Wireless Carplay Instruction Manual

For PCM3.1

CONTENT

1. Product Features Introduction

Apple Carplay	**Android Auto**	**Mirroring**	**USB Media**	**Advanced Chip**	**Front/Rear Camera**	**Bluetooth calling**

- Support Carplay, Carlife& Android Auto；
- Support wireless phone–link.
- Chip：Sunplus SPHE8368–U，800MHZ ；
- OS RAM MB DDRⅢ SDRAM；
- Flash support SLC/MLC，128MB SLC NAND FLASH；
  Adopt LINUX system，high performance ,more stable；
  Ultra–high integration, ultra–small size 60*39*6mm, simple circuit, combine easily.
  The complete and rich connectors, the strong and potential expansion functions ；
  After connect Carplay or, the original screen achieve positioning and navigation, voice search, BT function, music and other functions;
- Support multi–format video output,as below:
  ① Analog CVBS video format　　② LVDS HD output　　③ Digital RGB888
- Support two channels CD stereophonic sound output；
- Support original operate system；
- Support original MIC，high sound quality and echo control；
- Support play 1080P multi–format video smoothly,including H.264;
  Also support 1 group USB–HOST connect device；
- Through UART connector can complete touch screen and buttons the operation of machine and human interactive interface;
- Support extend reverse video input or AHD HD input and applications;
- Support extend front view,DVR and etc after communicate with engineer

2. Specification

Specification	
Chip：SPHE8368–U	Main Frequency：800MHz
RAM/ROM：128MB/256MB	OS：Linux Gemini
Support Audio Format：MP3，WMA，AAC，FLAC，WAV	Support Video Format：AVI，MKV，MP4，FLV，MPEG，H.264
Dimension：60mm*39mm*6mm	
Working Environment temperature：–40˚C~+85˚C	Storage Environment temperature：–40˚C~+100˚C
Storage Temperature：30%~90%	Working Humidity：45%~80%
Working Height：Device can work normally under 15000feet（4573 meter）height	
Drop Test：Device can work normally after dropping under 30inches（76cm）height	
Rating voltage：5V	Normal Working voltage：DC 5V(±0.3V)
Standby current：≦1mA	Video output：CVBS/RGB888/LVDS
Video output voltage：1.0Vpp/75Ω	Audio output：Two–channel CD stereophonic sound, can extend
Audio watt：Two channel 0.25W/CHANEL	Voice input：MIC analog signal
Communication serial port：1 group UART port	Touch way：IIC/serial communication
General IO：Multiplex IO, meet different customer demand	USB port：1 group

Bluetooth	WIFI
Bluetooth Standard：Bluetooth V2.1+EDR	Frequency Band：2.4GHz&5.8GHz
Frequency Band：2402MHz–2480MHz	Interface：USB
Interface：UART	Size：12*13mm
Size：12*15mm	Vcc：3.3V
Vcc：3.3V	ANT：External antenna interface
ANT：External antenna interface	

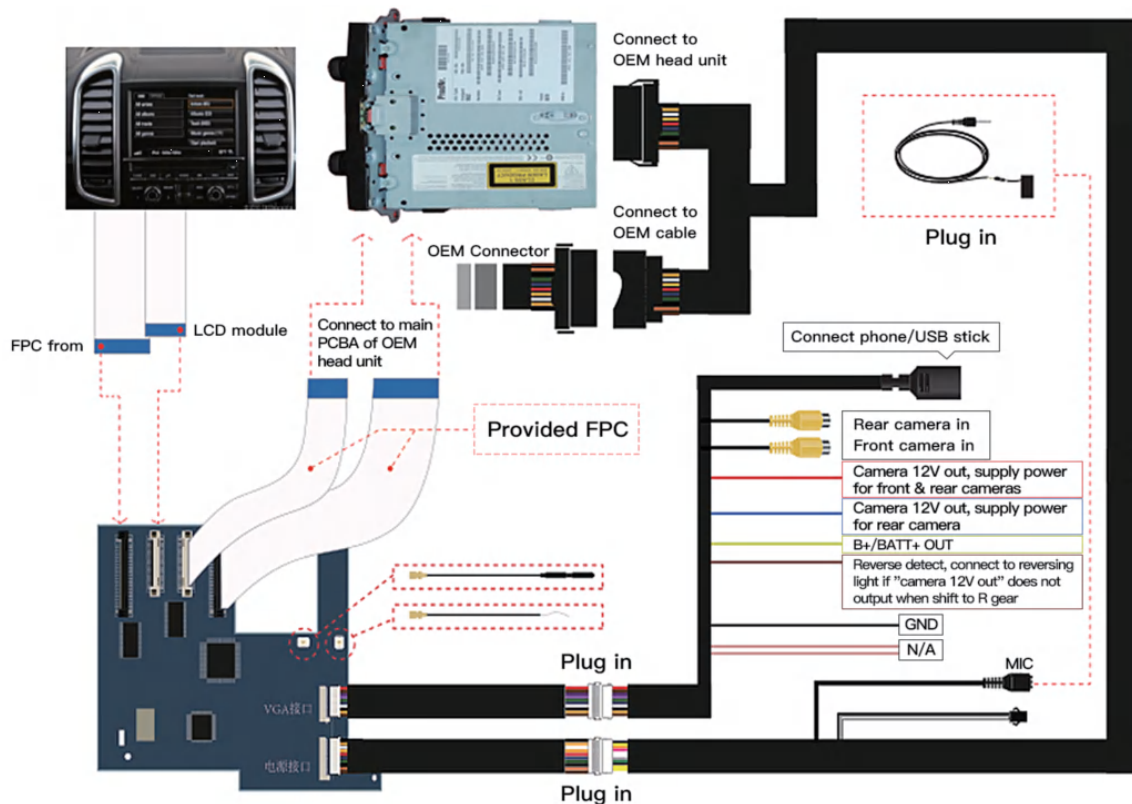# 3. Product Accessories List

Power cable
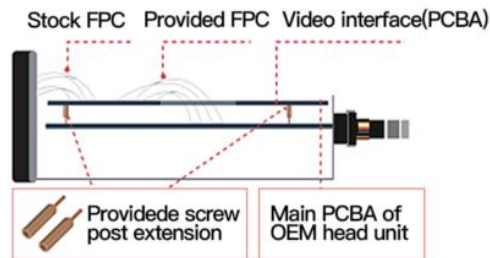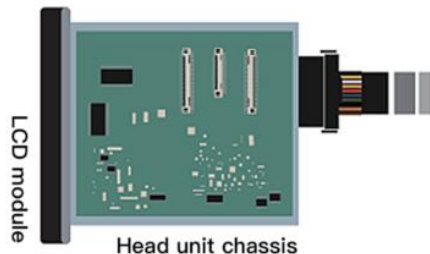
RCA/USB cable

Data cable

BT&
WIFI Antenna

Microphone
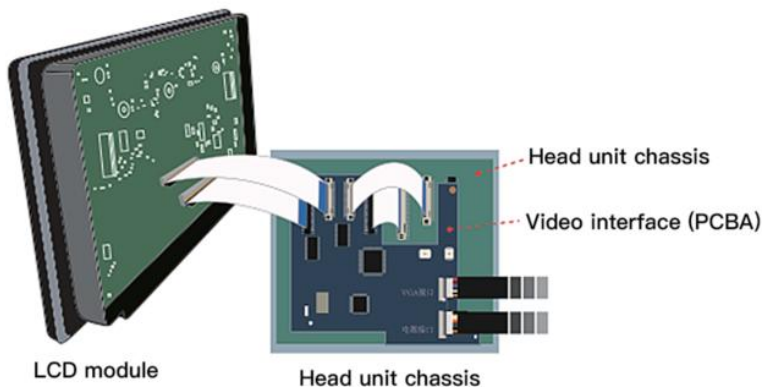cable

FPC

4. Product Installation

Connect to
OEM head unit

Plug in

OEM Connector

Connect to
OEM cable

Connect phone/USB stick

FPC from

LCD module

Connect to main
PCBA of OEM
head unit

Provided FPC

Rear camera in
Front camera in

Camera 12V out, supply power
for front & rear cameras

Camera 12V out, supply power
for rear camera

B+/BATT+ OUT

Reverse detect, connect to reversing
light if "camera 12V out" does not
output when shift to R gear

GND

N/A

MIC

Plug in

VGA接口

电源接口

Plug in

Plug in

4.1 Product Installation

Stock FPC Provided FPC Video interface(PCBA)

LCD module

Head unit chassis

Providede screw post extension

Main PCBA of OEM head unit

How to switch

Press and hold "INFO" button ➡ OEM UI ➡ Add on UI

Provided screw post extension

Head unit chassis

Video interface (PCBA)

Head unit chassis

Video interface (PCBA)

LCD module

Head unit chassis
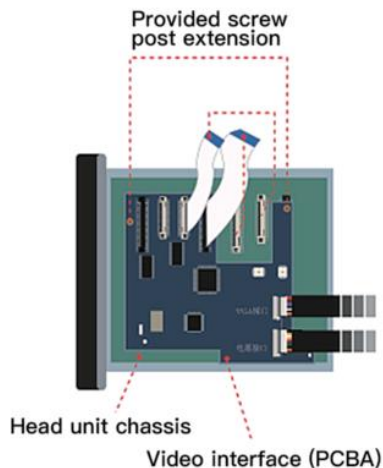
4.2 Product Installation

排线安装参考PCM3.1分体板小板连接
Refer to DB connection of Porsche PCM3.1

天线
Antenna

USB

USB拓展:连接U盘，手机，软件升级
USB expansion:connecting USB flash disk, mobile phone and software update

FRONT-CVBS
前置视频输入接口
Front video input port

REVER-CVBS
倒车视频输入接口
Reversing video input port

ACC
360_RXD
360_TXD
不接
No connect

CAN_12V
摄像头供电
Power for camera

REVERSE
倒车检测
Reverse detect

BATT+

GND

连接
Connect

接原车CD主机对应的接口
Connect to the corresponding port of the CD host of the original vehicle

连接
Connect

接原车CD主机对应接口拔下来的线
Connect to the cable pulled out from the corresponding port of the CD host of original vehicle

SPEAKER
接喇叭
connect to loudspeaker

加装麦克风接口
For Extra Mic

(1)   (2)

Transfer the original fiber optic cable from Figure 1 to the corresponding connector in Figure 2.
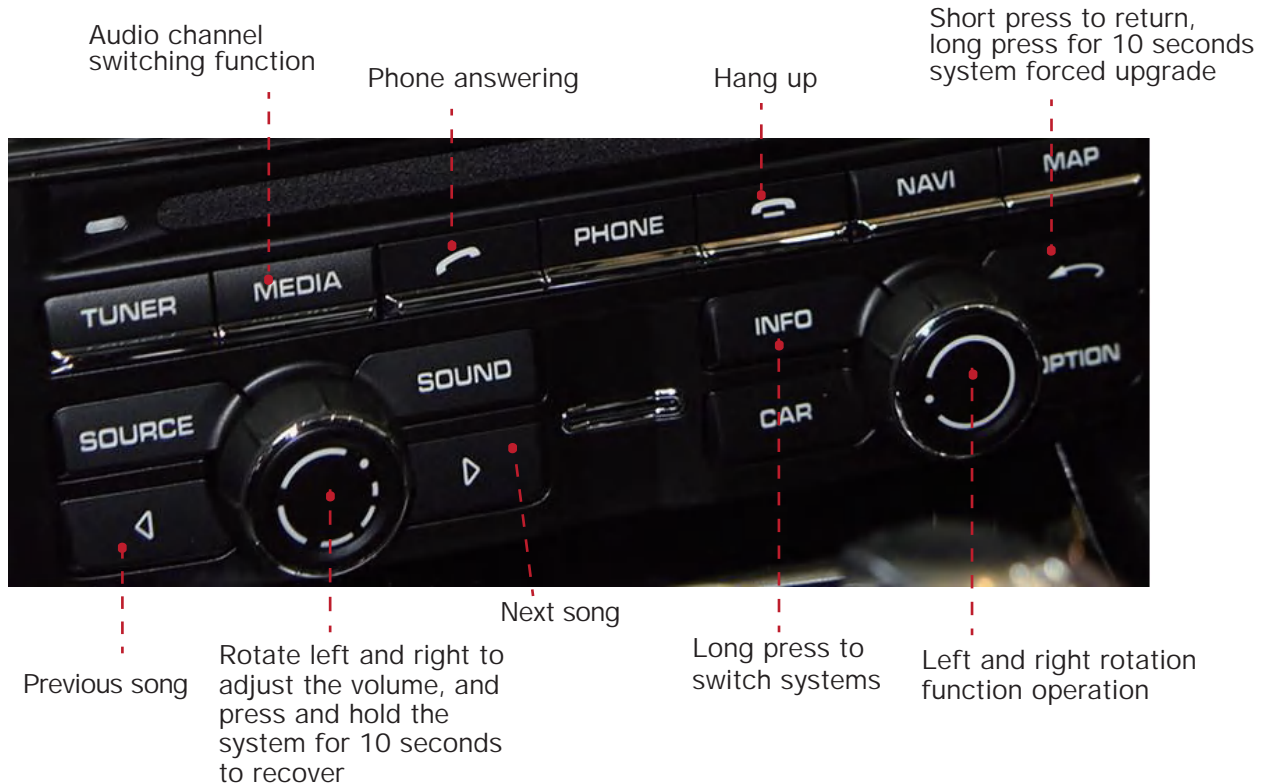
5. Original Car Button & Dip Switch Explained

Make and receive calls

Long press for 3 soconds to switch thesystem,10 less forced upgrade
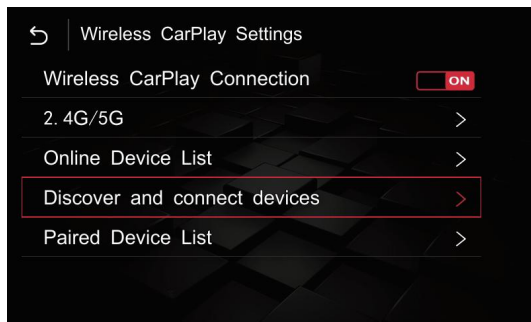
Short press to hang up the phone,long near Slri
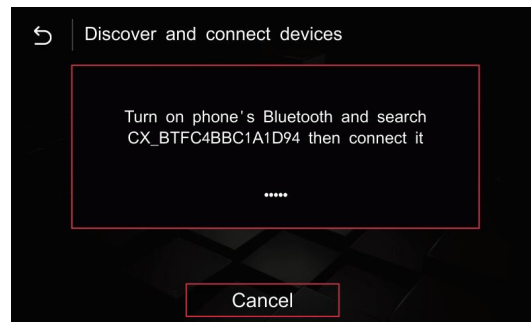
5.1 Original Car Button & Dip Switch Explained

Audio channel switching function

Phone answering

Hang up

Short press to return, long press for 10 seconds system forced upgrade

Previous song

Rotate left and right to adjust the volume, and press and hold the system for 10 seconds to recover

Next song

Long press to switch systems

Left and right rotation function operation

6. The First Connection Operation Description

 **The first connection method of wireless Apple Carplay is as follows :
(manual method)**

| Wireless CarPlay Settings	
�	
Wireless CarPlay Connection	**ON**
2. 4G/5G	>
Online Device List	>
Discover and connect devices	>
Paired Device List	>

P1

↩ Discover and connect devices

Turn on phone's Bluetooth and search
CX_BTFC4BBC1A1D94 then connect it

•••••

Cancel

P2

① Enter the CARPLAY menu interface(P1) — click Settings — Discover and connect device — pop-up window as shown above CX_BT(P2)......
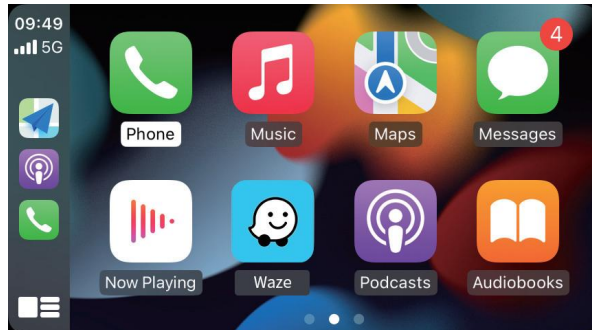
6.1 Connection Wireless Apple Carplay
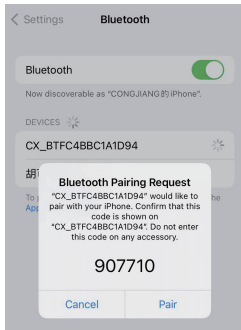
P3
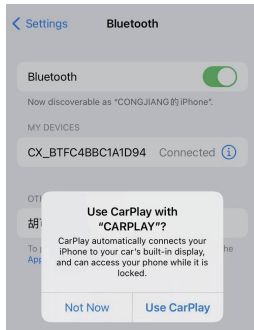
P4

P5

② Open the Apple mobile phone Bluetooth as shown above to search CX_BT(device name)(P3), click the connection pairing(P4), and then click to use CarPlay car(P5)

NOTE: Apple phone must be matched with bluetooth completely, the mobile phone can finish the wireless carplay connection when the wifi opened. Then the carplay will connects automatically next time.
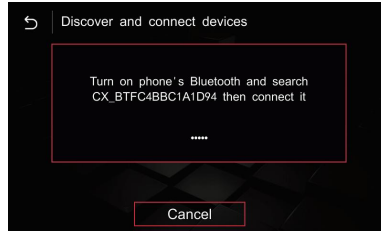
P.S: the first easy and convenient connection for the wireless Carplay: after connecting through USB wired method,the mobile phone will enable the wireless Carplay according to the instruction. After 15s dial the data cable, and the wireless will be automatically connected.
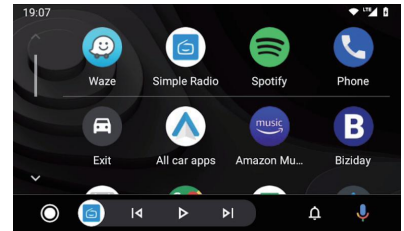
The first connection method of wireless Android Auto is as follows :
**(manual method)**

P1

P2

P3

① Enter the installation Settings interface, enter the wireless Android Auto Settings(P1), and click the pair of CX–BT....(P2), Use Android mobile phone Bluetooth to connect CX_BT..., after the pairing is successful, you will enter the auto interface.(P3)

② Entering this interface, the wireless auto is successfully connected.(P3)

P.S. the first easy connection for wireless Android Auto: connect to the USB wired method then the mobile phone enable the wireless CarPlay according to the instructions, and dial the data cable after 15s. The wireless Carplay will connect automatically .

7. Function Description
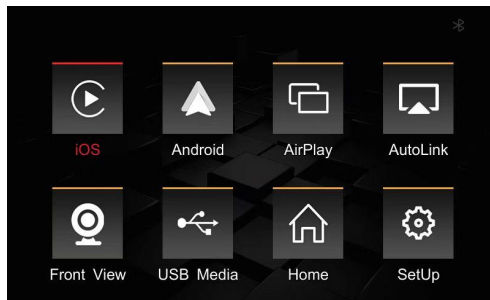
▲ Wired/Wireless Carplay

▲ Wired/Wireless Android Auto

▲ Screen mirroring function (Apple, Android)

▲ USB multimedia playback (Supports lossless audio, 720P video and picture playback)

▲ Support original car's rear-viewing camera, after-sale rear-viewing camera(CVBS/AHD), front-viewing camera (can be set up) or DVR

▲ Support to expand and after-sale 360 panorama (CVBS/AHD)

▲ Support audio EQ adjustment, music & navigation volume button adjustment separately

▲ Support the original car MIC (reserved installation MIC), and support the automatic correction function of calling for the calling cord.

▲ Support the original Bluetooth call function

▲ Support AUX in function, which can expand digital TV

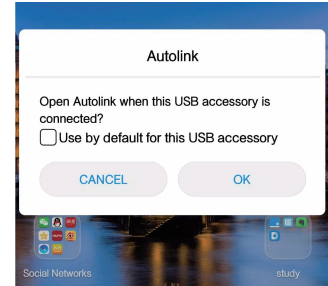▲ Support wired Baidu CarLife (need to open in the factory Settings, password: 0301)
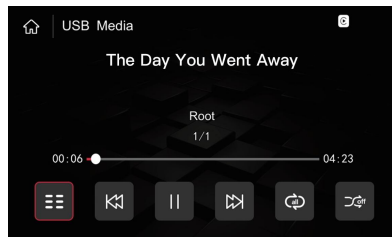
7.1 Screen Mirroring
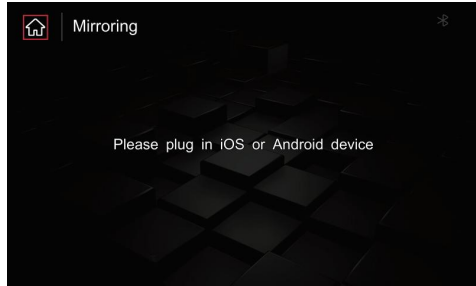
P1
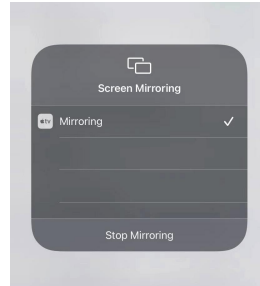
P2

P3

Apple

First disconnect the wireless Carplay or wireless Auto connection.Click the Mirroring icon, the USB cable is connected to the Apple mobile phone, and the phone prompts as shown above will pop up. You can enter the screen interface.(P1&P2)

Android

In the Mirroring interface → insert the Android phone, the "Autolink" download box will pop up on the mobile phone. Click the download. After the download is completed, click the installation in the browser. After the installation, the mobile phone interface will display the auto link icon. Re –insert the Android phone on the "Mirroring" interface, and the mobile phone will pop up "Open the USB default connection box" → click "OK". After the connection is connected. (P1&P3)

USB Media

Insert U disk will automatically jump to the USB player interface, supporting lossless audio and 720p video playback.
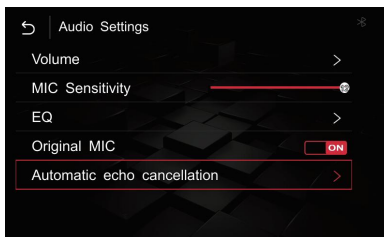
Automatic echo cancellation

If there is an echo of the call, you can find the "Automatically eliminate the echo" in the Audio Settings. Before eliminating the echo, you need to adjust the volume of the original car to the normal use value (we generally recommend adjusting to 50–70), and the echo effect will be better.
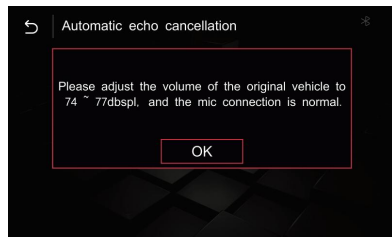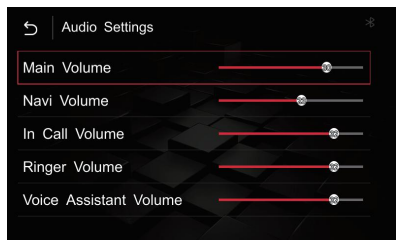
Language Settings

You can select the corresponding language in the installation setting interface.
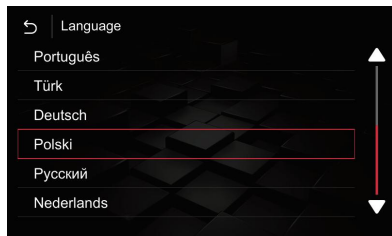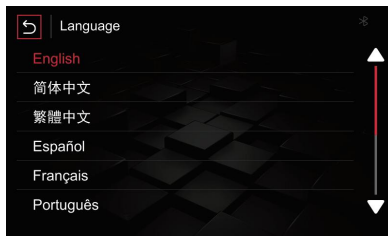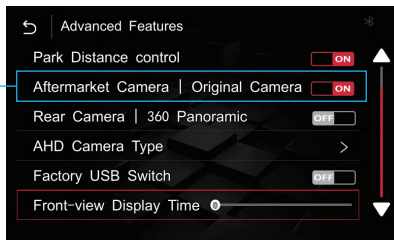
7.3 Commonly Installed System Function Settings

Audio Settings

Audio Settings like above picture to operate, we suggest the default value.

Audio Settings	
Main Volume	
Navi Volume	
In Call Volume	
Ringer Volume	
Voice Assistant Volume	

Advanced Features	
Park Distance control	ON
Aftermarket Camera	Original Camera	ON
Rear Camera	360 Panoramic	OFF
AHD Camera Type	>
Factory USB Switch	OFF
Front-view Display Time	

OFF Aftermarket Camera
ON Original Camera

Avdanced Features

Common rear view Settings are as shown right. If you install the AHD camera, you need to enter the AHD to select the corresponding frame rate.

UI Settings	
Driver Position	>
Wallpaper	>

Wallpaper	
+	
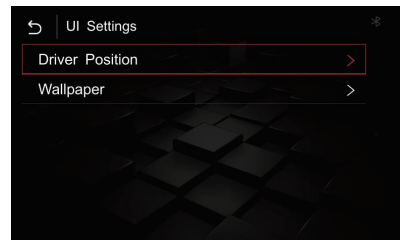
UI Settings

UI Settings like above picture to operate.

8. System Upgrade

P1

P2

P3

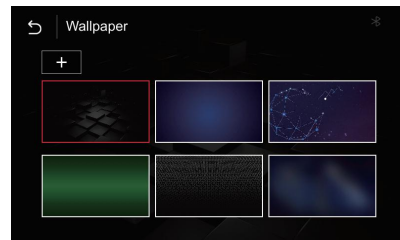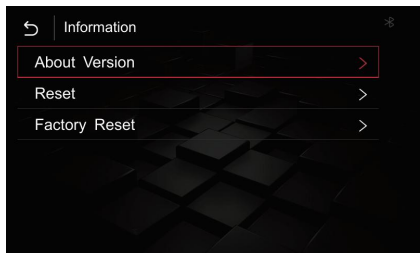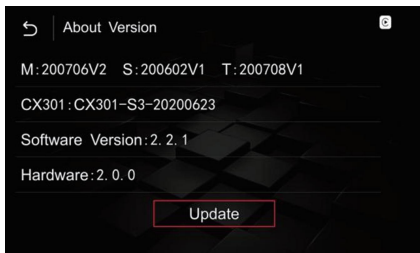The version information as shown above(P1),click "about the device" to display the current system version information(P2).

The specific operation is as follows:
① In the USB device, copy and upgrade files from the computer(P1–P2). After the file is decompressed, the ISPBOOOT.BIN and OSU_SETTITINGS folder or Update file is placed in the USB disk root directory;
② Insert USB, return to the main interface → Settings → version information → About device → update → click the corresponding file upgrade → upgrade (during the upgrade process, the USB cannot be pulled out, and the USB will be automatically read after the upgrade is completed) (P3)

❗ The upgrade process cannot be powered off. Please pay attention to whether the USB disk file name is correct and determine the vision information before the upgrade.

9. Common Fault Investigation

◆ The after–sale screen becomes blurred and indistinct, LVDS cable switch to the host,and it can be excluded poor contact of LVDS;

◆ The sound of the original car was normal, and Carplay had no sound. —— ① the carplay sound channel is selected as the original car AUX; ② If there is still no sound,you need to play music from the aftermarket and then switch to the AUX of original car to actibvate it.

◆ There is the echo (outside) while calling —— resolve it to by eliminating the echo in Settings.

◆ There is no sound in Carplay music or call–to–call —— check whether the sound is in the USB AUX channel. Do not connect to the original car Bluetooth or mobile phone.

◆ Carplay has been connected but the screen displays black, the sound is normal —— turn off the mobile wifi and BT,check if the installation interface can be displayed normally.if it fails to rhile reversing —— please set up in the after–sale interface.

Dear users:

We are CARABC ... products have passed strict functional an... in good condition Give it to pro... ...blems, please contact us.All of our products enjo...

The following regulations ... ...ranty ...

9.1 After the free ... ...tched, d...

9.2 The warranty c... ...nconsistent w... ...ltered marks.

9.3 The bar code ... ...unclear or there is n...

9.4 Failure to use, maintain, repair or refit according to the require... ...auses damage.

9.5 Damage due to force majeure (such as fire, flood, traffic accid... ...).

During the installation process, please be careful not to tilt or install the FPC cable in reverse

If you need help, please connect to
WhatsApp:+86 18923410098
Email: 5660103@qq.com

Installation Video