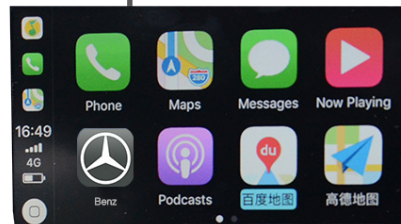


## kSmart auto Wireless CarPlay

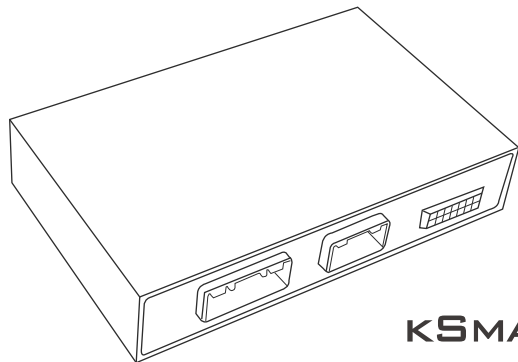
Factory direct sales ·  
Non-destructive installation ·  
Original car upgrade ·  
Continuous upgrade service ·



## kSmart auto Wireless CarPlay & Android Auto Smart Module

Product Manual For Mercedes Benz S W221 NTG4.0

Factory direct sales · Non-destructive installation · Original car upgrade · Continuous upgrade service



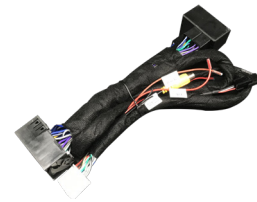
**KSMART AUTO BOX**

Wireless CarPlay Smart Module

## 1. Packing List



① iSmart CarPlay Main Box



② Main harness



③ LVDS Cable



④ USB Cable



⑤ Reversing wiring harness



⑥ Antenna x 2

## 2. Function introduction



CarPlay



CarLife



AndroidAuto



Front/Rear/360



Mirroring



AHD HD video protocol



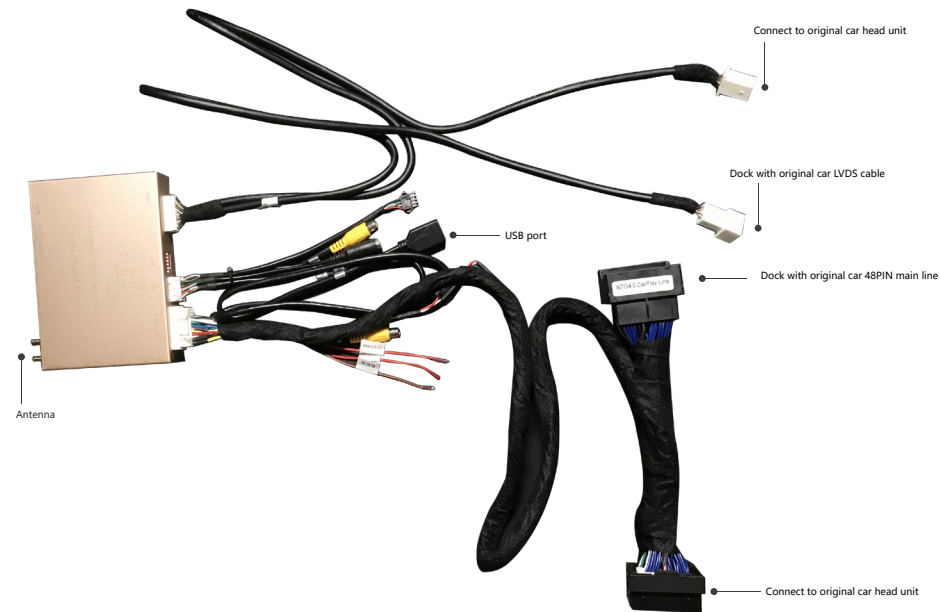
USB video



DSP Power amplifier chip

- **CarPlay**  
The iPhone' s built-in car-machine interaction system works with the central control knob button to operate the voice control phone, information, navigation, music and Siri voice interaction for more information; supports wireless and wired connections to CarPlay
- **CarLife**  
The car and machine care system developed by Baidu, supports the connection of iPhone and Android devices, voice control of telephone, information, navigation, and music; built-in "Xiaodu" voice control system, supports wireless and wired connections
- **AndroidAuto**  
The original ecological Android car-machine interaction system developed by Google, voice control phone, information, navigation, music built-in voice control system;
- **Front/Rear/360**  
The intelligent module can decode video, and can be equipped with front view, rear view (support display intelligent dynamic trajectory and radar), right view and 360 panoramic view
- **Mirroring**  
Supports wired and wireless screen projection for iphone and Android phones
- **AHD HD video protocol**  
Added AHD HD rear view/360 video output interface
- **USB video**  
Automatic media playback function, can directly insert U disk to play audio and video media
- **DSP Power amplifier chip**  
Add DSP power amplifier chip to improve sound quality

## 3. Connection Diagram



## 4. Main Parameters & Specifications

Operating voltage: 9-16V, 14.4V (rated)	Storage temperature: -30~+85°C
Operating temperature: -30~+75°C	Ambient humidity: ≤98% (at45°C) , 65±5% (rated)
Power consumption current: 1A (rated) , 3A (Max)	Shutdown current: Current: 300mA (Clock is on)
Quiescent current: less than 3mA	
Charging current: ≤2A, when the USB charging current >1A, the host machine should activate the circuit protect function to control the current within 1.5A and avoid products burning	

## 5. Warranty Terms

Dear user:

Thank you for using our products. In order to make sure customers receive product is good, all our products have been strictly tested in our factory before delivery. And all our products enjoy 1 year warranty.

**But following conditions are not covered by warranty:**

1. Warranty period over; the appearance with scratches dirt, deformation.
2. Information on Warranty car and purchase bill inconsistent with product, or modified.
3. There is no bar code or bar code not clearly on host unit.
4. Damage caused by using, disassembling or refitting product not follow the instruction properly.
5. Not our company authorized personnel disassemble. repair or refit to cause human made damage.
6. The product damaged by improper transport or improper use.
7. Damage due to irresistible factors (such as fire, flood, traffic matters Therefore, lightning, earthquakes, etc.).

## 6. Interface introduction

Music: Play local music in USB, formats include: MP3, WMA, AAC, AC3, DTS, OGG, FLAC, APE, AMR.



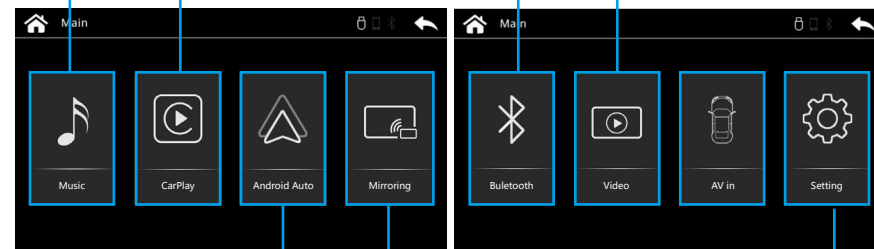
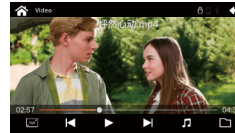
CarPlay: Support iPhone wired and wireless CarPlay connection (The connection method can be set by yourself)



Bluetooth: You can view the Bluetooth name and pairing code in this interface



Video: Play local video in USB, the format includes: mkv, mp4, avi, wmv, rmvb, rmpg, mpeg, ts, dat, asf, flv, vob.



Android Auto: Support Android Auto connection of Android phones

CarLife: Support Android mobile phone wired and wireless CarLife connection (connection method can be set by yourself)



Mirroring: Support mirrored screen projection for iPhone & Android phones



Setting: System setting interface, setting entrance of system functions

**Note: To use CarLife or Android Auto, you need to enter the system setting selection**

## 7. Installation Process

### Tools you need to prepare

- 1 \* panel remover
- 1 \* T20 screwdriver
- 1 \* T10 screwdriver (some car models need it to dis-assemble the glovebox)
- Tape and towel-protect the trim and panel, collect harness

**Remark : Make Sure Car Engine Off Before The Installation. Open/Close The Driver Side Door ONCE, Wait Centre Screen Turns Black**



1. Remove the trim panel under the center console



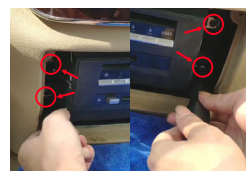
2. Unscrew the screws on the bezel console



3. Open the center console, then open the small shutter of the screw; unscrew the screws



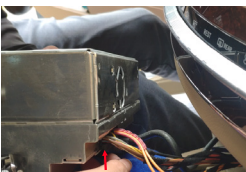
4. Remove the center console



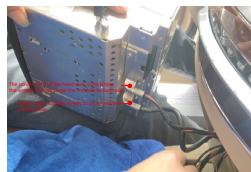
5. Unscrew the screws on the head unit



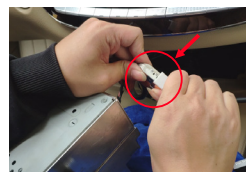
6. Take out the head unit



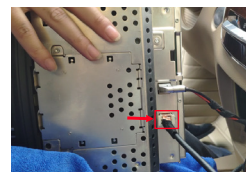
7. Unplug the main cable of the head unit.



8. Unplug the video cable on the back of the head unit, be careful not to unplug it by mistake



9. Take out the LVDS cable of CarPlay and connect it with the video cable of the original car



10. Connect the other end of the CarPlay LVDS cable to the console



11. Take out the main cable of CarPlay, be careful not to unplug the docking plug on the main cable (the NTG4.5 host needs to be unplugged)



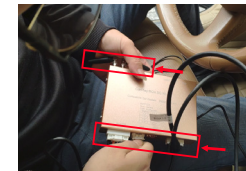
12. Take out the fiber optic cable on the original car main line



13. Connect the main line of CarPlay with the main line of the original car



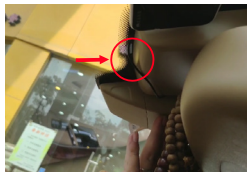
14. Connect the fiber optic cable you took out to the main cable of CarPlay



15. Insert the white power cable, LVDS cable and USB Cable into main box. Connect the WiFi Antenna and Bluetooth Antenna to the CarPlay Box



16. It is recommended to connect the main cable of CarPlay to the host in the last step



17. The microphone can be placed in the space of the front windshield and the microphone wire harness can be routed to the main wire



18. CarPlay box can be placed in the center console



19. After the CarPlay installation is complete, you can restore the original car layout



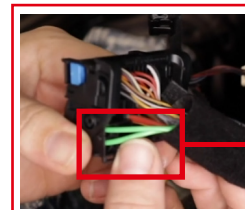
20. Enter the audio interface - choose AUX, Long press phone-ending button to switch to carplay interface. (If the original car does not have AUX, you need to activate the AUX of the original car first)



21. Turn on WiFi on the phone, keep it on, then turn on Bluetooth, search for and connect CarPlay Bluetooth (You can enter the Bluetooth interface in the CarPlay system to view information such as the name of the CarPlay Bluetooth)

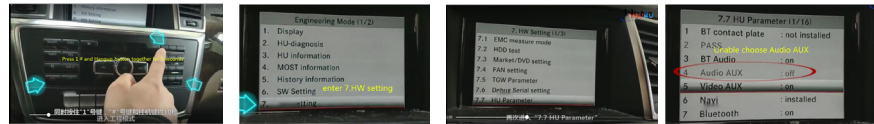


22. Click USE Carplay on your phone side. Orit will keep at searching interface.



Note that if there is an optical fiber cable (usually Green or orange) on the original car power cable, you need to take out the optical fiber cable and transfer it to the main line of CarPlay

## HOW TO CHECK WHETHER THE AUDIO AUX IS ON OR NOT

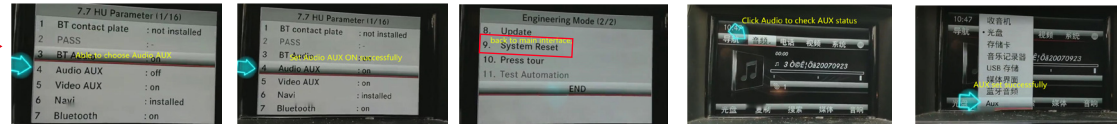


1. Press 1 # and Hangup button together for 5 seconds. Enter the car engineering mode.
2. Enter into "7. HW setting"
3. Then enter into "7.7 HU Parameter"
4. AUX status can be viewed on this interface

When Audio AUX is selectable

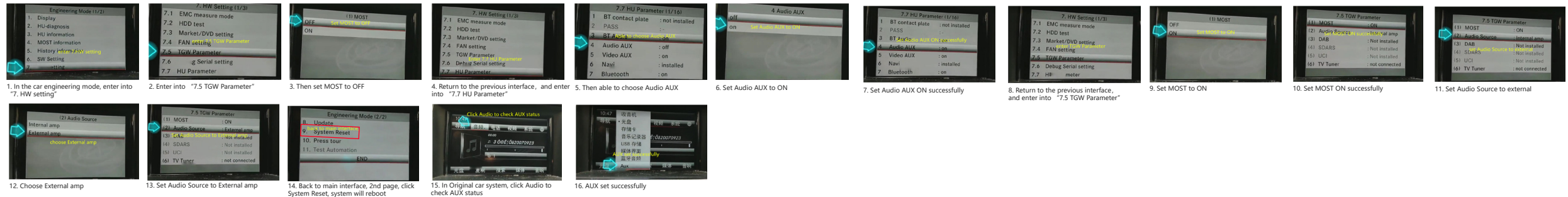
When Audio AUX is not selectable

## HOW TO SET AUX ON



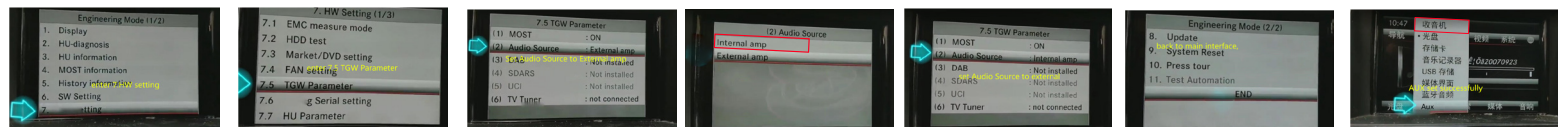
1. Set Audio AUX to ON
2. Back to main interface, 2nd page, click System Reset, system will reboot
3. In Original car system, click Audio to check AUX status
4. AUX set successfully

## HOW TO SET AUDIO AUX ON



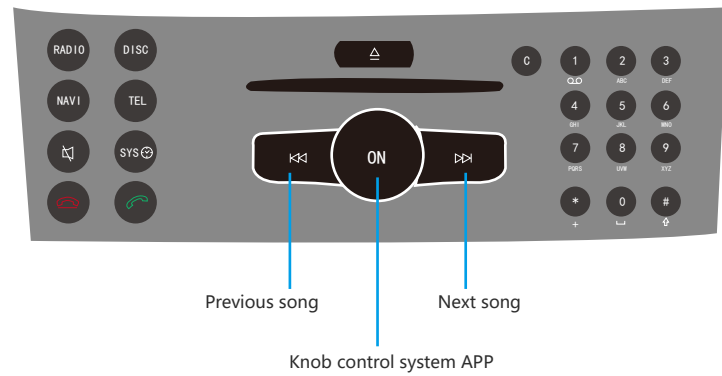
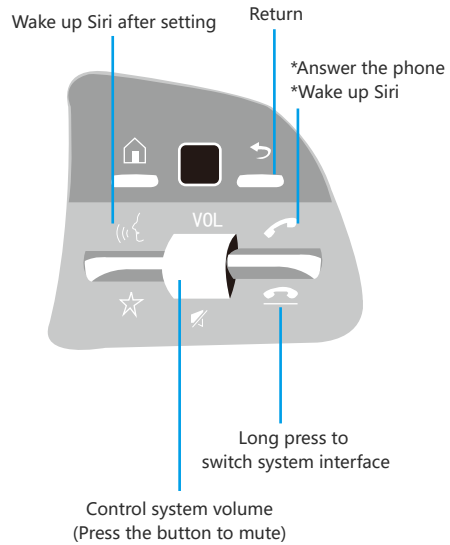
1. In the car engineering mode, enter into "7. HW setting"
2. Enter into "7.5 TGW Parameter"
3. Then set MOST to OFF
4. Return to the previous interface, and enter into "7.7 HU Parameter"
5. Then able to choose Audio AUX
6. Set Audio AUX to ON
7. Set Audio AUX ON successfully
8. Return to the previous interface, and enter into "7.5 TGW Parameter"
9. Set MOST to ON
10. Set MOST ON successfully
11. Set Audio Source to external
12. Choose External amp
13. Set Audio Source to External amp
14. Back to main interface, 2nd page, click System Reset, system will reboot
15. In Original car system, click Audio to check AUX status
16. AUX set successfully

Note: When the setting is complete, there is no sound in the whole car, you need to return to the car engineering mode

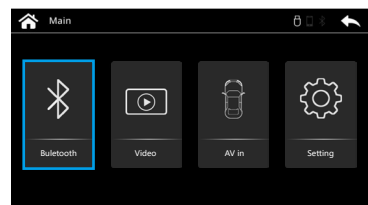


1. In the car engineering mode, enter into "7. HW setting"
2. Enter into "7.5 TGW Parameter"
3. Set Audio Source to Internal amp
4. Choose Internal amp
5. Set Audio Source to Internal amp
6. Back to main interface, 2nd page, click System Reset, system will reboot
7. Select the radio to see if the sound is playing normally

## 8. Button description



## 9. Wireless CarPlay Connection Method



1. Long press the phone-ending button of the original car to switch to the CarPlay main system interface, find the Bluetooth function option and click to enter

2. Check the Bluetooth name of CarPlay on the "Bluetooth" system interface

3. Turn on the phone WiFi and keep it turned on, then enter the phone Bluetooth interface, click and connect CarPlay Bluetooth



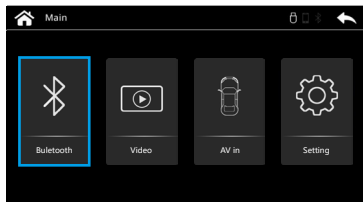
4. Click on the Bluetooth name beginning with the link "Car Audio-", a pairing request will pop up, just click on pairing; after the Bluetooth pairing is successful, the phone will pop up a request to enable the carplay option, click on confirm.



5. CarPlay connection is successful, you can use wireless CarPlay

## 10. Android auto Connect Method

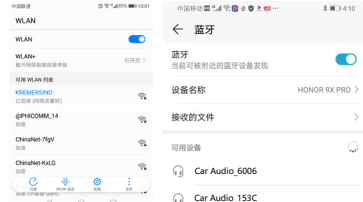
Before connecting to use Android Auto, you need to download and install Android Auto App on your phone in advance



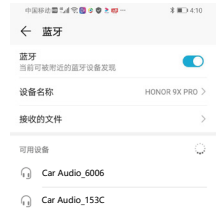
1. Long press the phone-ending button of the original car to switch to the CarPlay main system interface, find the Bluetooth function option and click to enter



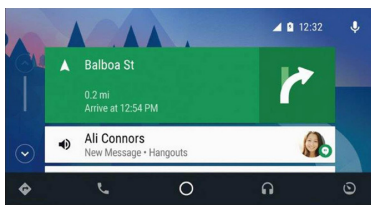
2. In the Bluetooth interface of CarPlay, you can view the Bluetooth name and pairing code of CarPlay; check Auto Connect, the next time you get in the car, the Bluetooth of the phone will automatically connect



3. Turn on the phone WiFi and keep it turned on, then enter the phone Bluetooth interface, click and connect CarPlay Bluetooth

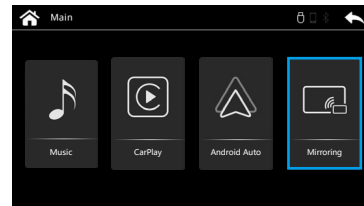


4. Click on the Bluetooth name beginning with the link "Car Audio-", a pairing request will pop up, just click on pairing;



5. After the Bluetooth connection is successful, it will automatically connect to Android Auto. After entering the Android auto page, the system supports the original car touch or knob and other corresponding buttons to seamlessly operate the Android auto page APP

## 11. iPhone Wireless Mirroring



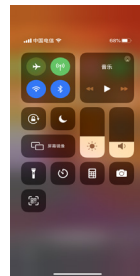
1. Long press the phone-ending button of the original car to switch to the CarPlay main system interface, find the Mirroring function option and click to enter



2. Select iPhone option in Mirroring function



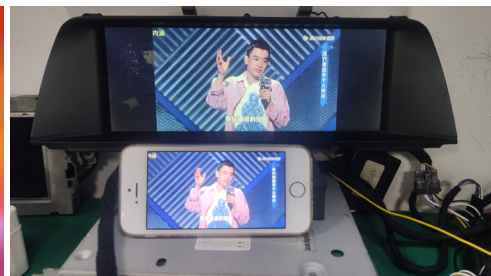
3. Take out the iPhone, find the "Wireless LAN" function option and enter; open the "Wireless LAN" function option, then the carplay-wifi name will appear in the search bar and click on this wifi, the password is 88888888



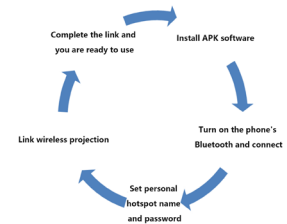
4. After the carplay wifi connection is successful, the phone returns to the main interface, opens the shortcut menu bar, selects "Screen mirroring" and opens



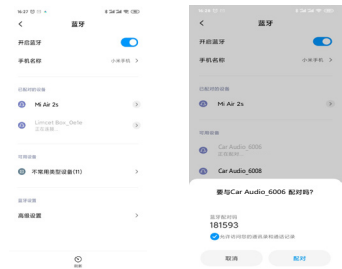
5. After the mobile phone "Screen mirroring" is turned on, select "Mirroring" to complete the wireless projection



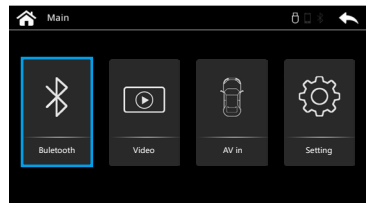
# 12. Android Wireless Mirroring



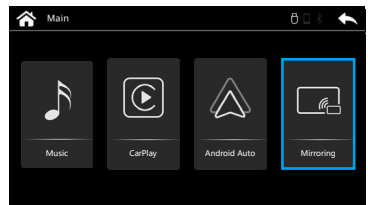
1. To use Android wireless mirroring, you need to download a "MLink" software first, and you can obtain the "Android wireless APK software" from the dealer



4. Take out the Android phone, find the "Bluetooth" function option, and find the name starting with "Car Audio-" in the Bluetooth search bar, click connect; click the link "Car Audio-" starting with the Bluetooth name, a pairing request will pop up, click pairing



2. Long press the phone-ending button of the original car to switch to the CarPlay main system interface, find the Bluetooth function option and click to enter



5. Long press the phone-ending button of the original car to switch to the CarPlay main system interface, find the Mirroring function option and click to enter



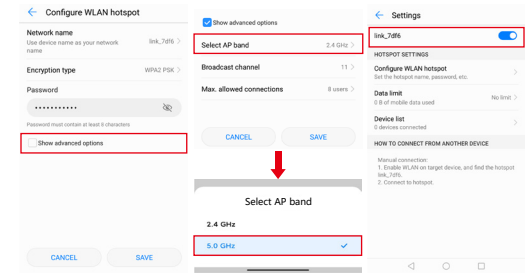
3. Check the Bluetooth name on the "Bluetooth" system interface



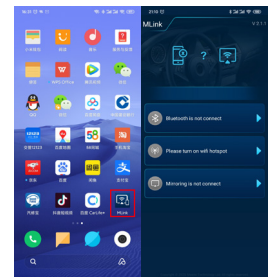
6. Select the "Mirroring" function option and adjust it to "Android" to prompt the phone to establish a mobile hotspot for communication. The hotspot name and password are displayed in the lower left corner of the connection interface



7. Enter the phone settings function and find "Personal Hotspot";



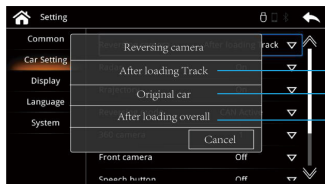
8. Set the name and password of "Personal Hotspot" to be consistent with the name and password prompted on the "Mirroring" interface. Select "5.0 GHz Band" for the hotspot AP band; (If there is no such option, check the "Show advanced options" first) Then save the setting and turn on the "Personal Hotspot" switch



9. Return to the main interface of the phone and open "MLink" to use wireless mirroring

## 13. Camera settings

CarPlay System - Setting - Car Setting - Reversing camera



Please select this if you install a camera

Please select this if the original car with a camera

Please select this if you install 360 camera

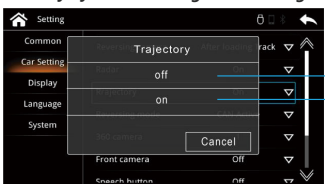
CarPlay System - Setting - Car Setting- Radar



The radar is not displayed on the interface of the camera select this option

The radar is displayed on the interface of the camera select this option

CarPlay System - Setting - Car Setting - Trajectory



If the camera interface does not display dynamic track, select this option

If the camera interface display dynamic track, select this option

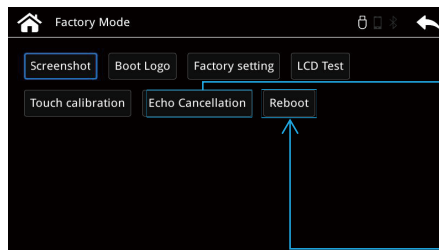
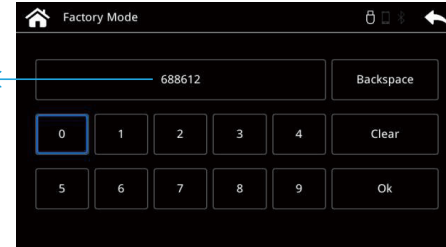
## 14. Echo cancellation

CarPlay System - Setting - System



Enter the password "688612"  
Click "OK" to enter factory mode

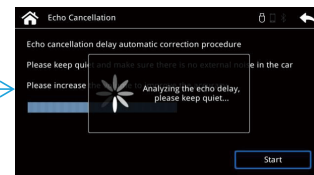
Enter Factory Mode



Call echo cancellation button, if the call has echo, please enter this button to perform echo correction

Analyzing the echo delay finished, noise accuracy:91%!  
Please increase the volume to improve the accuracy  
Analysis failed, please try again!

After the steps are completed in sequence, click the button to return to the left interface. Click the "Reboot" button to restart the system, wait for the system restart to complete, the selected settings take effect



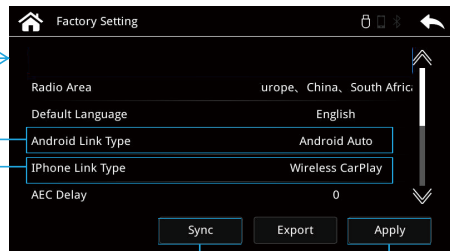
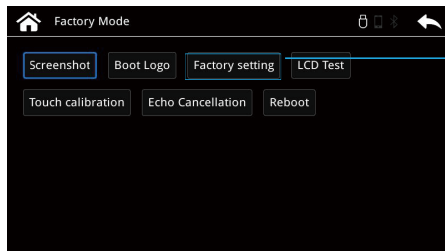
**When correcting the echo, you must keep:**

1. The environment in the car is quiet;
2. The sound channel must be set to the AUX channel that the system can recognize;
3. Turn the volume to a moderate position, then click "Start" to start echo correction,

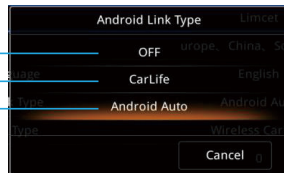
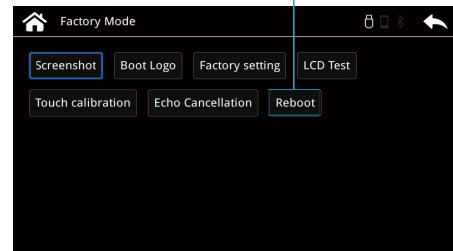
**The larger the final correction value, the better, as shown on the left**

## 15. iPhone / Android Phone Setting

### CarPlay System - Setting - System - Factory mode - Factory setting



After the setting is complete, you need to click Apply-Sync, and then return to the interface below, click Reboot to restart the system, and wait for the system to restart, the selected settings will take effect



Android phone interconnection is off  
Baidu CarLife interconnected  
GooglePlay interconnected



iPhone CarPlay interconnected is off  
iPhone CarPlay wired connection  
iPhone CarPlay wireless connection