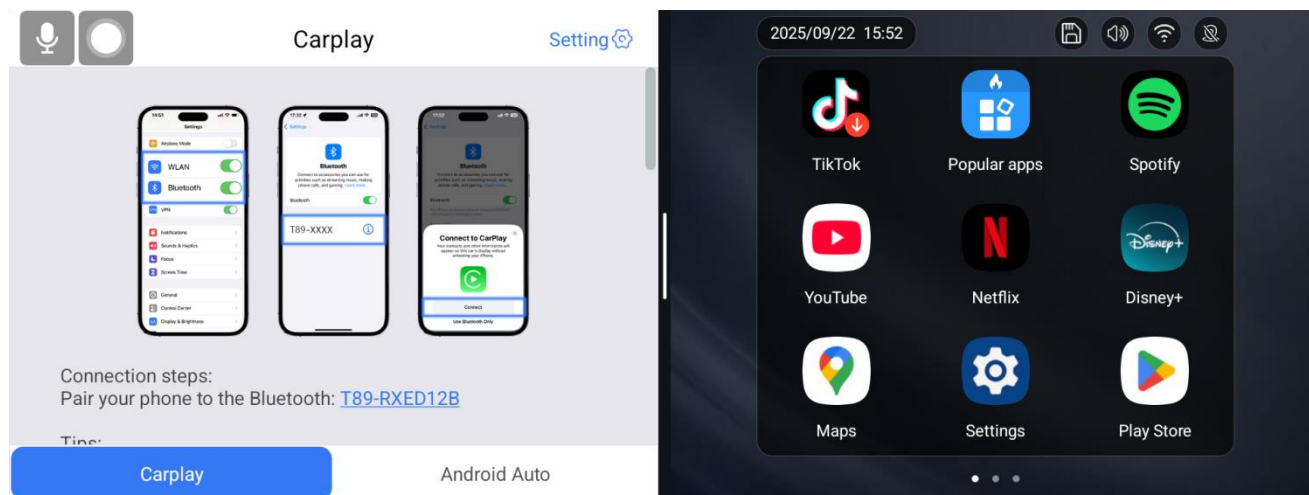
Half screen mode allows users to run multiple applications simultaneously on the same screen, thereby avoiding the time waste caused by frequent switching of applications. This parallel processing approach enables users to complete multiple tasks more quickly.

Click the 'Half Screen' button to enter half screen mode.

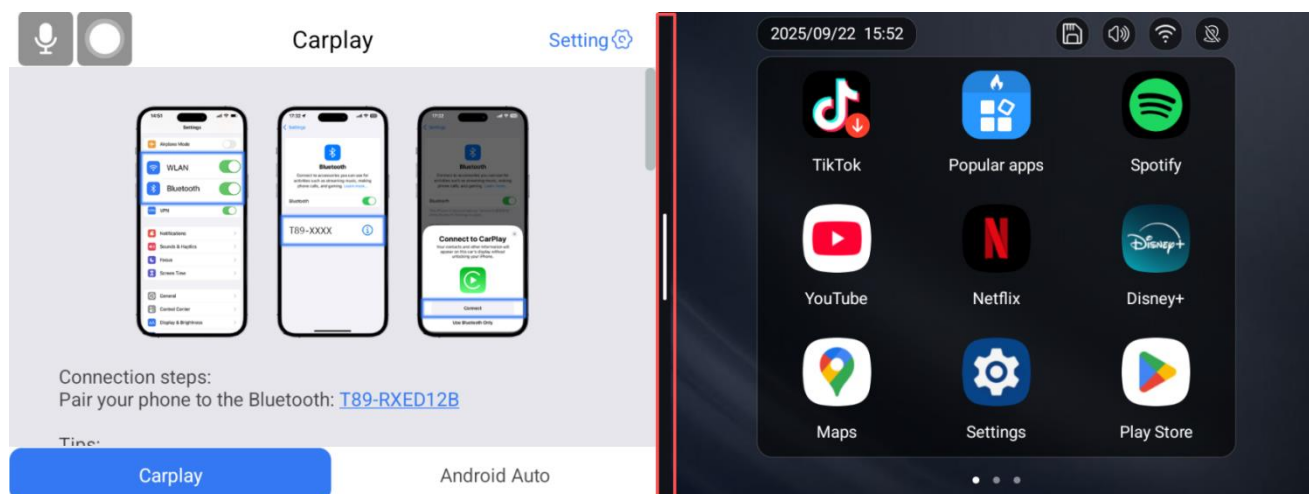


[在此处键入]

[在此处键入]



Click on the 'Auxiliary button' and select the 'Full screen button' to exit half screen mode.



Slide the middle boundary line left and right to both sides to exit the half screen mode.

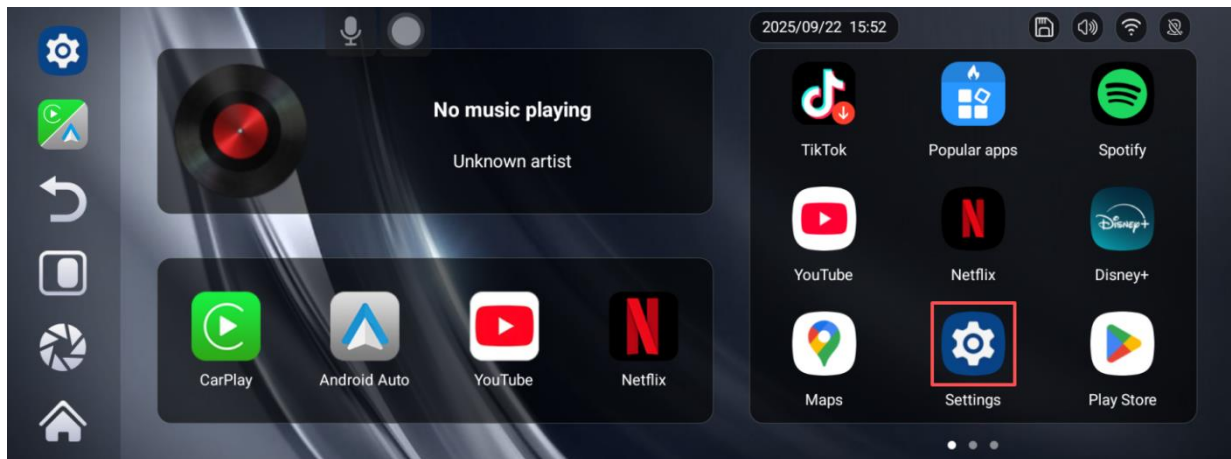
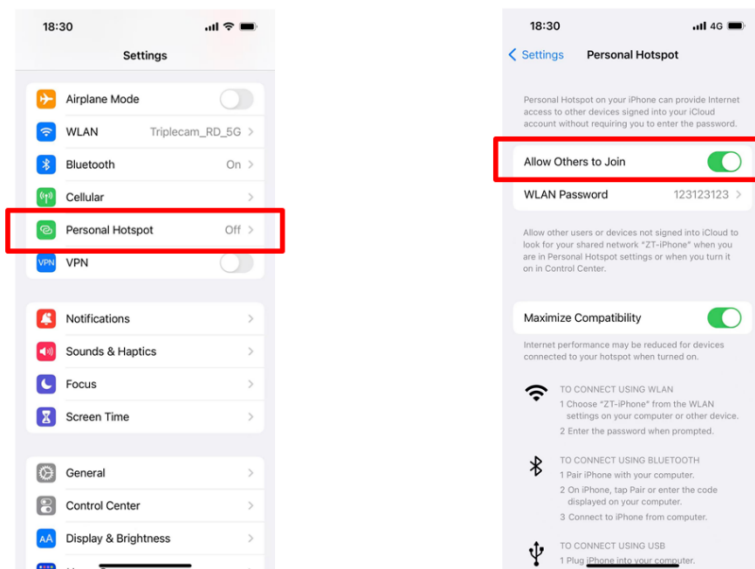
[在此处键入]

[在此处键入]

6.3 Connect to the network

Some functions of MORNVOY Smart Screen require a network connection to use.

Please turn on your phone hotspot, then click on the Smart Screen Settings - WiFi, turn on the WiFi switch, select and connect to your phone hotspot.



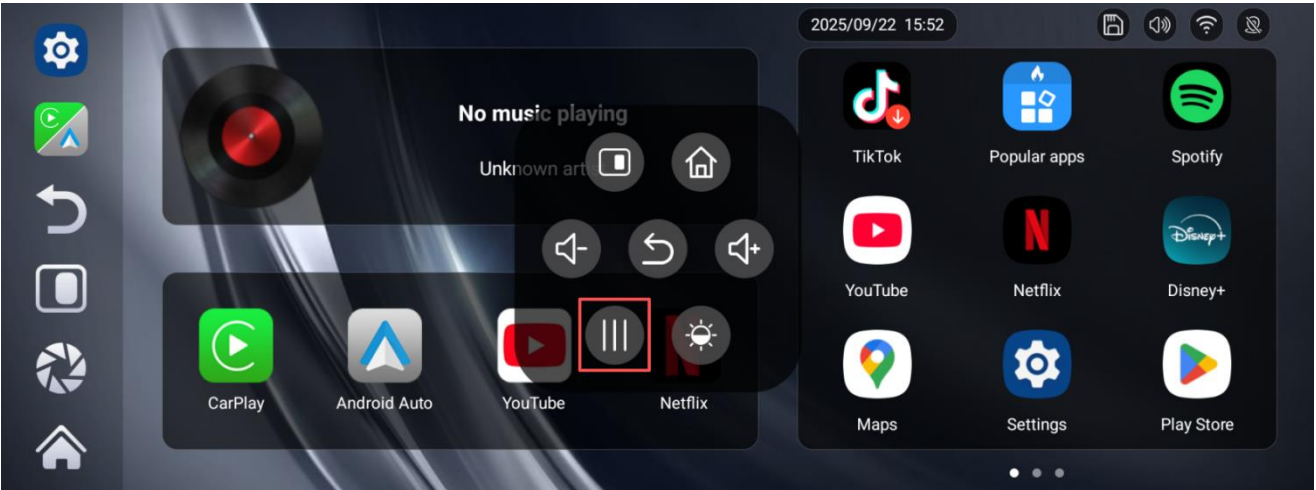
[在此处键入]

[在此处键入]

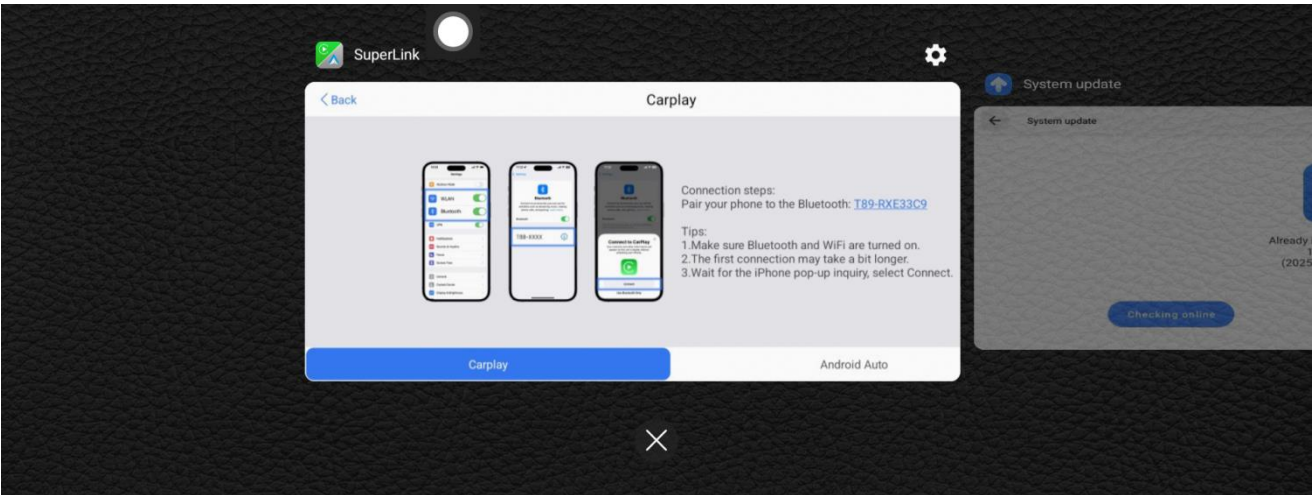
6.4 Recent Task Button

When the application runs incorrectly, you can open the auxiliary button  and click the

'Recent Tasks' button.



Swipe left or right to select recent apps, swipe up to close apps, click the close button  to close all recent apps with just one click, and then restart the wrong app.

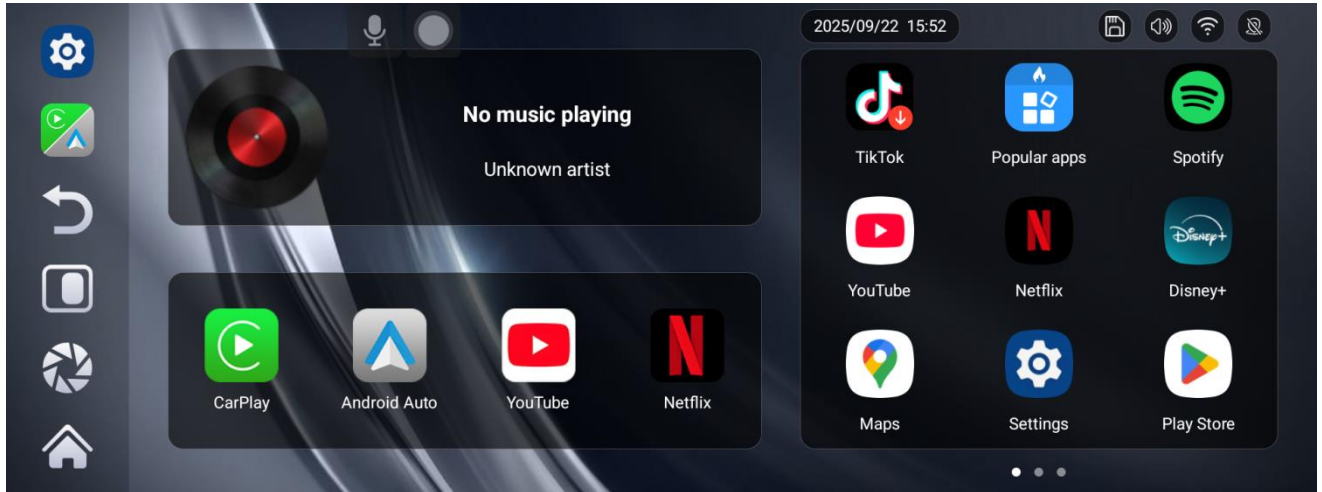


When the application is not running properly, you can also long press the application icon to enter the application information interface. (Taking YouTube as an example below)

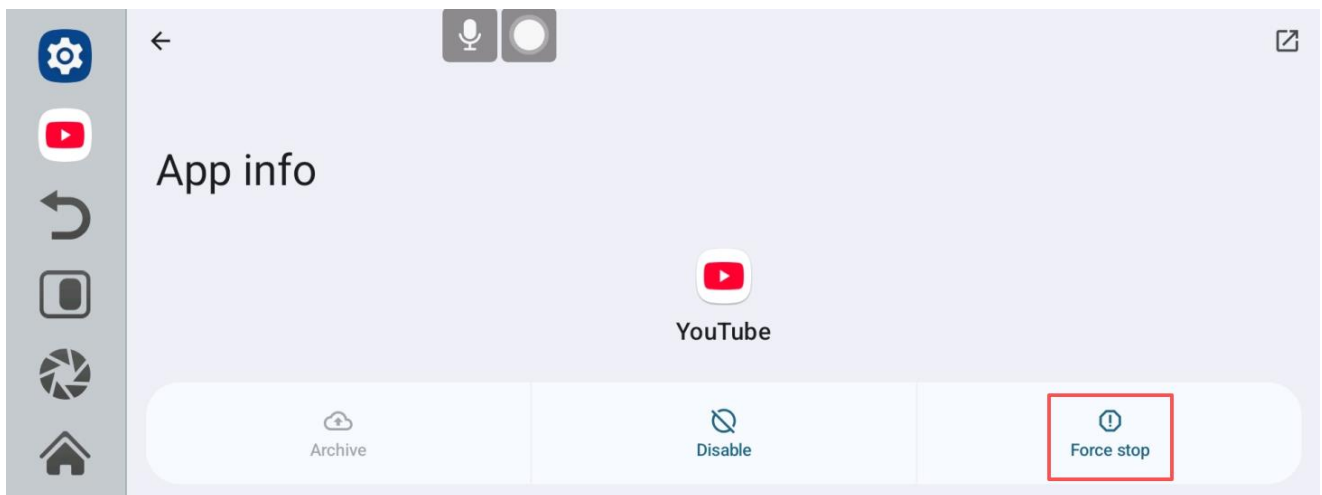
[在此处键入]

[在此处键入]

1. Long press the YouTube application icon on the main interface to enter the application information interface.



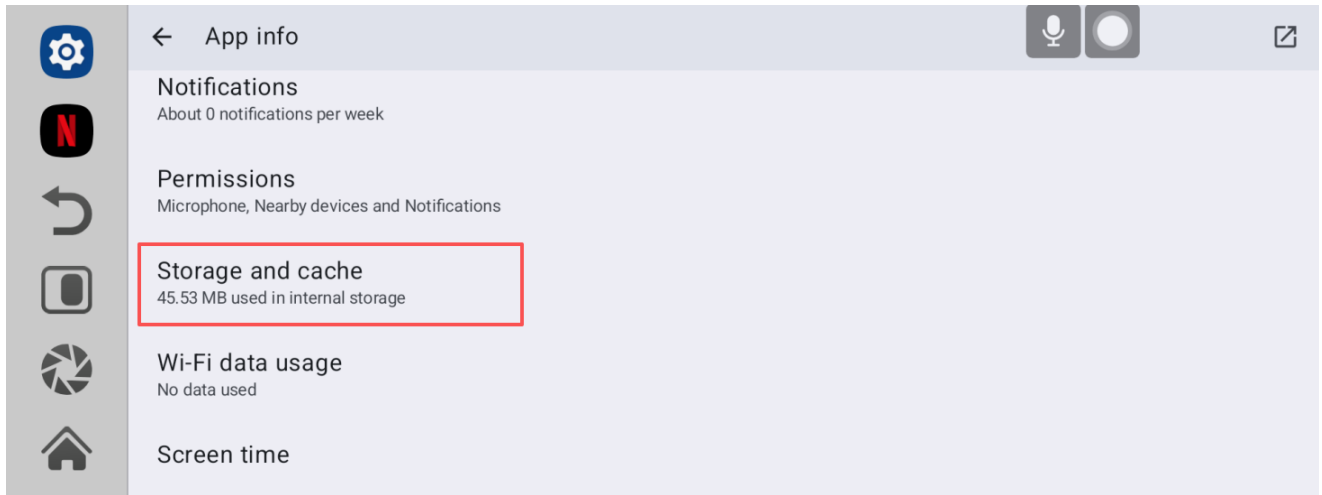
2. After clicking on the 'Force Stop' icon, open YouTube again to check if it is running properly.



3. If you still cannot restore normal operation after opening YouTube again, please scroll down in the application information interface and click on 'Storage & cache'.

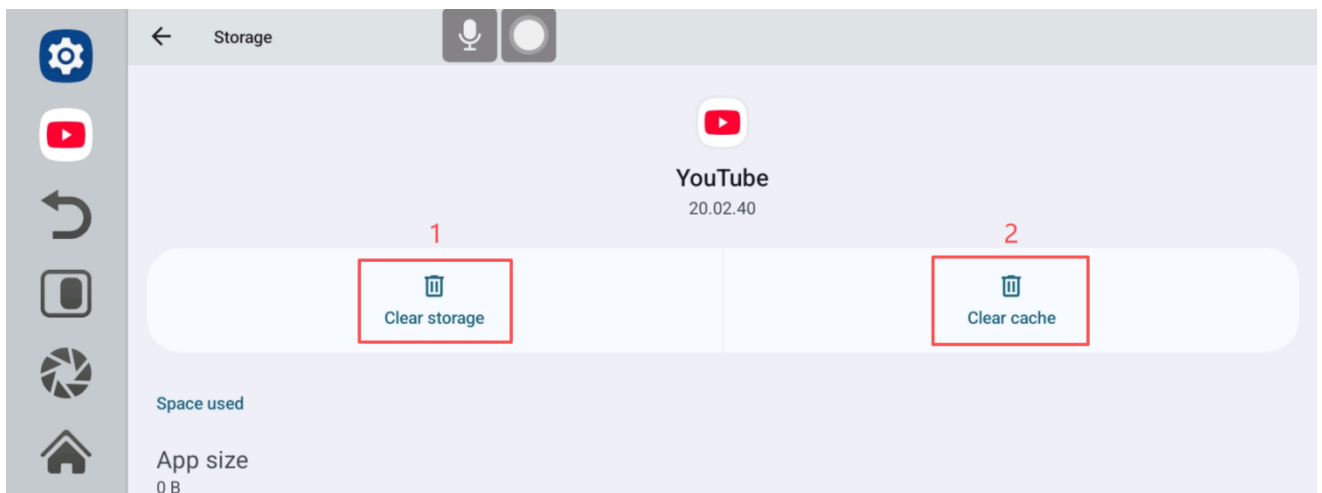
[在此处键入]

[在此处键入]



4. After clicking on 'Clear Storage' and 'Clear Cache' in sequence, try opening YouTube again.

(Reminder: This operation will clear all data and records of the application)

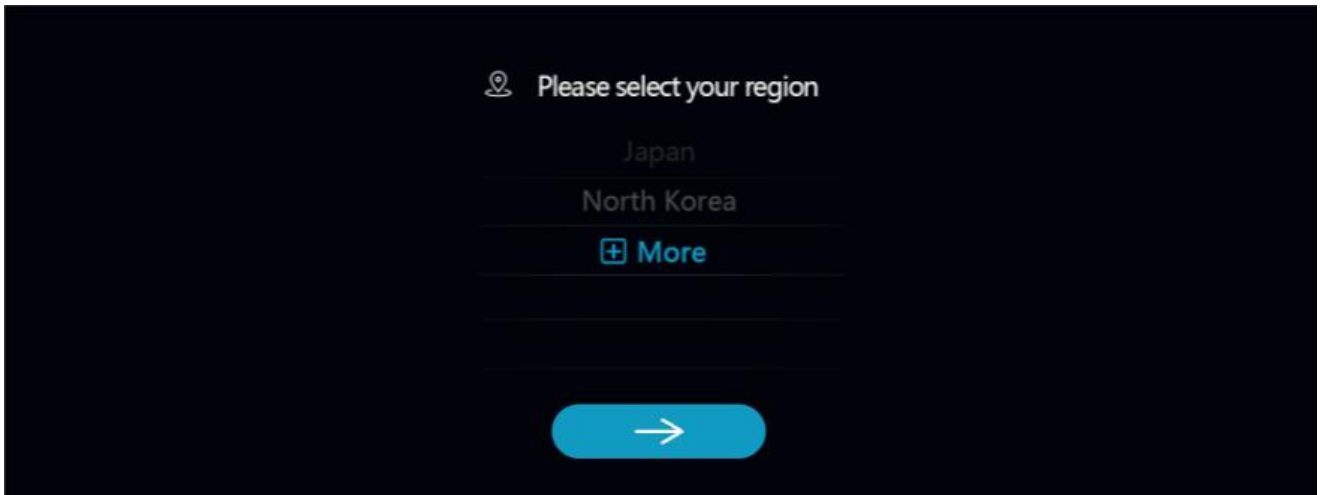


[在此处键入]

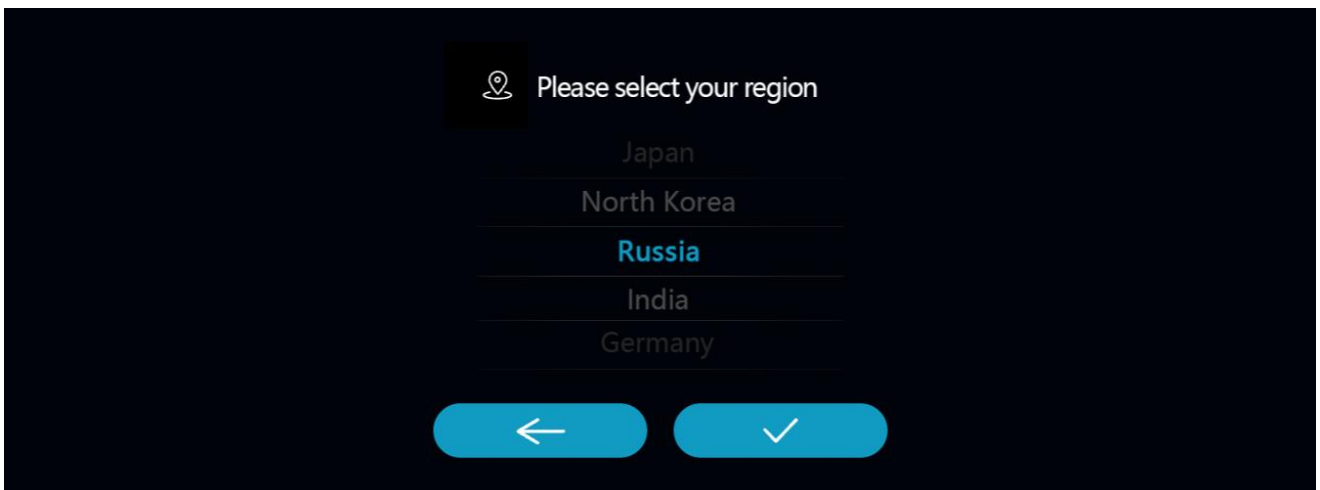
[在此处键入]

6.5 Startup Wizard

1. After the first startup or factory reset, you need to select your language again. If you need to select more languages, please scroll down to the end, click on the more options to select more languages , and then click the next button .



2. Then you need to click to select your region, and WiFi will be set based on this region code.



Return to the previous level.

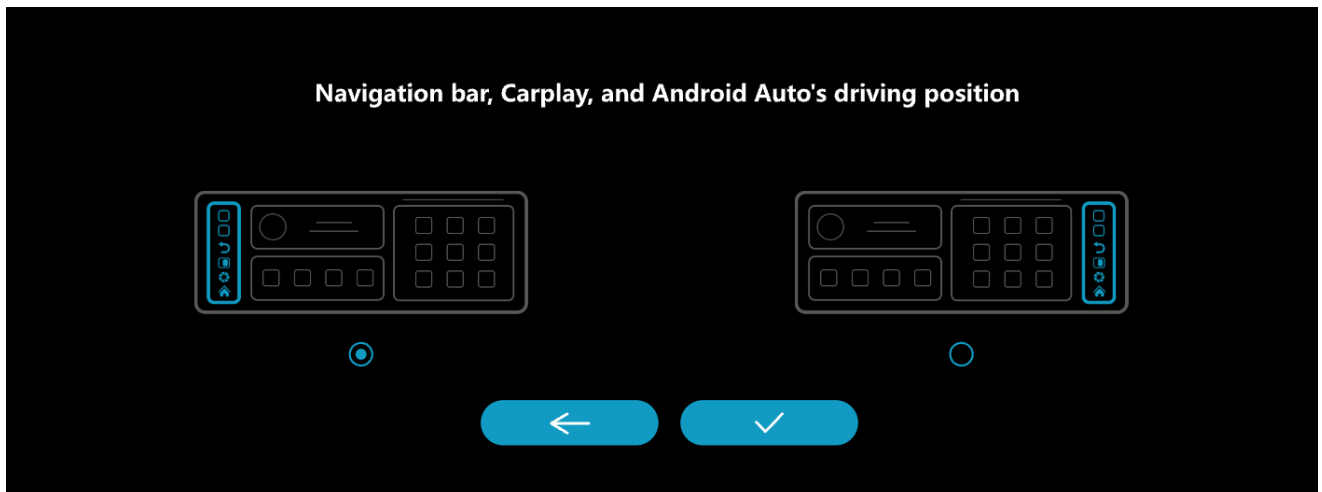


Confirm the selection.

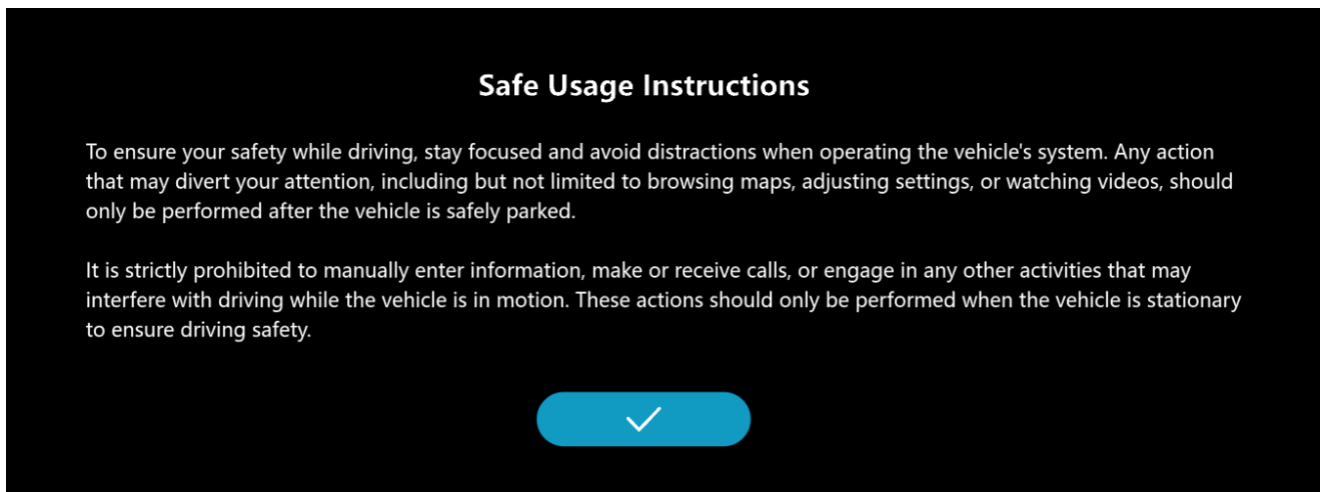
[在此处键入]

[在此处键入]

3. Please select left and right steering. The shortcut keys of this product support adaptive configuration of left and right steering, which can be matched with different vehicle models (left/right steering), ensuring that the operation logic is consistent with the steering wheel position, and improving driving safety and handling convenience.



4. Please carefully read the safety instructions and use this product in accordance with them.

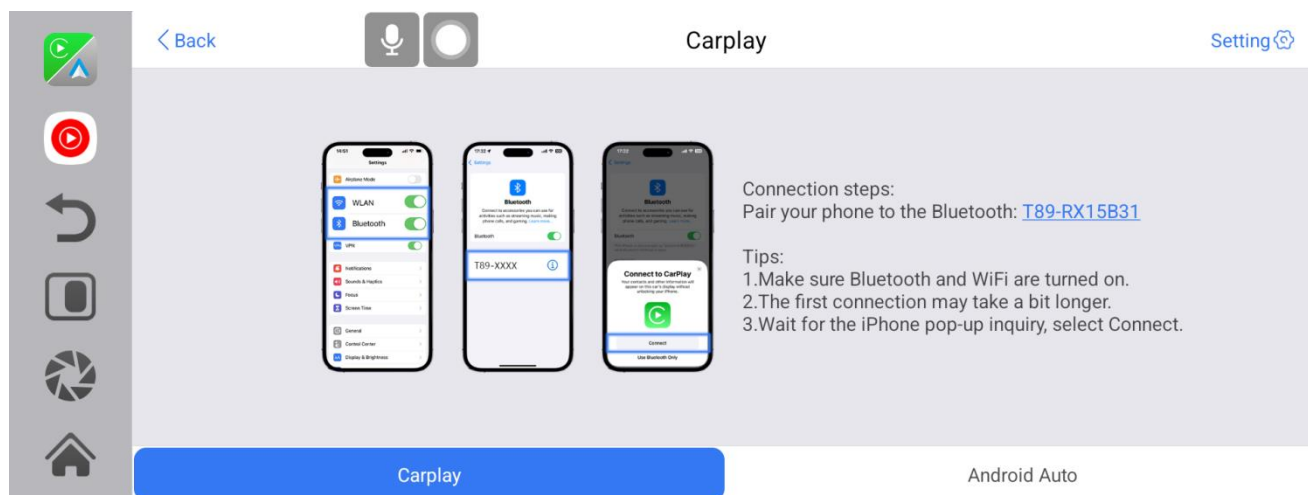


After clicking confirm, you can enter the main interface to start using this product.

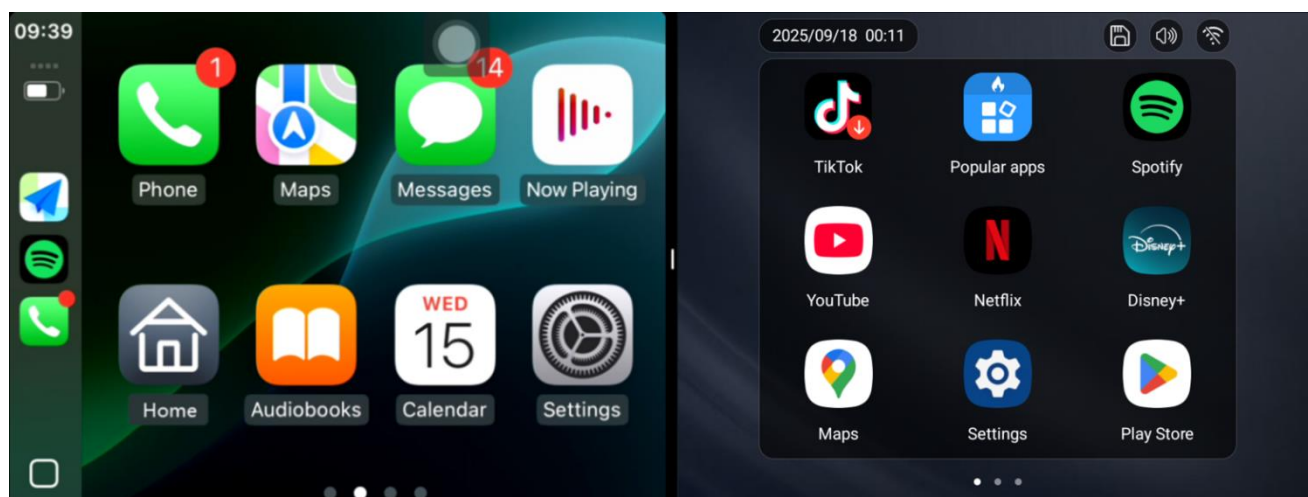
[在此处键入]

[在此处键入]

6.6 Carplay



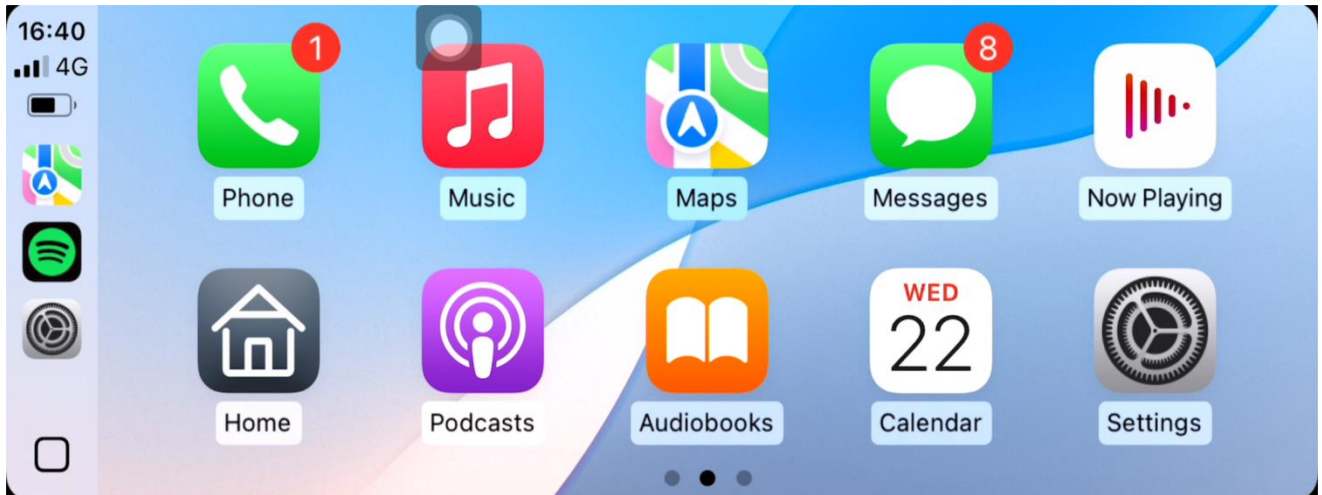
As shown in the figure above, click the 【Carplay】 button, then select the 【Carplay】 option, and first turn on the phone's WiFi and Bluetooth, as shown in the figure above. Bluetooth (receive) will automatically turn on, named T89-RXXXXX. After successful Bluetooth connection, Carplay can be connected. When the machine is powered on, it will attempt to automatically connect to the last connected phone.



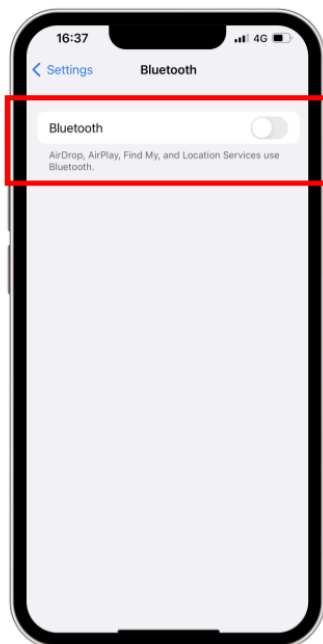
(Half screen mode)

[在此处键入]

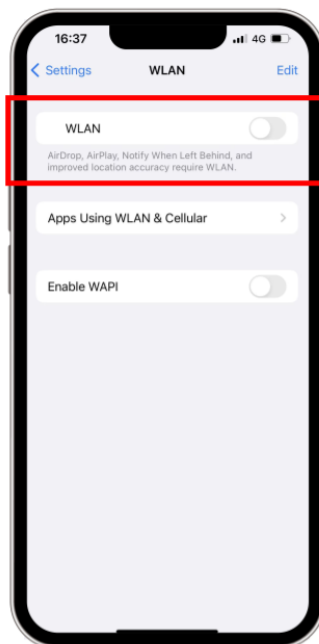
[在此处键入]



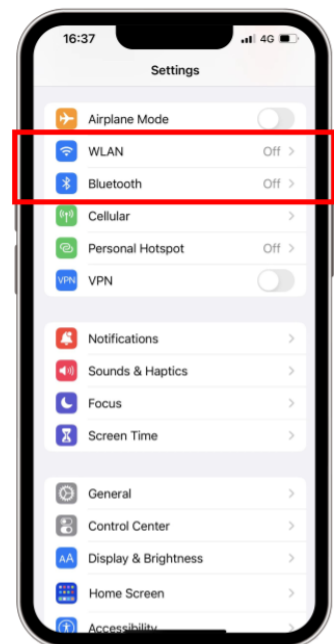
(Full screen mode)



1



2



3

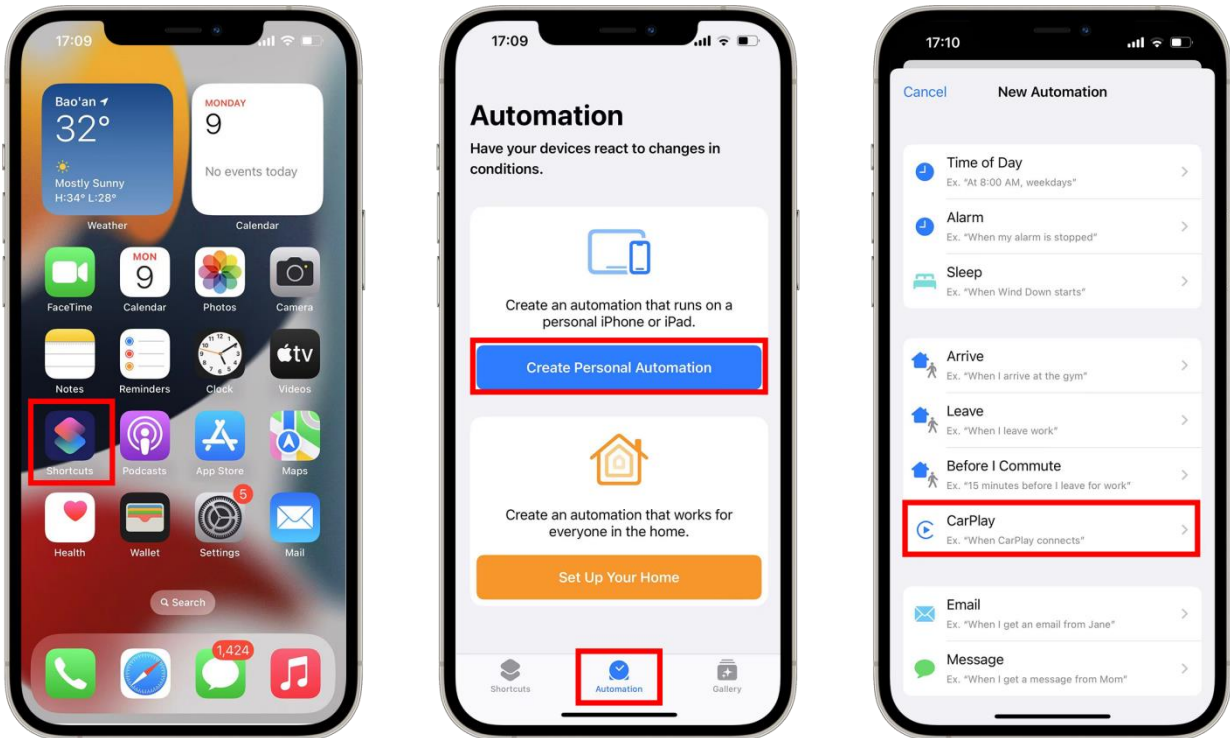
(Carplay option only supports Apple phones, turn off the WiFi button on the phone to disconnect)

Users can set the phone to automatically turn on personal hotspot function when connected to CarPlay, so that the smart screen can easily access the network. (Set up tutorial as shown in the following figure)

[在此处键入]

[在此处键入]

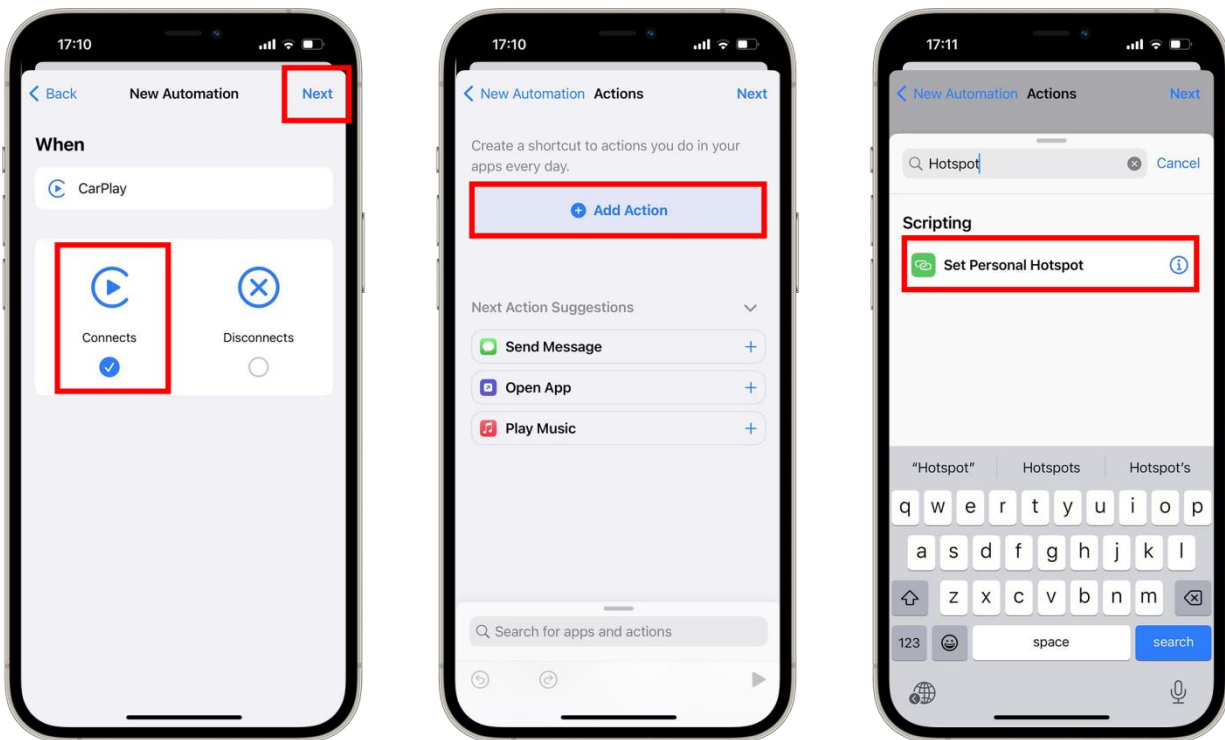
1. Find and open the Shortcuts app on your phone, select Automation, click Create Personal Automation, and choose CarPlay.



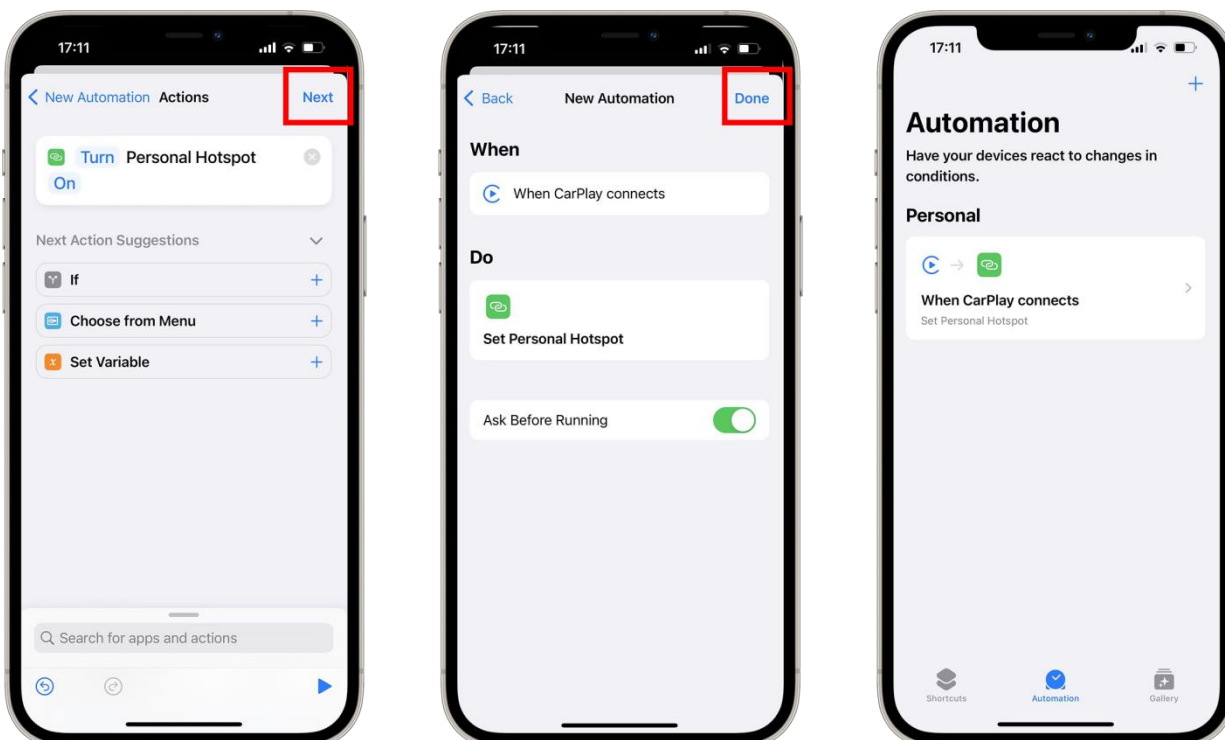
2. After selecting Connects, click Next, click Add Action, search and select Set Personal Hotspot.

[在此处键入]

[在此处键入]



3. When Turn Personal Hotspot is displayed, click Next, click Done, and when CarPlay connections Set Personal Hotspot is displayed, it indicates successful setup.



[在此处键入]

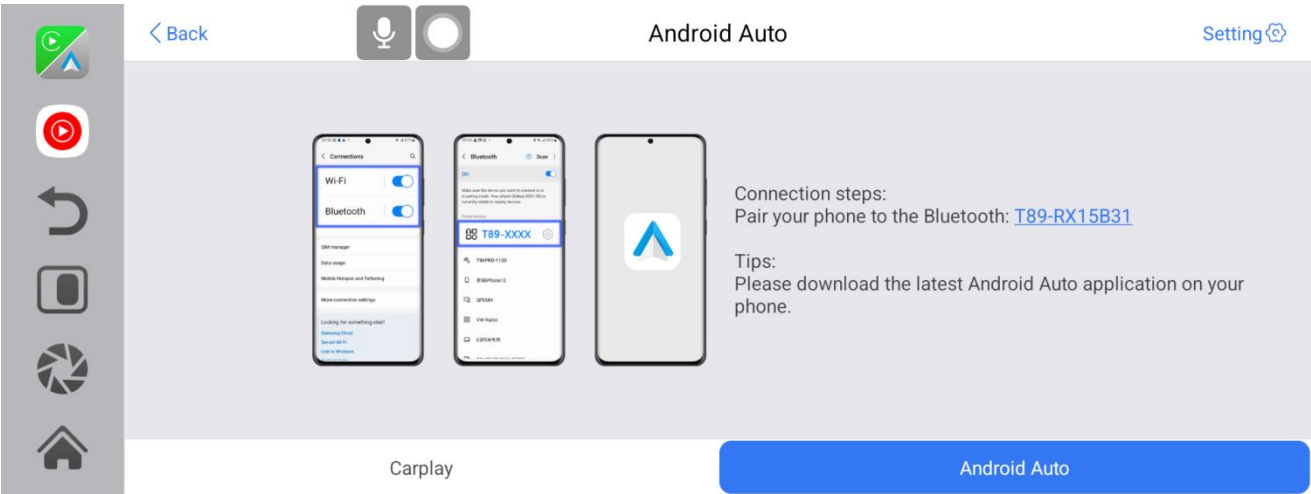
[在此处键入]

[在此处键入]

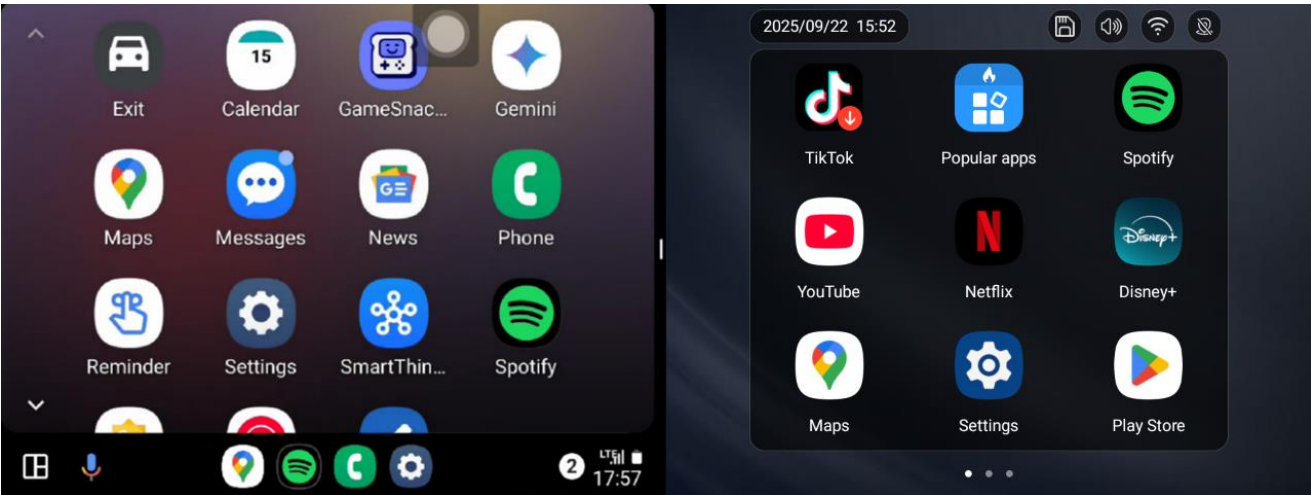


[在此处键入]

6.7 Android Auto



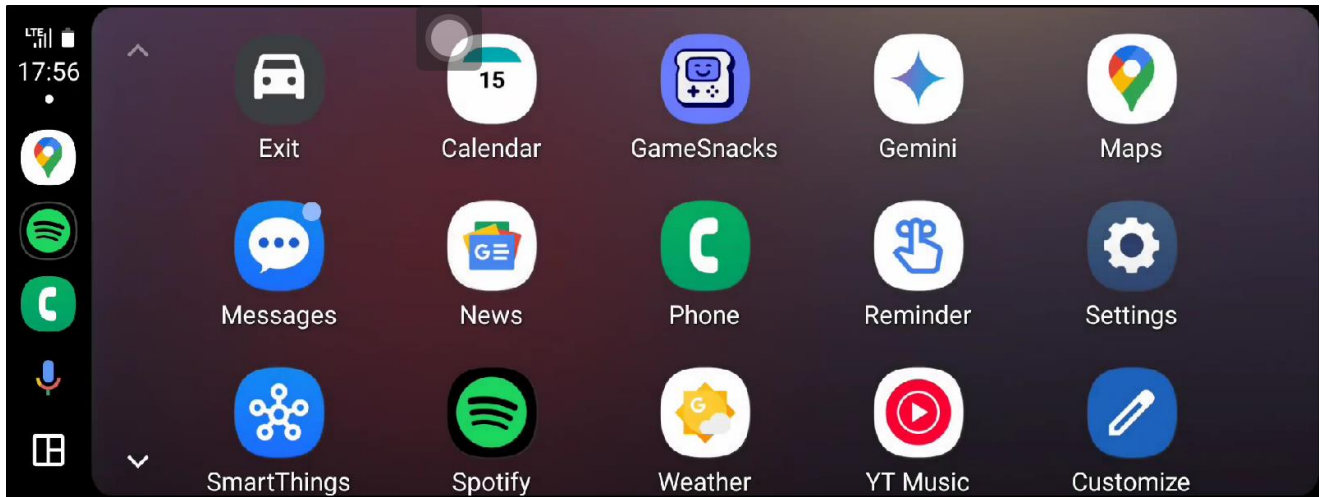
As shown in the figure, click the [Android Auto] button and select the [Android Auto] option. First, turn on the phone's WiFi and Bluetooth, as shown in the figure above. Bluetooth will automatically turn on, named T89-RXXXXX. After a successful Bluetooth connection, you can connect to Android Auto. (When turned on, the machine will attempt to automatically connect to the last connected phone)



(Half screen mode)

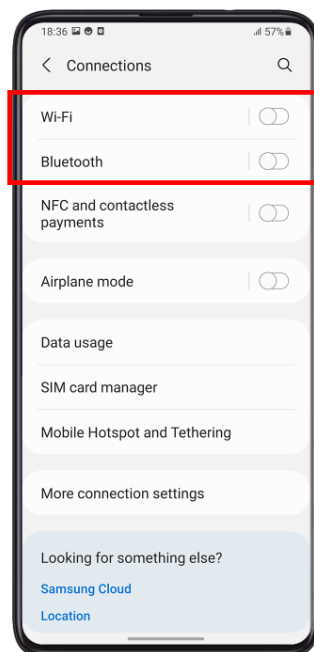
[在此处键入]

[在此处键入]



(Full screen mode)

The wireless Android Auto option only supports Android phones. To disconnect, turn off Bluetooth and the WiFi button in the phone settings.

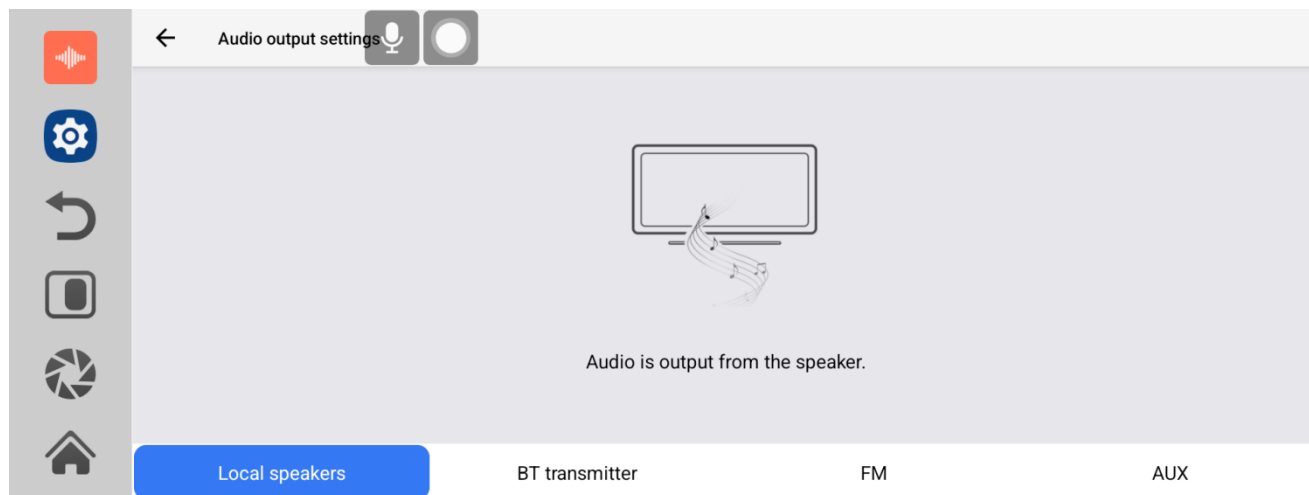


[在此处键入]

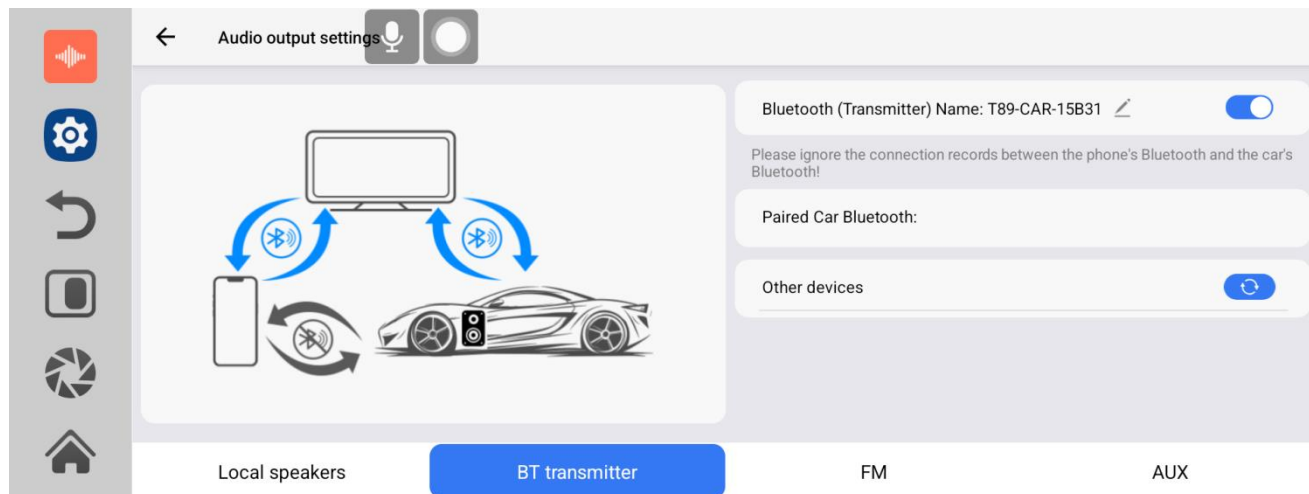
[在此处键入]

6.8 Audio output

As shown in the above figure, click the [Audio Output] button to enter the audio output selection interface.



① **【Local speakers】** : The sound will be played from the speaker of the smart screen.



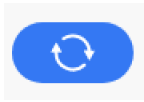
② **【Bluetooth transmitter】** : After selecting this mode, turn on the Bluetooth (emission) switch. Turn on the car's Bluetooth again, and the name of the car's Bluetooth will be displayed in the "Other Devices" section on the lower right side. After successful connection, all sounds from the device will be transmitted via Bluetooth to the car speakers for playback.

[在此处键入]

[在此处键入]

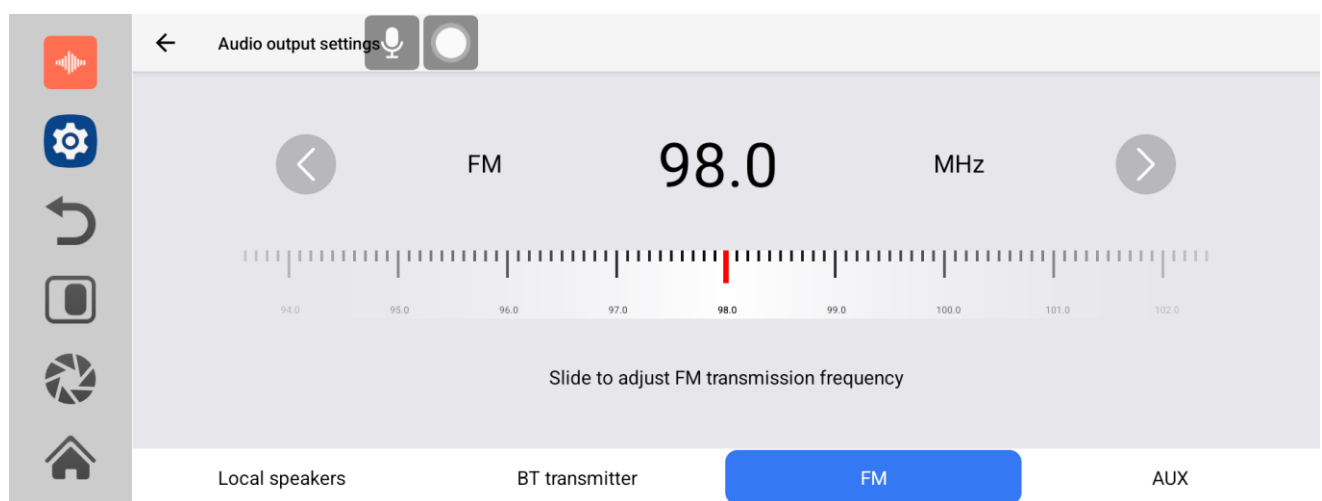


Click to modify the Bluetooth name.



Click to refresh and search for Bluetooth again.

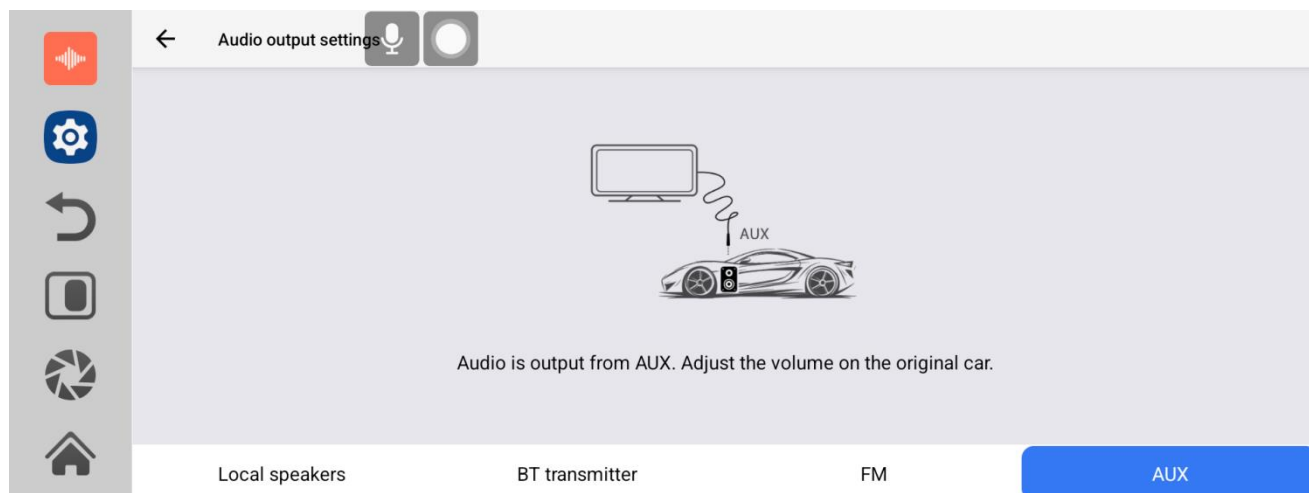
When connected, steering wheel controls support music track switching, pause/play, and other playback operations.



③ 【FM】: After selecting this mode, the FM transmission mode will be turned on by default. For example, the FM transmission frequency of the device is adjusted to FM 106.0 MHz (any unoccupied channel can be used), and the car radio will also adjust the receiving frequency band to the same FM 106.0 Hz. After successful connection, all sounds from the device will be transmitted to the car horn through FM transmission. **When using FM transmission, please do not insert the AUX cable as it may interfere with the FM transmission sound quality! (Not using the power cord may result in deterioration of FM transmission signal or malfunction.)**

[在此处键入]

[在此处键入]

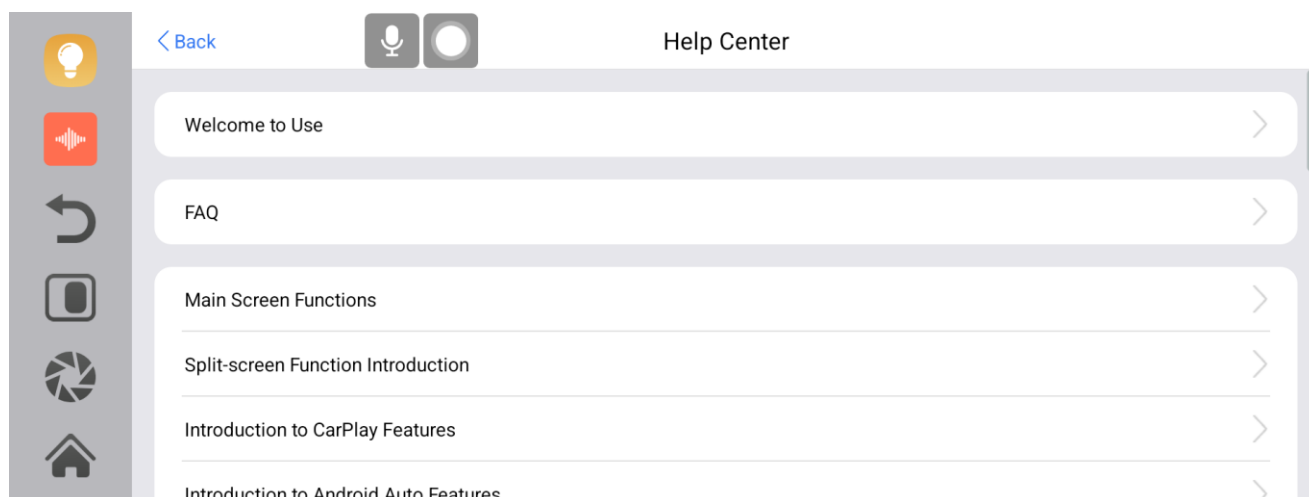


④ 【AUX】 : After selecting this mode, the AUX output mode will be turned on by default.

Connect the smart screen to the original vehicle using AUX sound source wires. After successful connection, all sounds from the device will be transmitted to the car speakers through the AUX sound source cable for playback.

6.9 Help Center

The help function provides you with answers to questions and operation guides during the use of the smart screen.



[在此处键入]

[在此处键入]

Frequently Asked Questions, Main Interface Function Introduction, Half Screen Function Introduction, Carplay Function Introduction, Android Auto Function Introduction, System Settings Function Introduction.

Frequently Asked Questions Special Explanation:

1. For the stability of device usage, the device will perform a shutdown instead of hibernation after a certain number of uses.
2. The system needs to be optimized for the first startup, and the startup time will be more than 2 minutes. After optimization, the subsequent boot time is only about 30 seconds.

Mobile phones that can connect to both screen mirroring and hotspot settings require:

iPhone series: Requires IOS16 or higher version. (iPhone 8 and above, iPhone SE second generation and above)

Android series: Some Android phones do not support simultaneous connection of screen mirroring and phone hotspot. (Currently found unsupported phones include Samsung A40)

Common problem:

1. After turning on the hotspot on the iPhone, the smart screen cannot connect or use the WiFi.

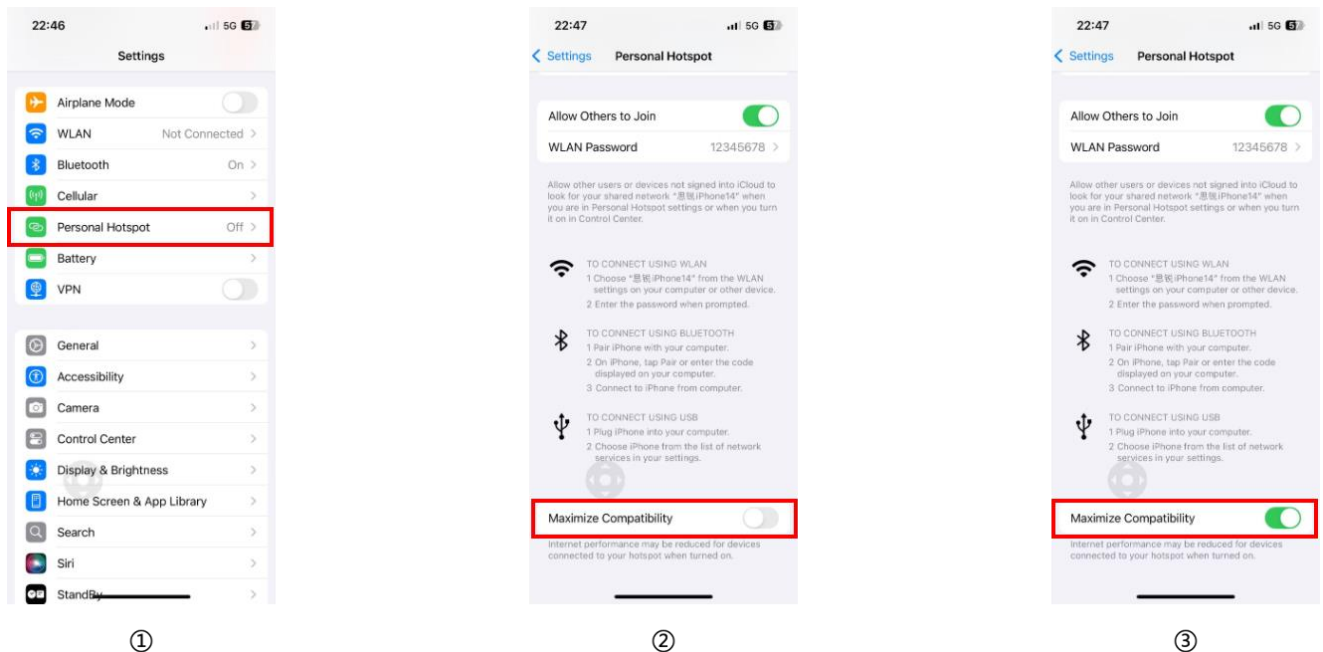
Please turn on the maximum compatibility button for personal hotspot on your iPhone.

Mobile phones without a maximum compatibility button and unable to connect to hotspots

[在此处键入]

[在此处键入]

do not support connecting to Carplay and personal hotspots at the same time (some phone steps are shown in the following figure)



iPhone needs to be IOS16 or above to connect to personal hotspots (iPhone 8 and above, iPhone SE 2nd generation and above) while connecting to Carplay. Mobile phones that do not meet the requirements need to disconnect Carplay before connecting to the hotspot.

2. After turning on the hotspot on an Android phone, the smart screen cannot connect or use the WiFi.

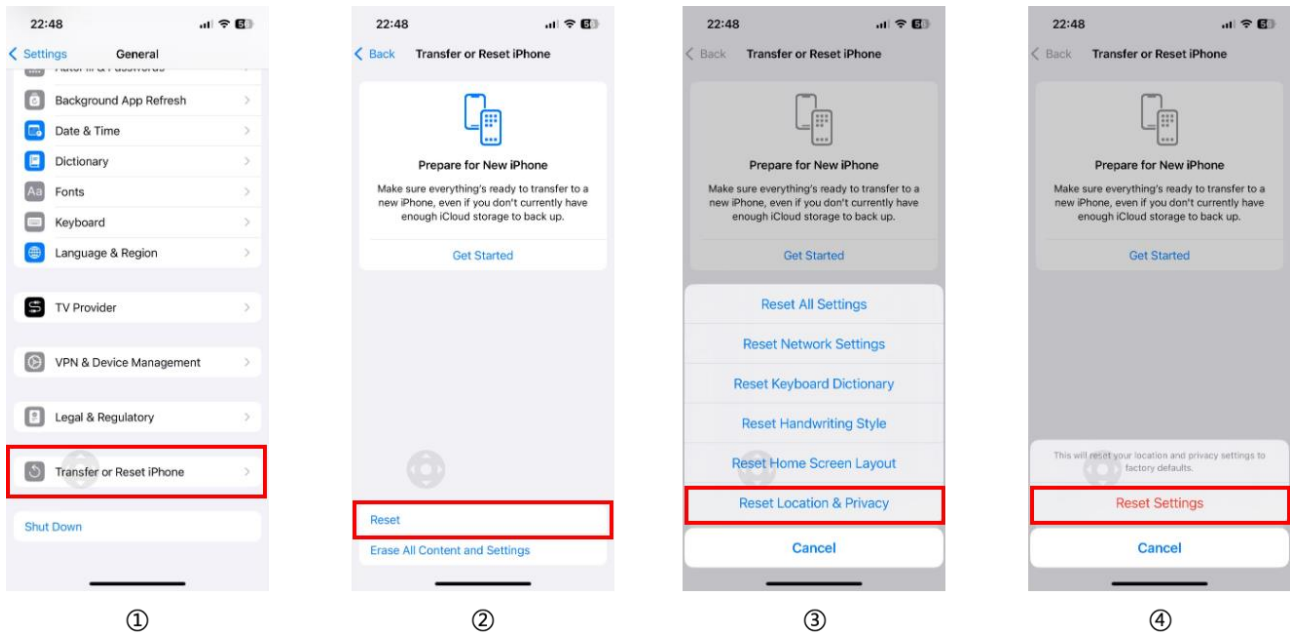
Most Android phones do not have the maximum compatibility feature, and only some Android phones can connect to personal hotspots while connecting to Android Auto (currently found to be unsupported phones include Samsung A40). Phones that do not meet the requirements need to disconnect Android Auto and then connect to the hotspot.

[在此处键入]

[在此处键入]

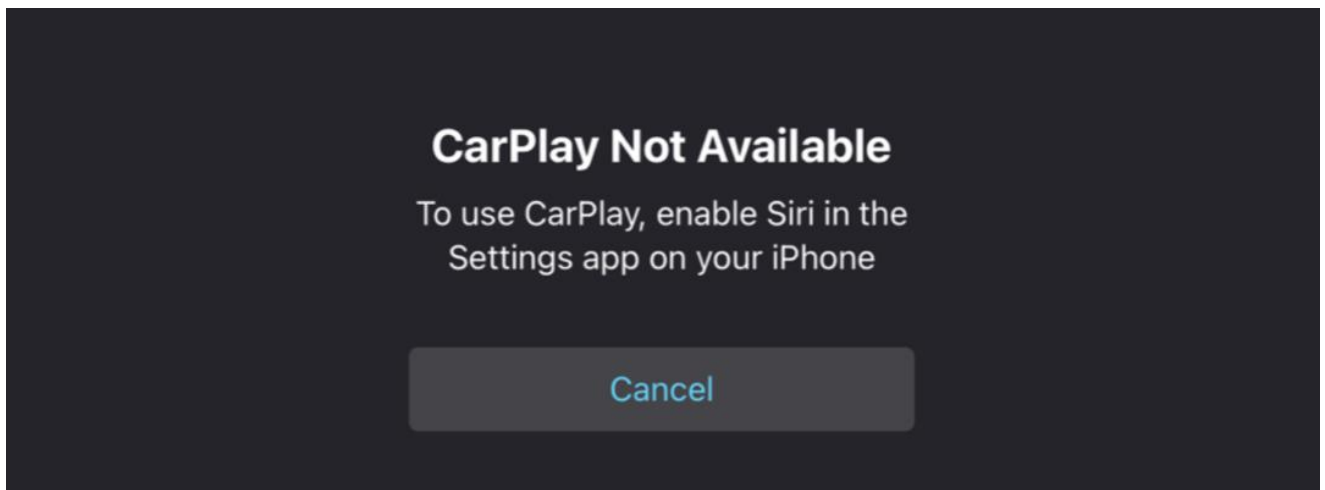
3. When Carplay screens are projected, the navigation positioning may be offset or inaccurate.

Solution: Open the phone [Settings] → [General] → [Transfer or Restore iPhone] → [Rest] → [Reset Location & Privacy] → [Reset Settings].



4. When Carplay is projected, the smart screen displays [Carplay Not Available] and cannot be used.

Solution: Open your phone [Settings] → [Siri & Search] → Select Enable Siri.



[在此处键入]

[在此处键入]

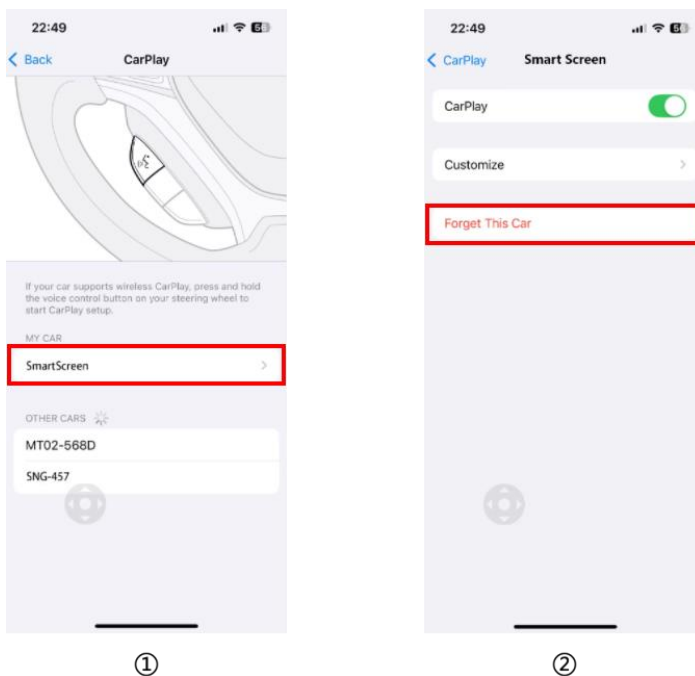
5. Carplay cannot connect.

Carplay connection requirements:

The phone must be an iPhone 5 or above.

The mobile system version requires IOS13 or above.

Solution 1: Open the phone [Settings] → [General] → [Carplay], and then clear the records inside.



Solution 2: Restart the phone and reconnect to the smart screen Bluetooth.

Solution 3: You can turn off both WiFi and Bluetooth on your phone at the same time, then turn them back on and reconnect.

(To turn it off in the settings, do not turn it off in the quick notification bar).

[在此处键入]

[在此处键入]



(×)



(√)

Solution 4: Disconnect the personal hotspot of the phone first, and then connect it to the Bluetooth of the smart screen.

7. Android Auto cannot connect.

Android phone connection requirements:

- The versions of Android Auto, Google, Google Maps, and Google Voice have been updated.
- Unable to activate the VPN function on the phone during screen mirroring.
- Require the phone version to be Android 11 or above, and the phone supports 5G WiFi.

Solution 1: You can turn off the Bluetooth on your phone, turn it back on, and then reconnect the Bluetooth on your smart screen.

Solution 2: After clearing the cache and data of Google Play service on the phone, restart the phone and reconnect to Bluetooth.

Solution 3: Disconnect the personal hotspot of the phone first, and then connect it to the

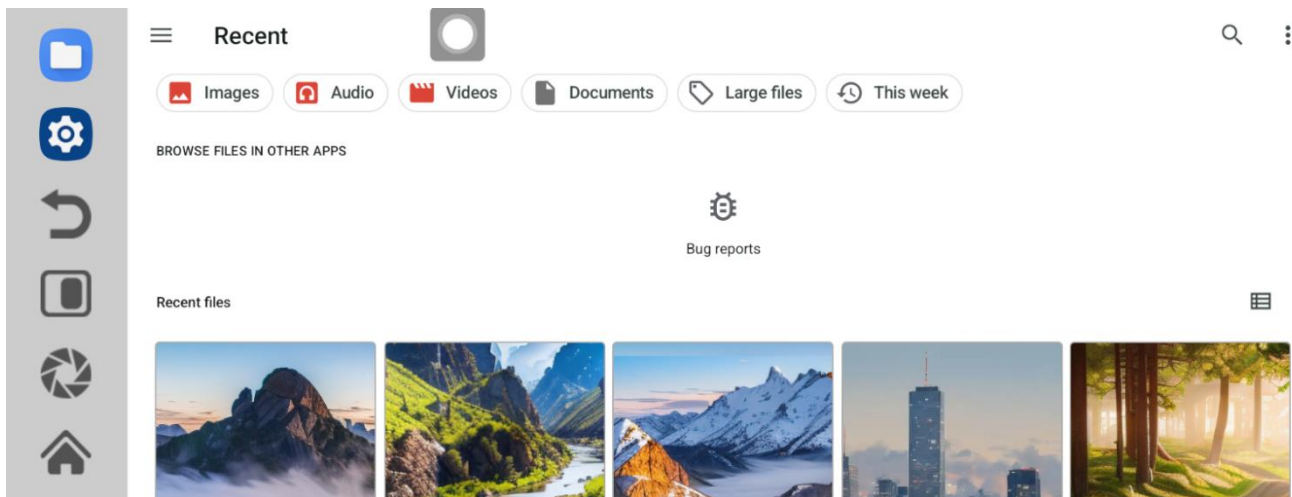
[在此处键入]

[在此处键入]

Bluetooth of the smart screen.

6.10 Files

File application is a tool used in smart screens to manage files such as downloads, images, music, videos, etc.



You can browse files in the smart screen memory and SD card in a list format. Support sorting files by name, size, type, or modification date.

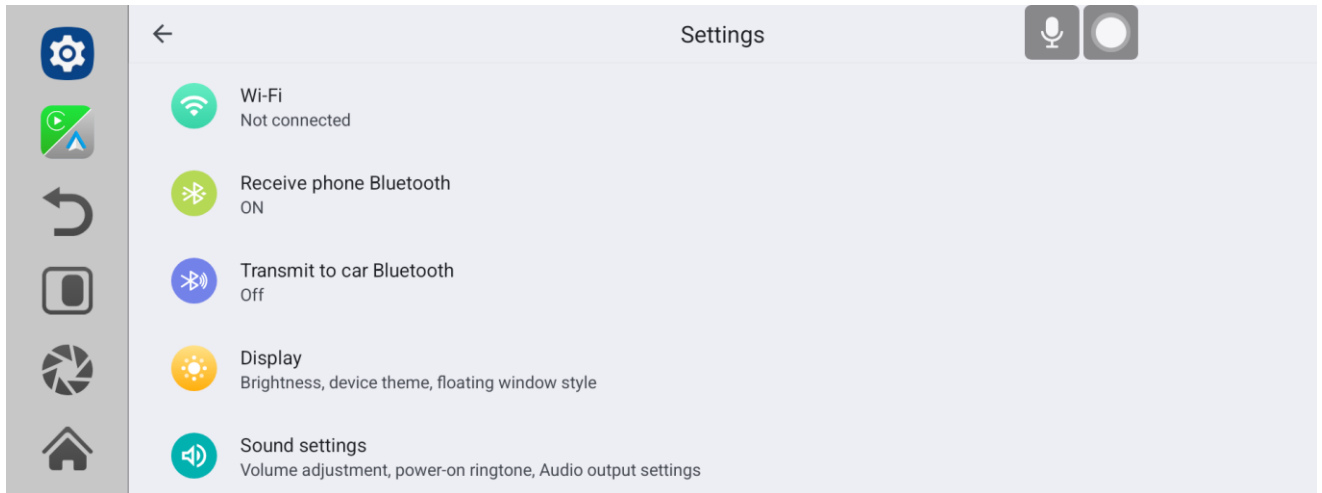
Long press file selection provides file operation functions such as copy, move, delete, share, compress, rename, etc. Support creating folders to organize files. Enter keywords in the search box to quickly find files. Choose the appropriate application to open the file.

Usage tip: Be cautious when deleting files to avoid accidentally deleting important data.

[在此处键入]

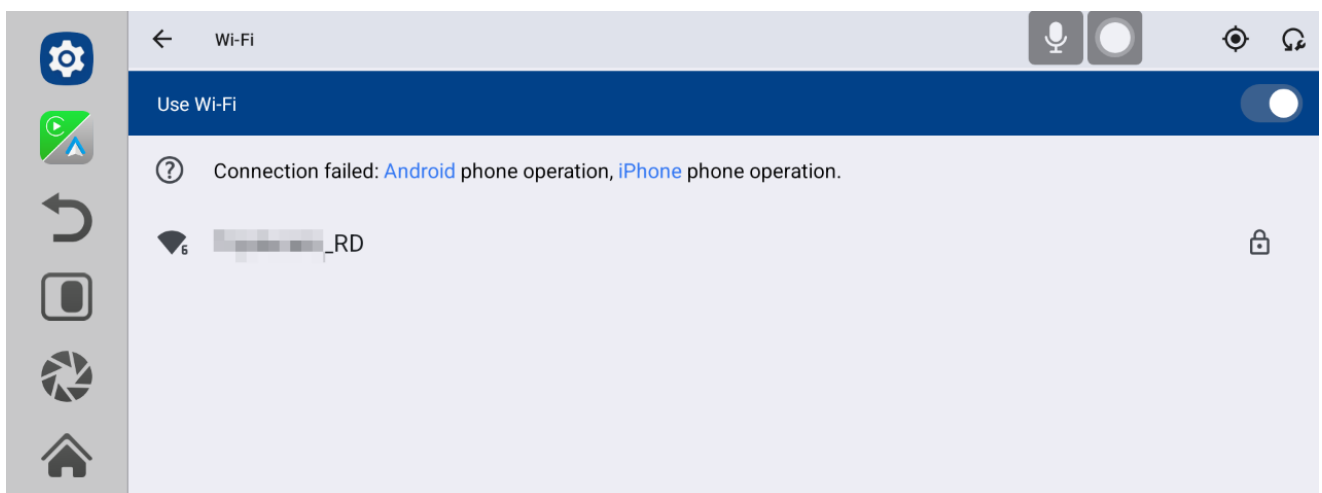
[在此处键入]

6.11 Settings



The system settings aim to provide users with comprehensive device management and personalized services:

1. WiFi: Users can find the WiFi option in "Settings", turn on the WiFi switch, scan and connect to available networks, and also set WiFi preferences.

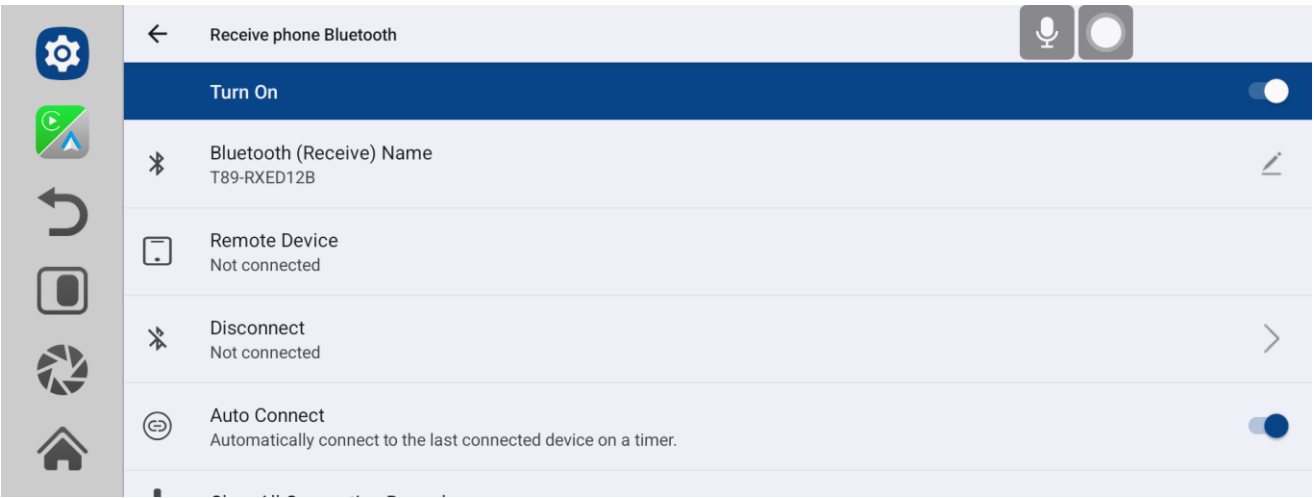


[在此处键入]

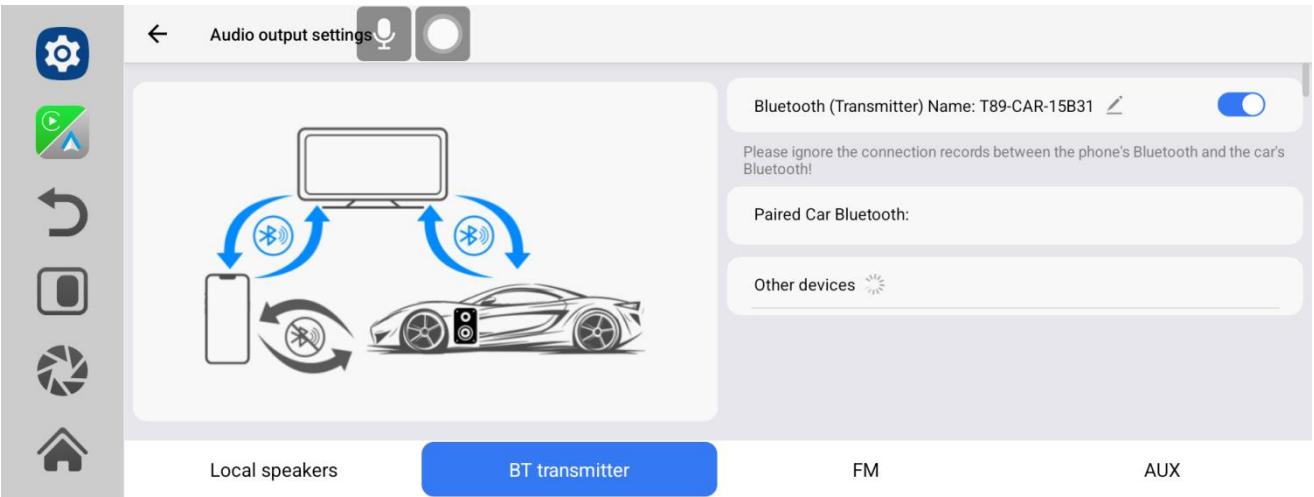
[在此处键入]

To simultaneously connect Carplay/Android Auto and mobile hotspot on the same phone, please enable the maximum compatibility feature of the mobile hotspot. [Android phone operation](#), [iPhone phone operation](#). Clicking on the blue font will redirect you to the corresponding operating interface.

2. Receive Bluetooth: Users use their mobile devices to search for Bluetooth reception on the smart screen, achieving wireless connectivity with their phones.



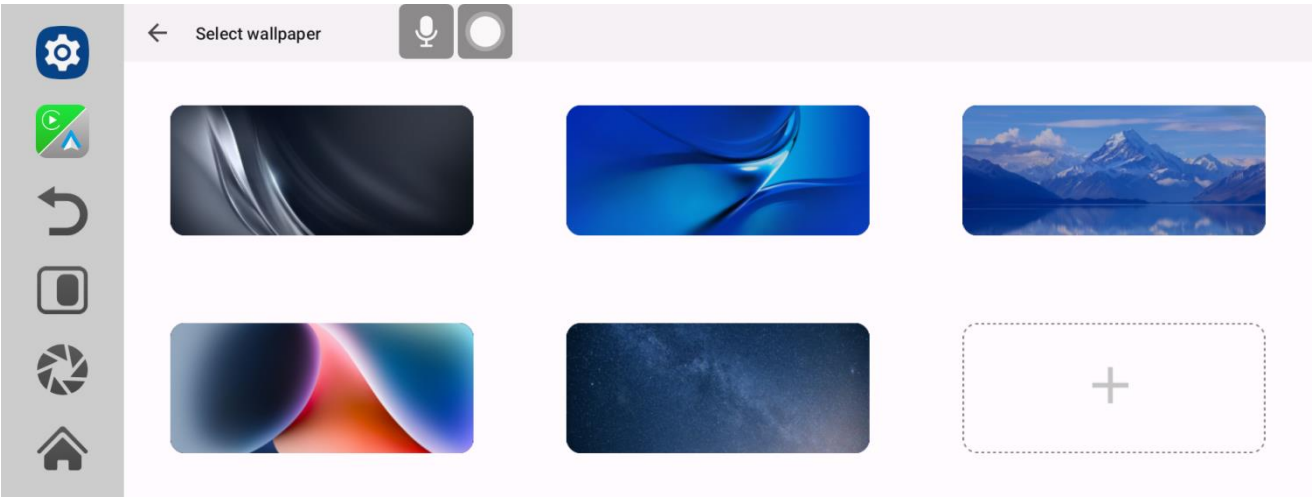
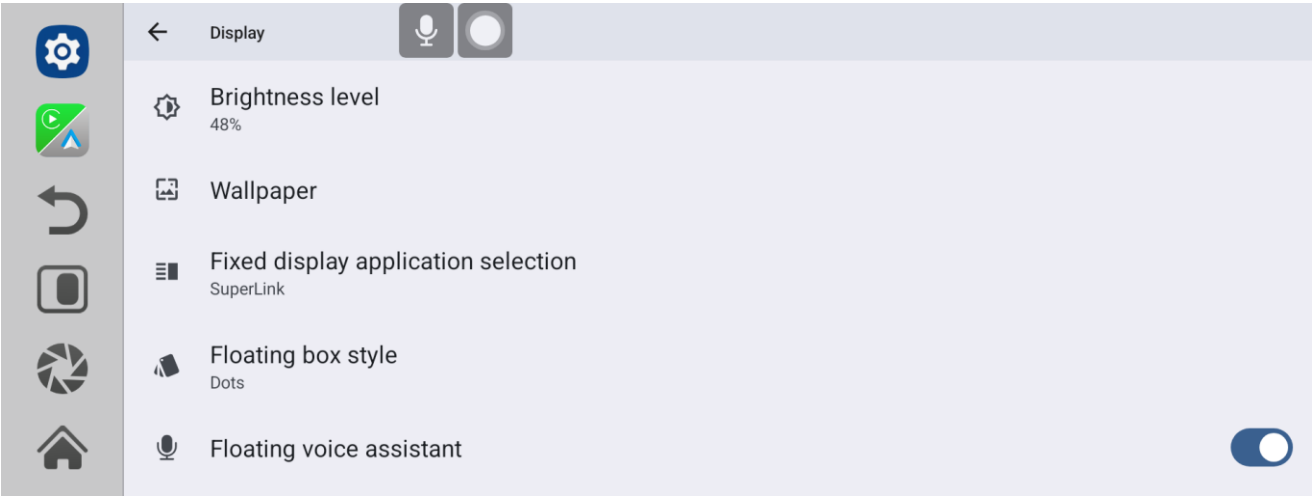
Bluetooth transmission: Users can actively search and connect to the car's Bluetooth to send all audio to the car's audio system for playback.



[在此处键入]

[在此处键入]

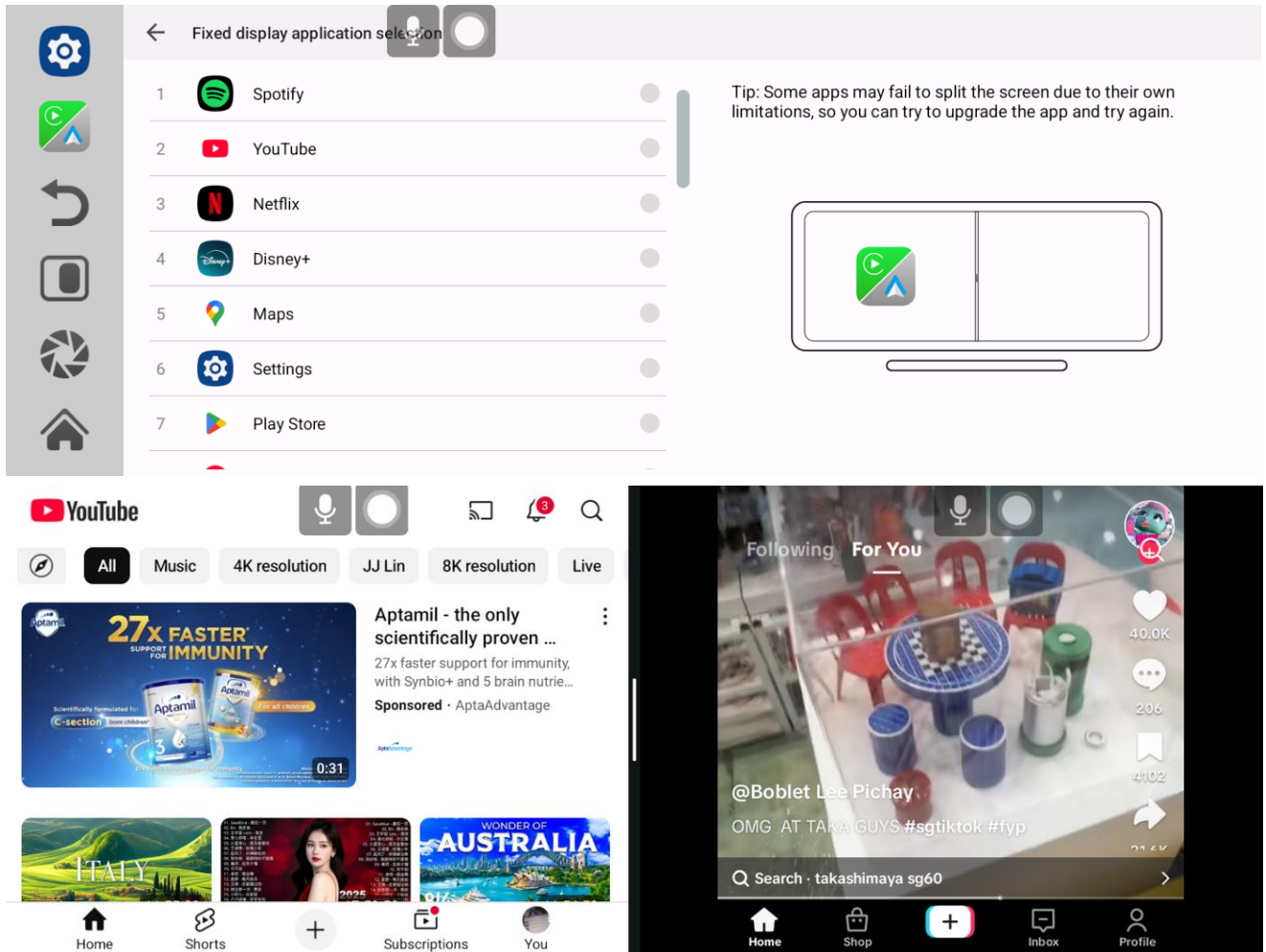
3. Display: Users can adjust screen brightness, change the default split screen application on the left, change the floating frame style, position the sidebar, select device themes, sort applications, and replace the startup logo.



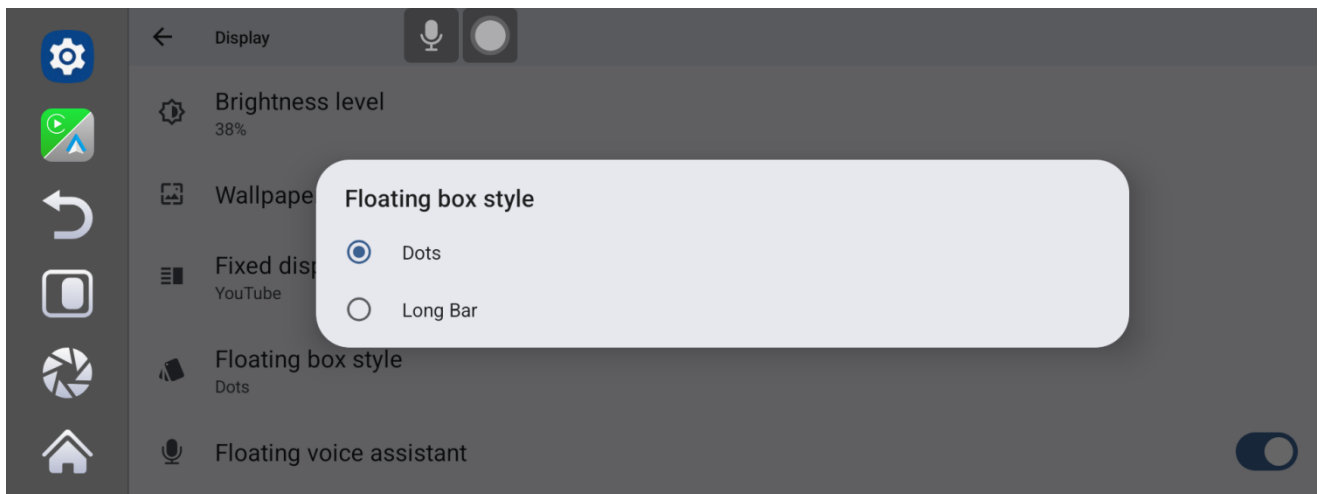
▲ Change the wallpaper of the main interface

[在此处键入]

[在此处键入]

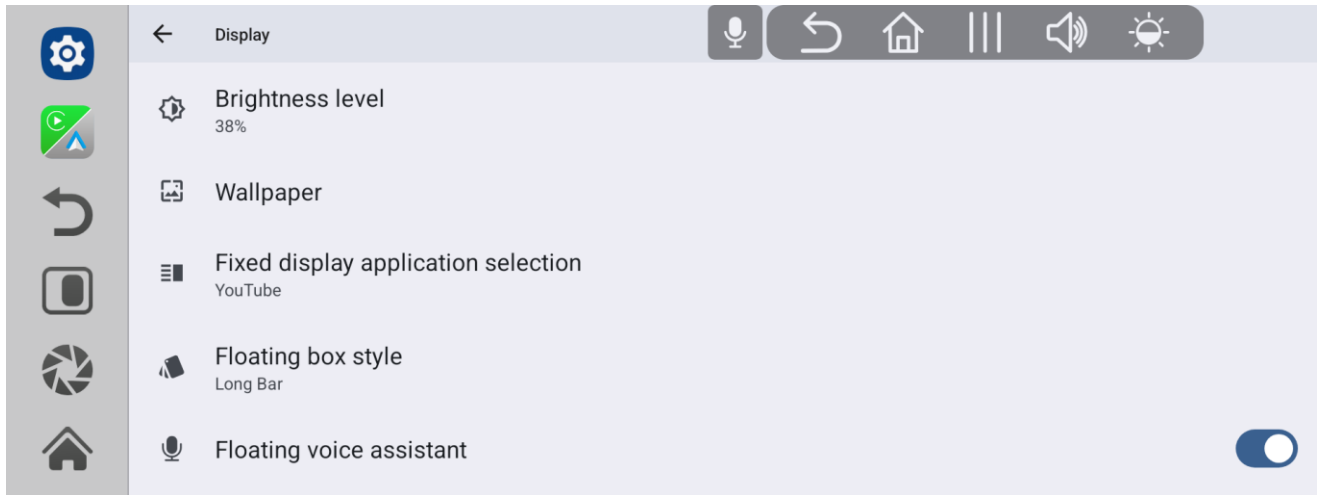


▲ Change the left or right split screen application

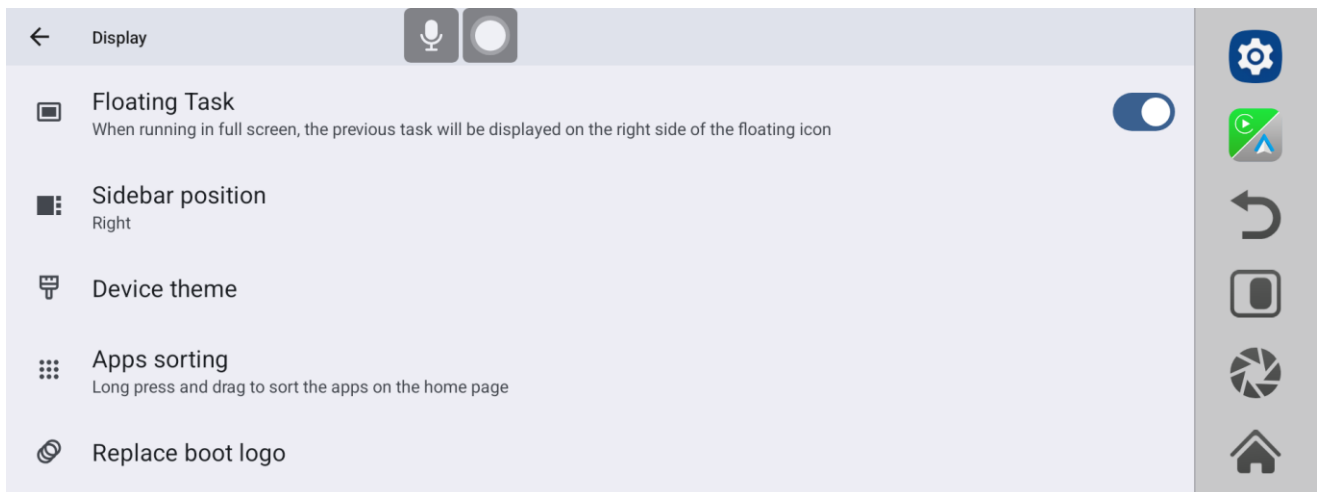
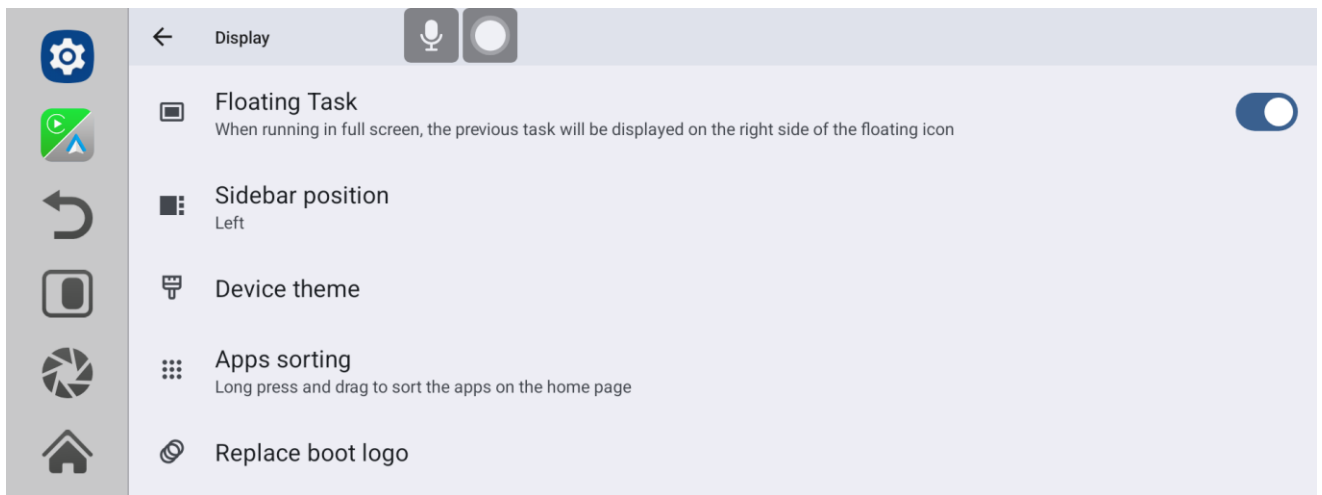


[在此处键入]

[在此处键入]



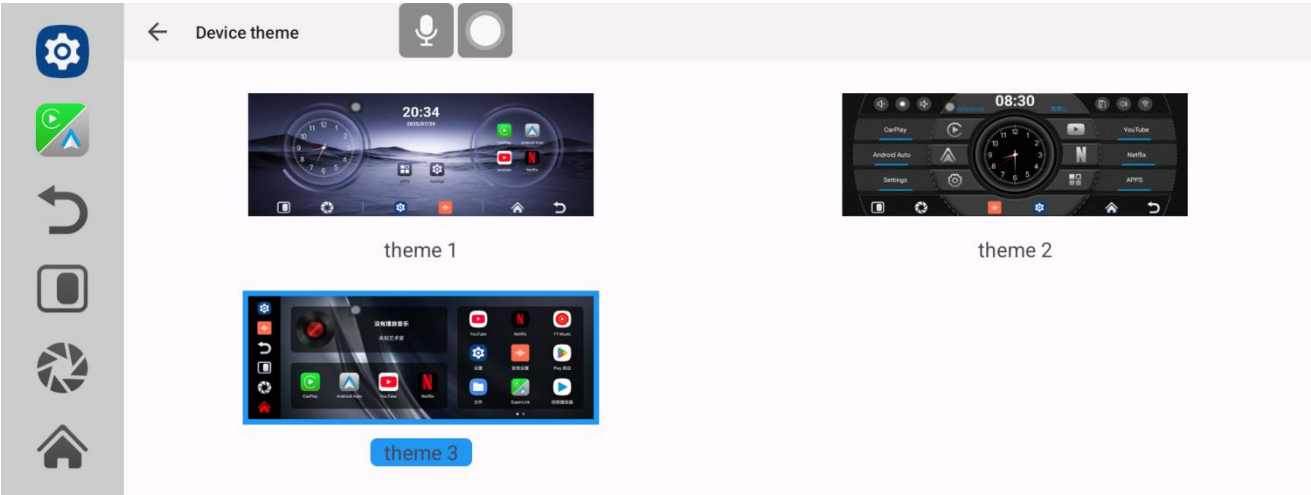
▲ Replace the Floating box style



▲ Sidebar position

[在此处键入]

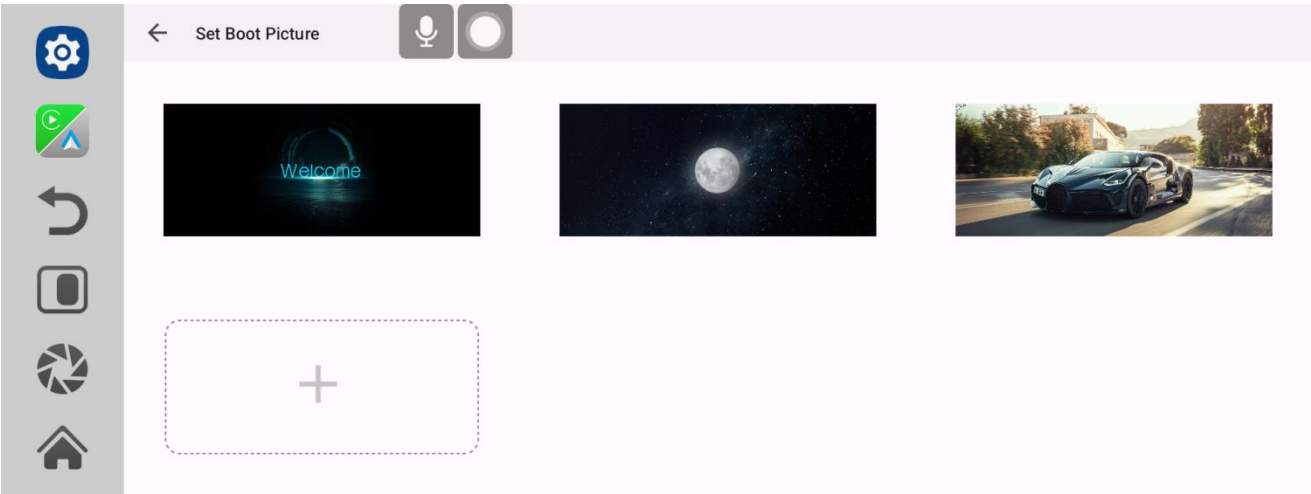
[在此处键入]



▲Change wallpaper



▲Application sorting (long press to select applications and drag to sort)

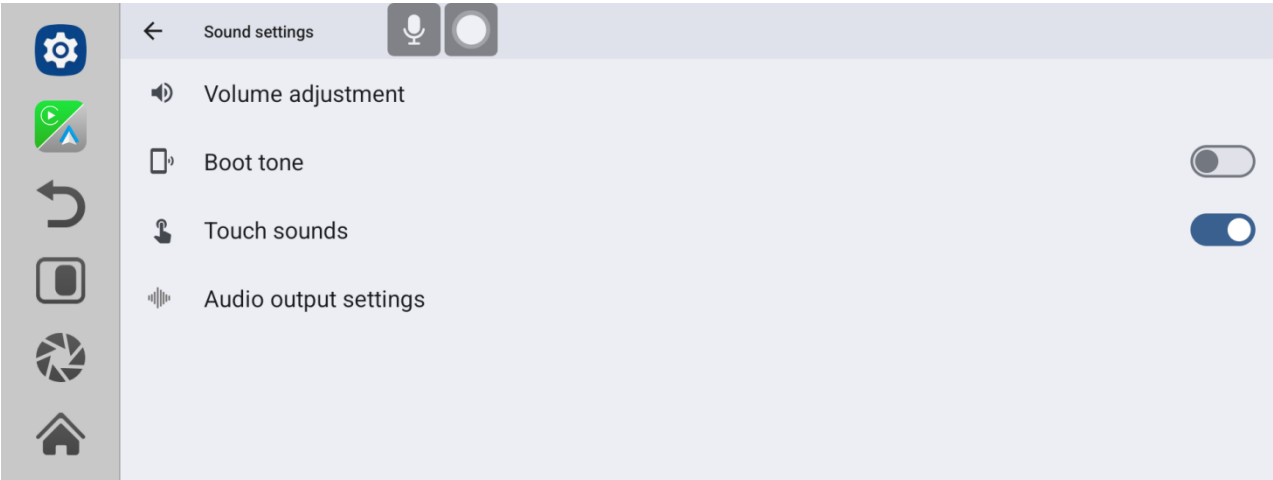


[在此处键入]

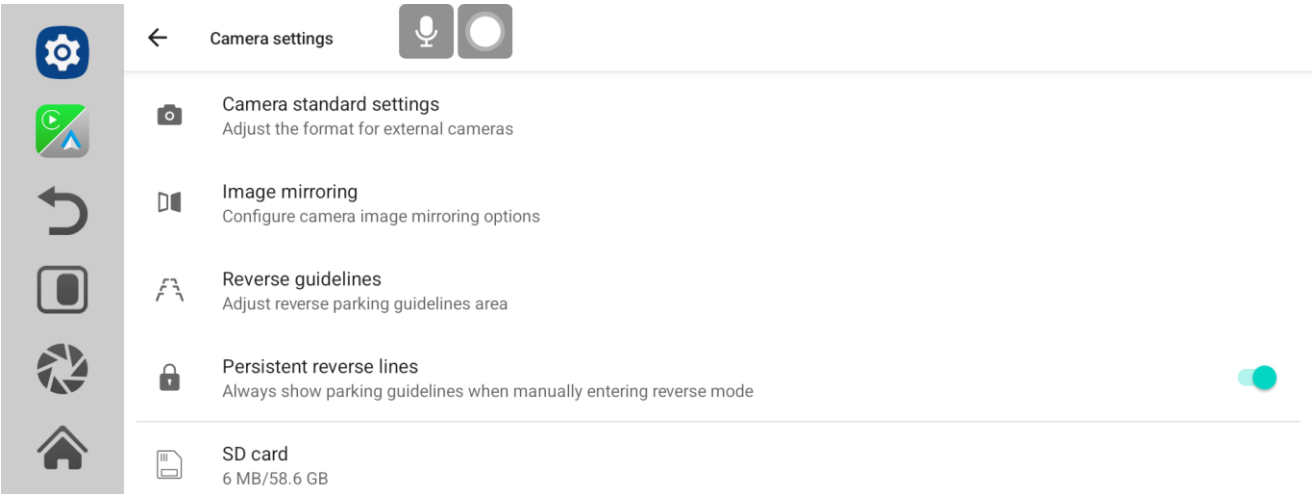
[在此处键入]

▲Change the startup logo

4. Sound settings: Users can control the volume of the device, choose to turn on or off the power on ringtone, and set audio output.

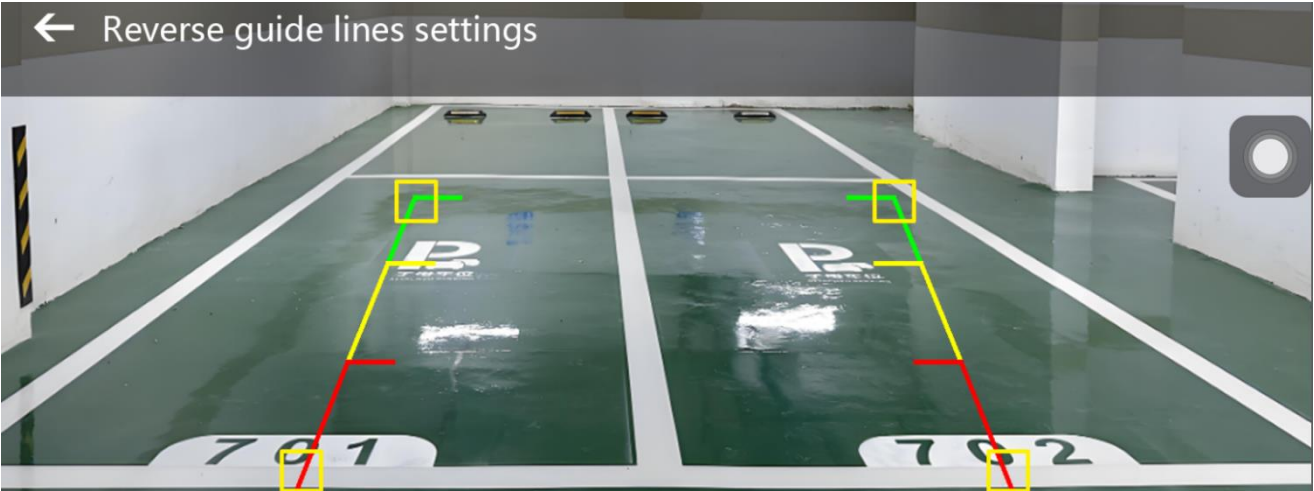
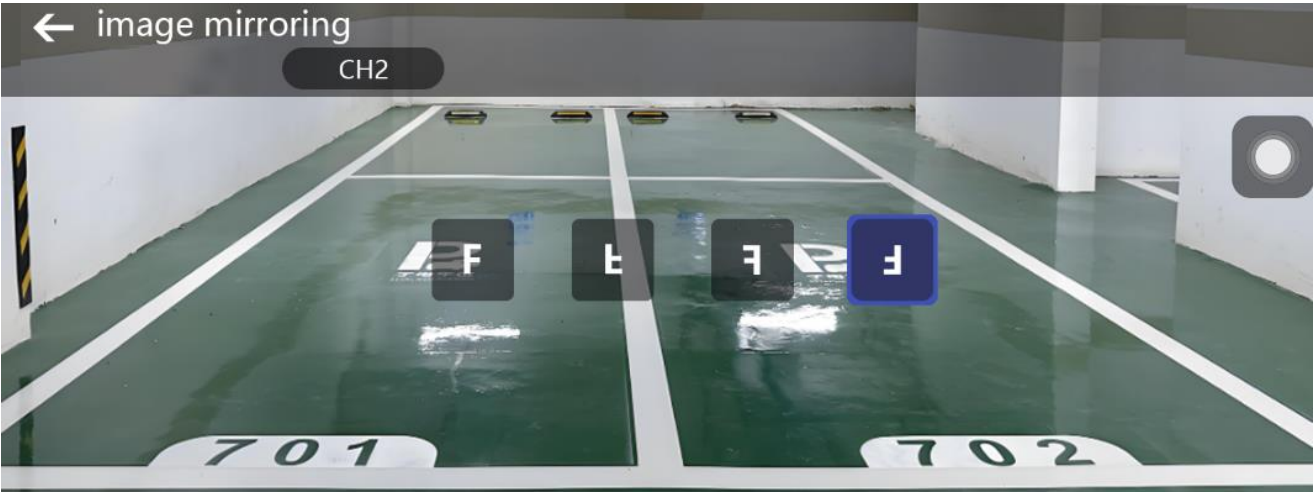
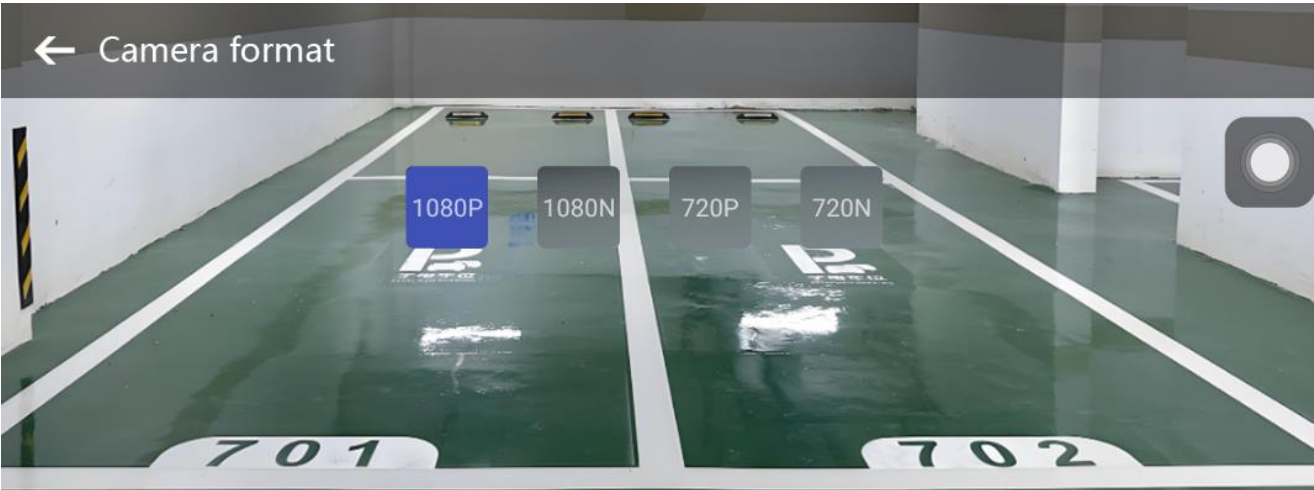


5. Reverse settings: reverse line calibration, reverse camera system selection, reverse camera image mirroring.



[在此处键入]

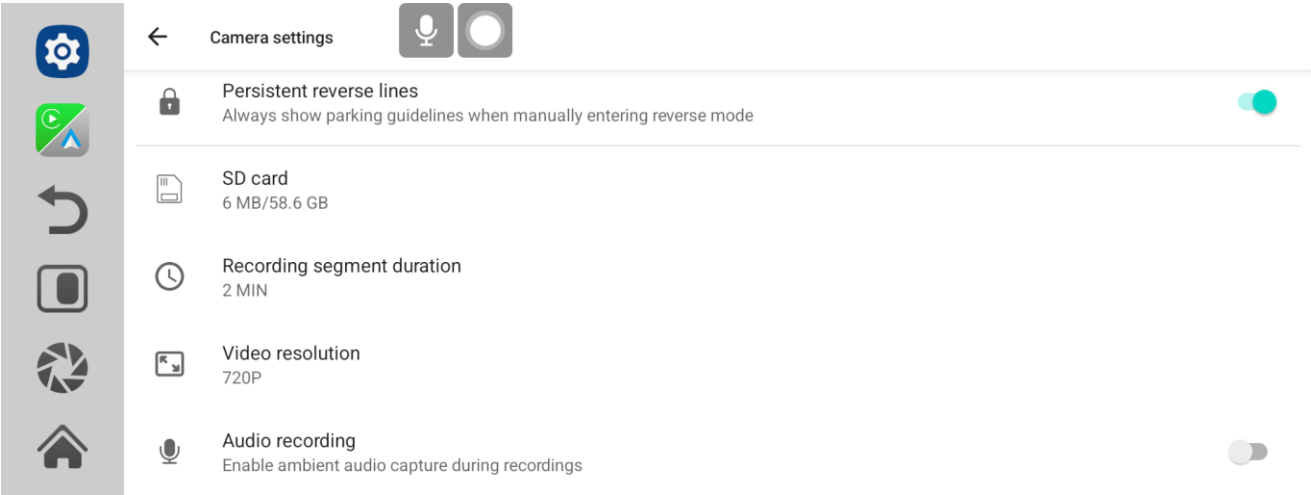
[在此处键入]



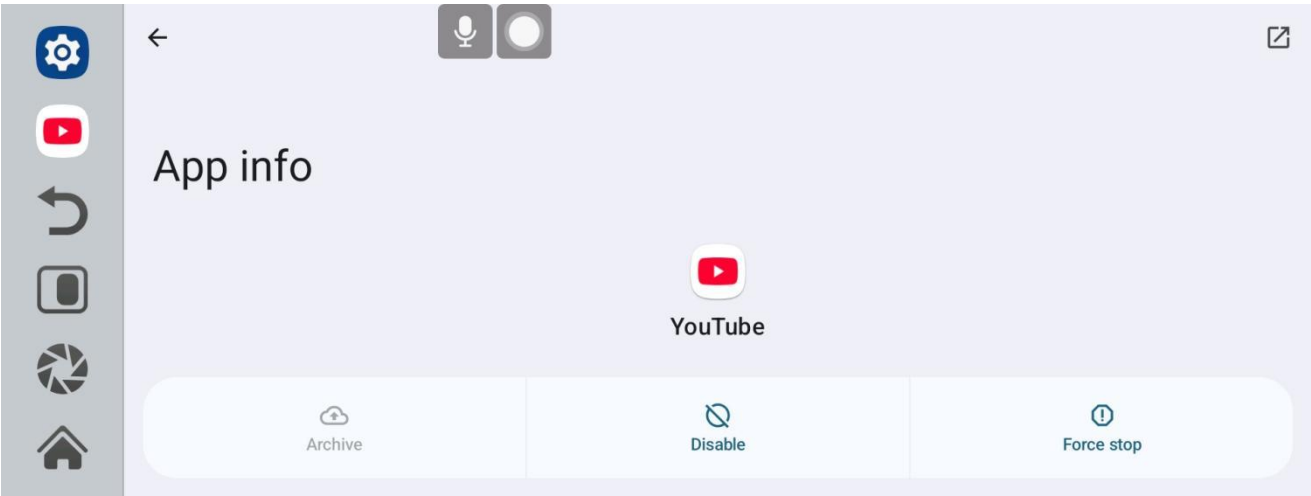
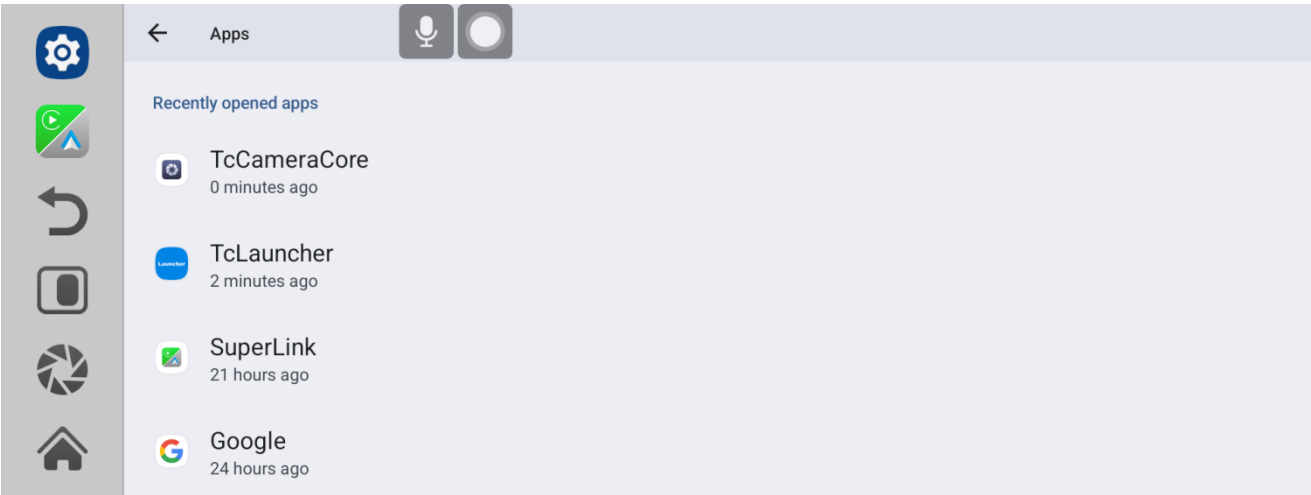
▲ Reverse line calibration

[在此处键入]

[在此处键入]



6. Applications: Recently used applications, default applications.

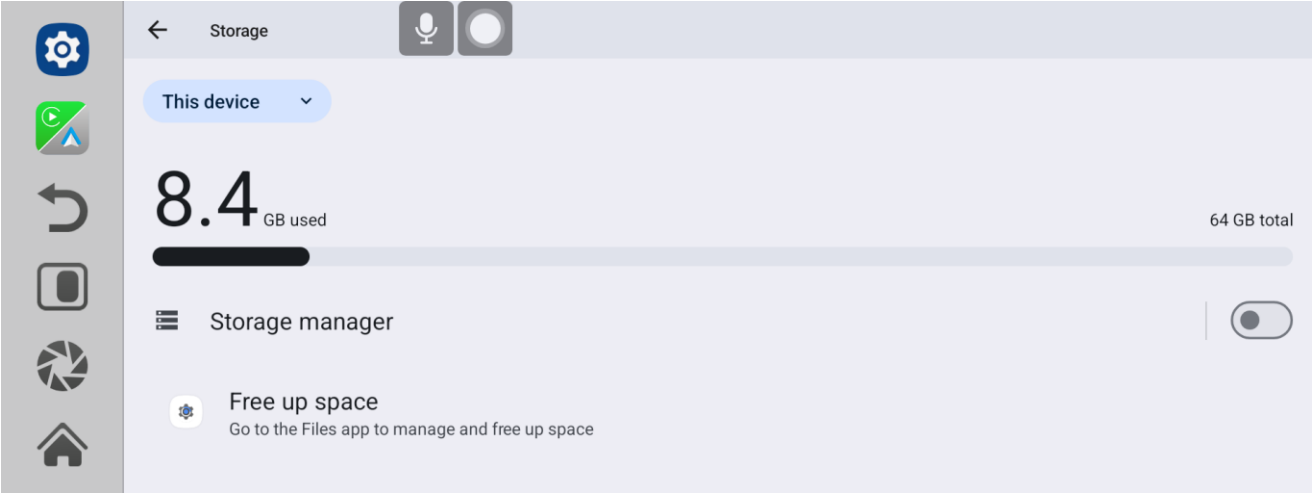


7. Storage: Provide users with functions such as storage space usage, cleaning storage space,

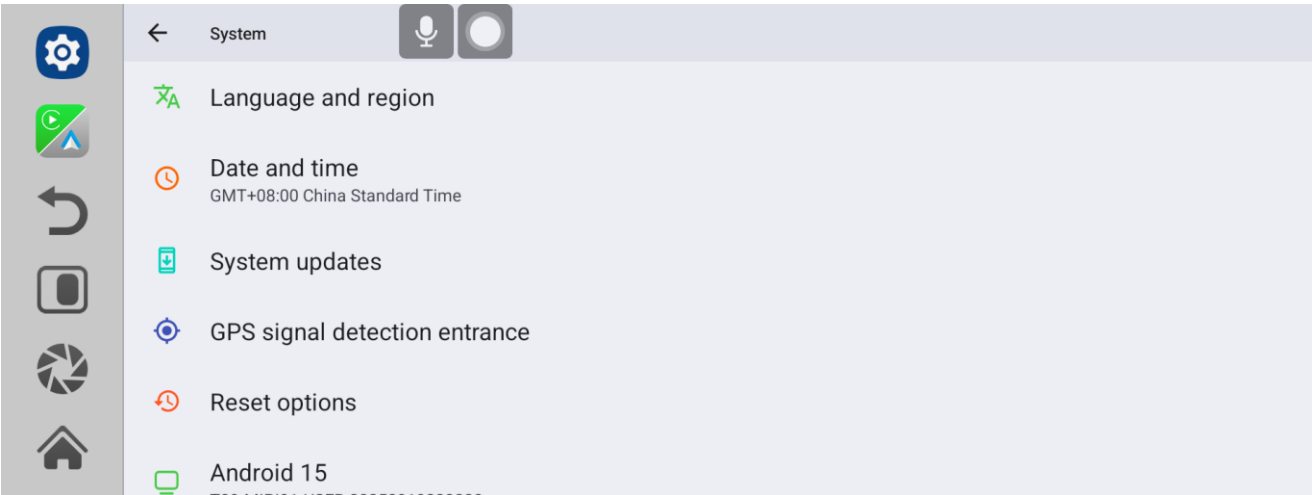
[在此处键入]

[在此处键入]

and external storage management to help users better manage and optimize their phone's storage space.



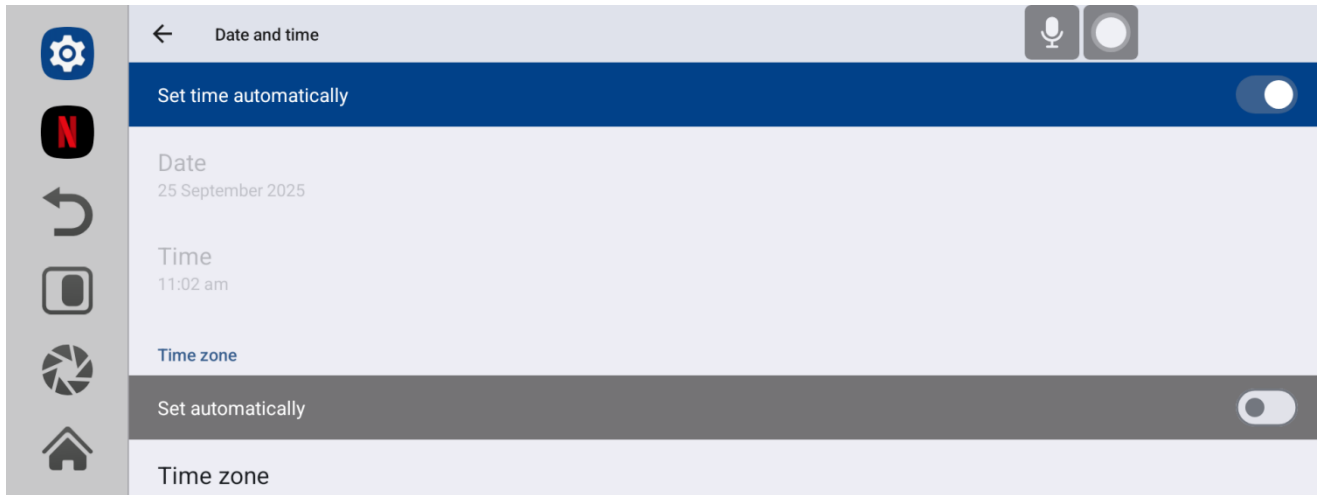
8. System: Language and region, Date & time, Reset options, System updates, AI OS. **This system is based on Android 15.**



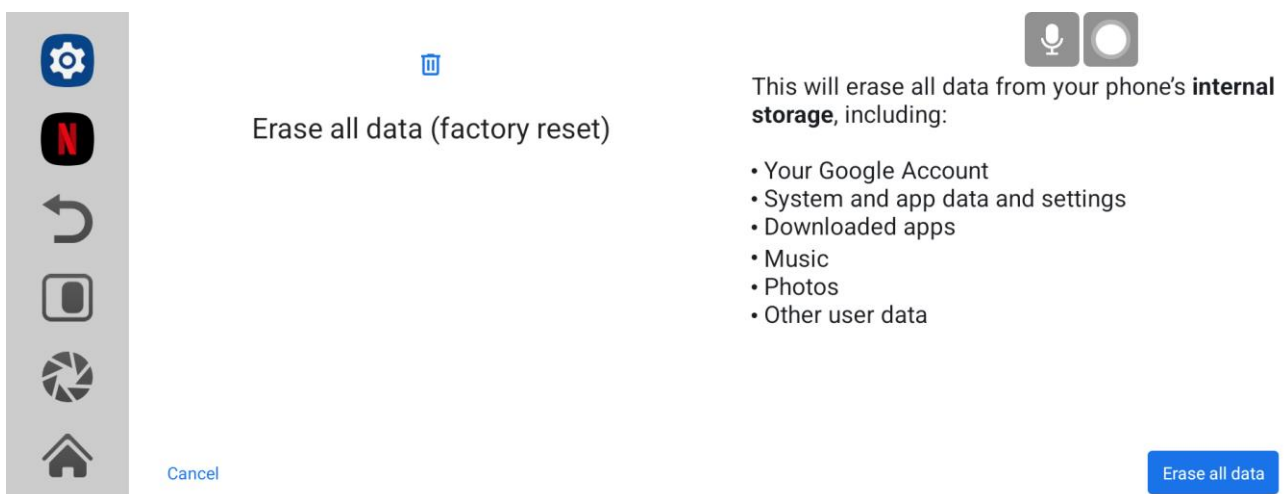
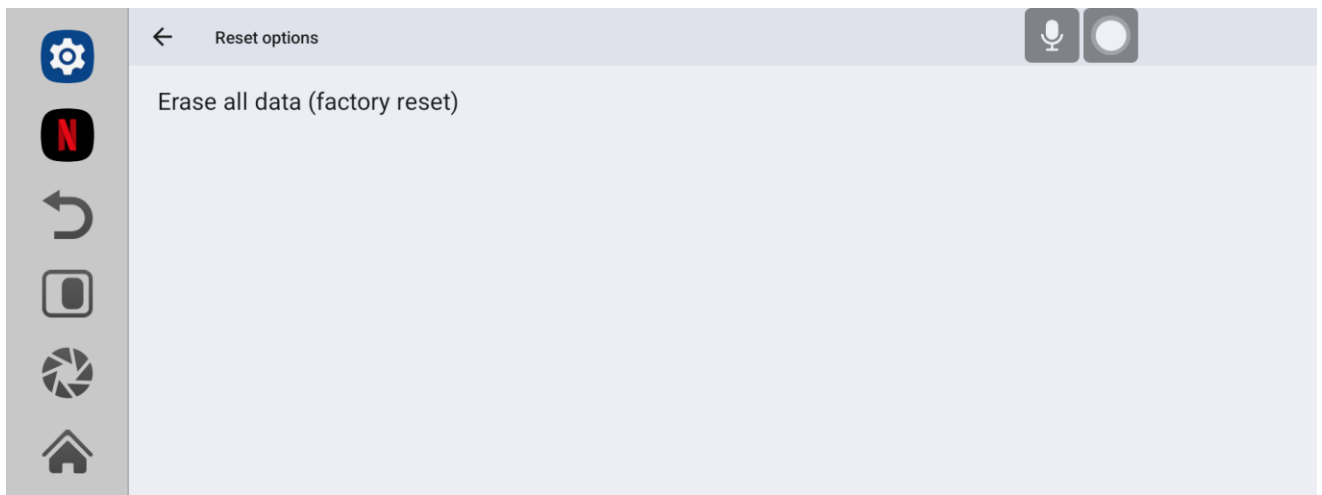
▲Choose language or region

[在此处键入]

[在此处键入]



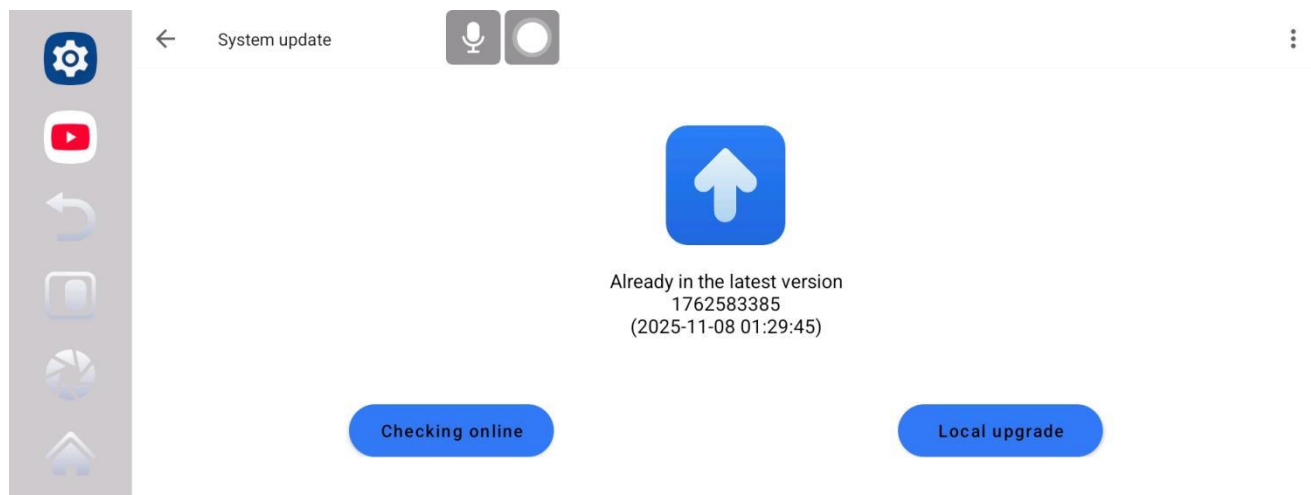
▲ Choose to set date and time



▲ Restore factory settings

[在此处键入]

[在此处键入]



▲ System updates

Please ensure the vehicle power supply remains active and the system maintains uninterrupted power throughout the OTA update process. Do not interrupt the power source during the upgrade procedure.

FCC Warning

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.

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

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.

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 and your body.

[在此处键入]