

3D Surround View Monitoring System



User's Manual

Operation mode

1. Remote controller operation: 1.1-1.2;
2. Switch views: 2.1-2.2;
3. Vehicle radar activate surround view system: 3.1;
4. Left/right turn activate surround view system: 4.1
5. Double press Emergency light button activate 360: 5.1-5.2

Video recording

6. Recording status and video browsing: 6.1-6.3
7. Videos playback and deletion: 7.1-7.5

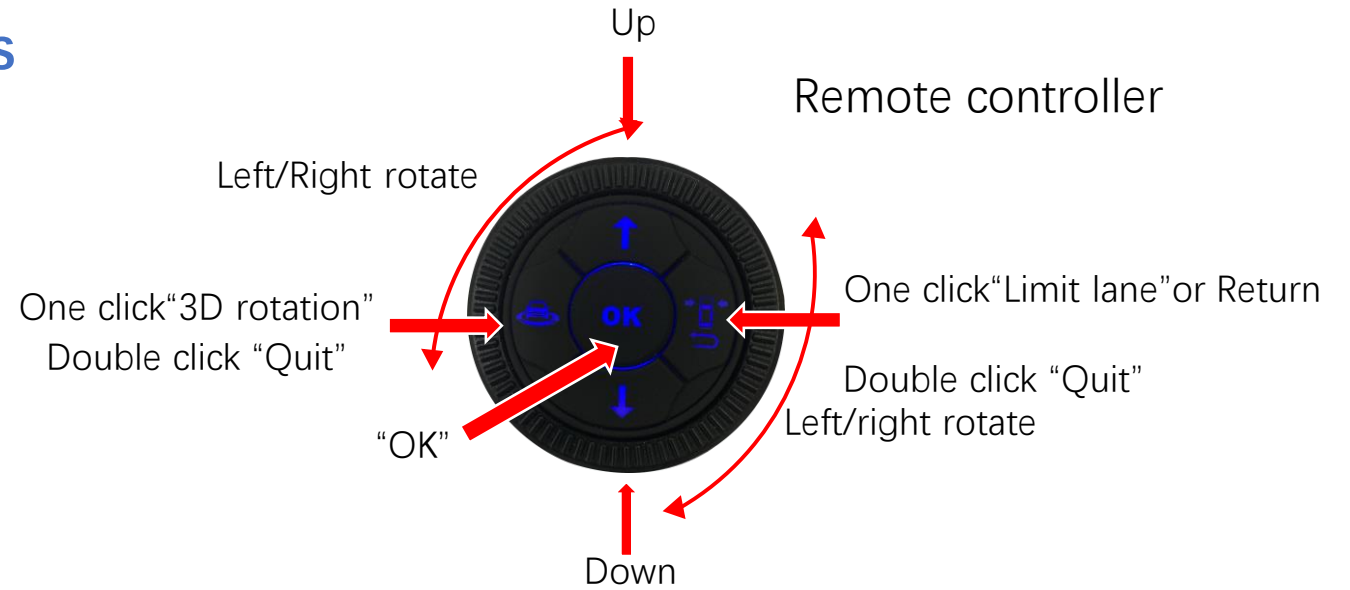
Settings

8. Calibration: 8.1-8.5
9. Display: 9.1-9.6
10. Control: 10.1-10.11
11. Vehicle: 11.1-11.6
12. System: 12.1-12.7
13. Version: 13.1

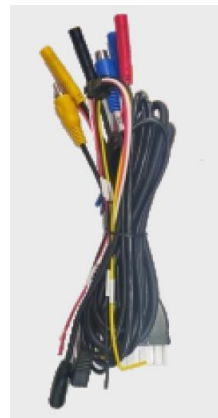
1. Mainframe and accessories



Mainframe



Camera



Main wiring



Extension wiring

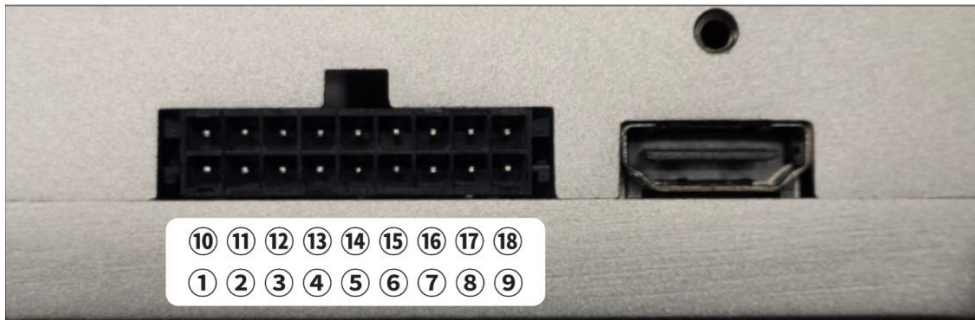


Video extension wiring



OBD wiring

Mainframe interface



- ①CANH1 ②CVBS OUT ③VGA-B ④VGA-G ⑤VGA-R
- ⑥VGA-H ⑦VHA-V ⑧GND ⑨CANH2 ⑩CANL1
- ⑪Back up control low output ⑫TXD connet RXD
- ⑬RXD connet TXD ⑭GND ⑮ACC input ⑯B+
- ⑰Back up control high output ⑱CANL2

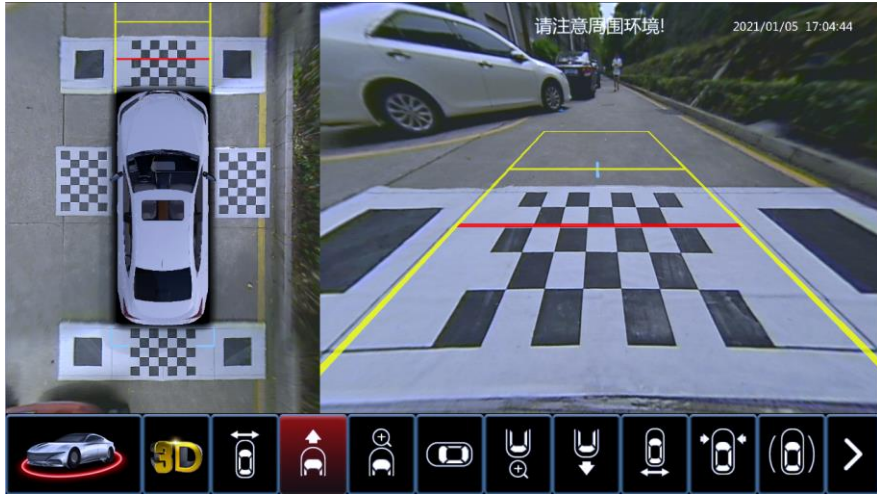
- ①RXD ②TXD ③NC ④CANL2 ⑤CANH1
- ⑥GND ⑦CANL1 ⑧CANH2

2. Switch Views

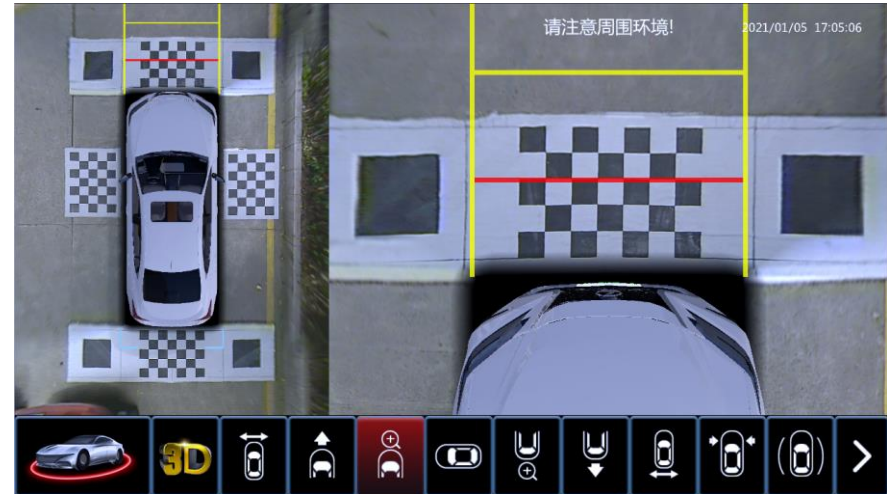
- 2.1 By using the remote to switch the bottom UI bar(Red), then press “OK” ;
- 2.2 Some of views can also be activated by gear shifting, left/right signal turning and double clicking Emergency lights.



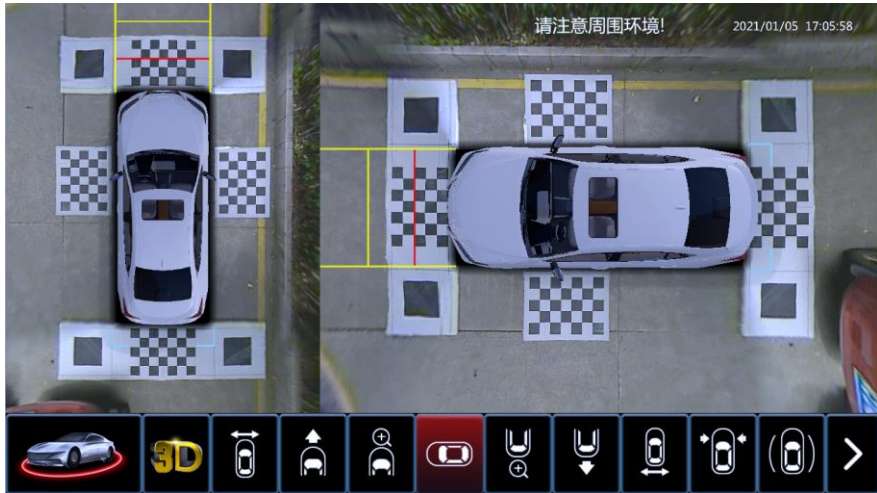
3D rotation



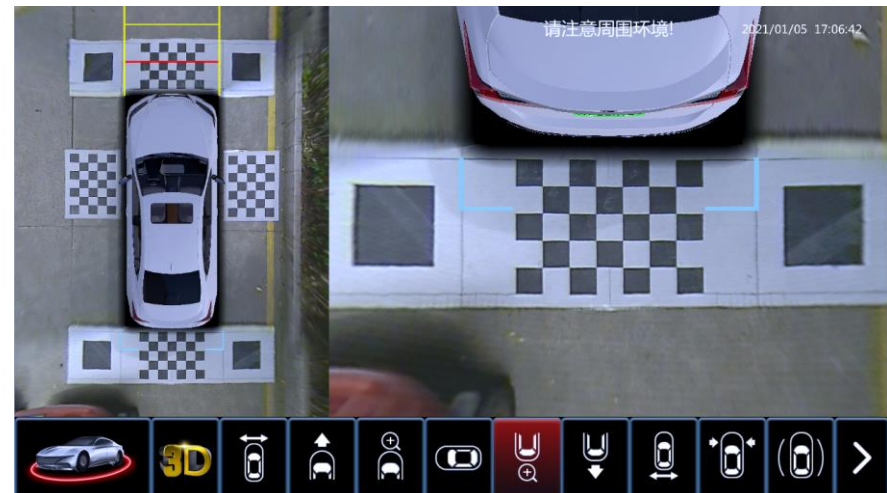
2D & front view



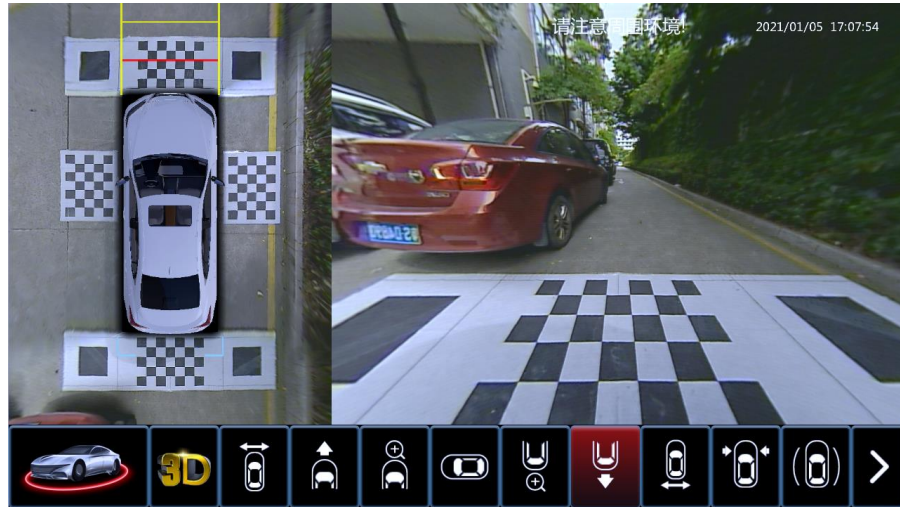
2D & front enlarged view



2D & horizontal 2D view



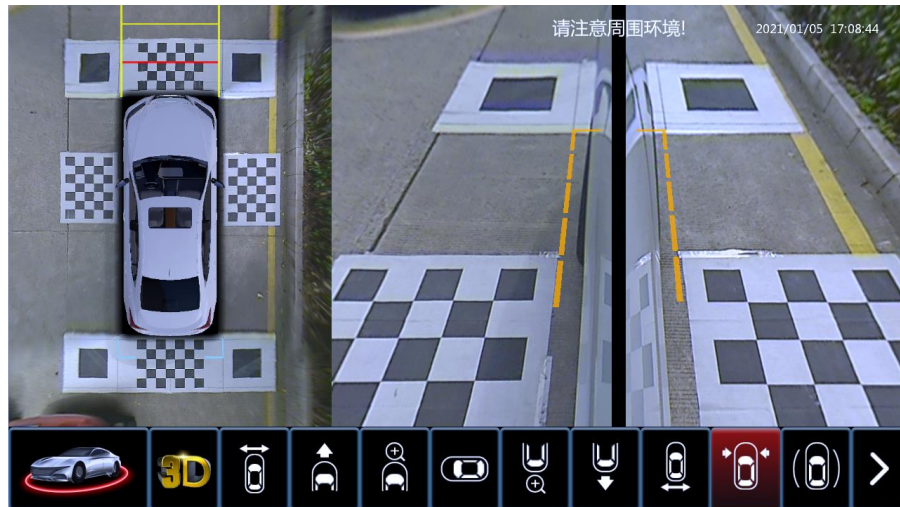
2D & rear enlarged view



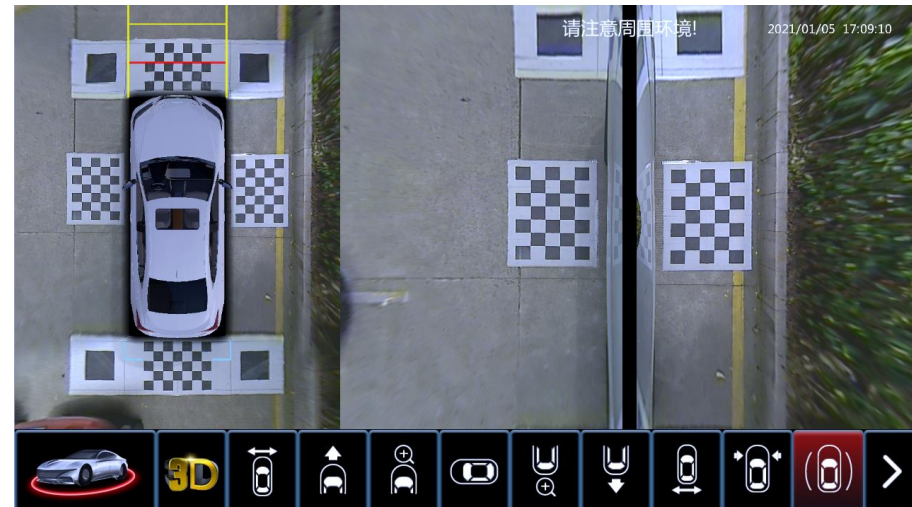
2D & Rear view



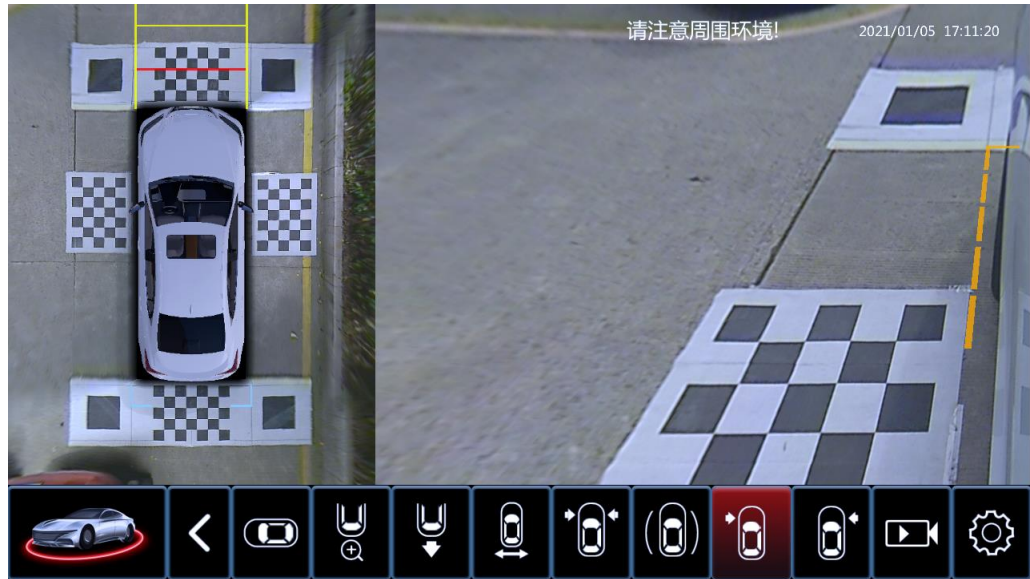
2D & Rear wide view



2D & Front limit view

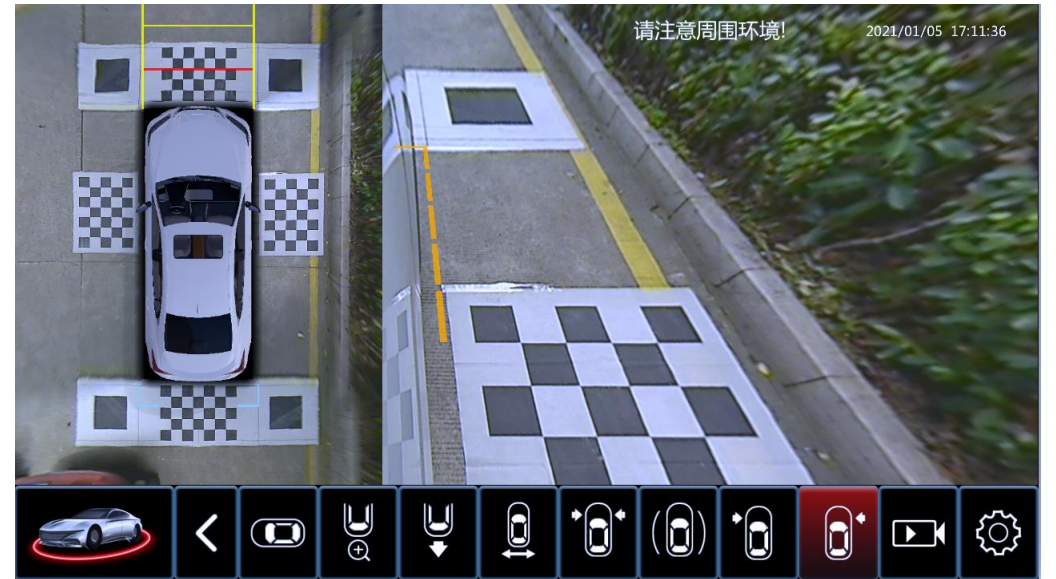


2D & limit view



2D & Left turn view

Left turn signal can also active

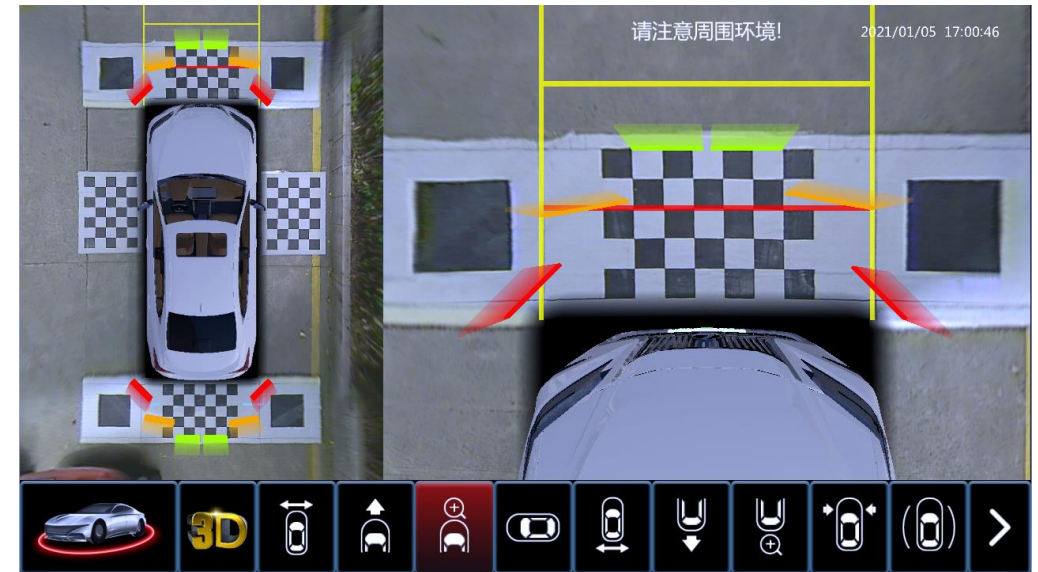
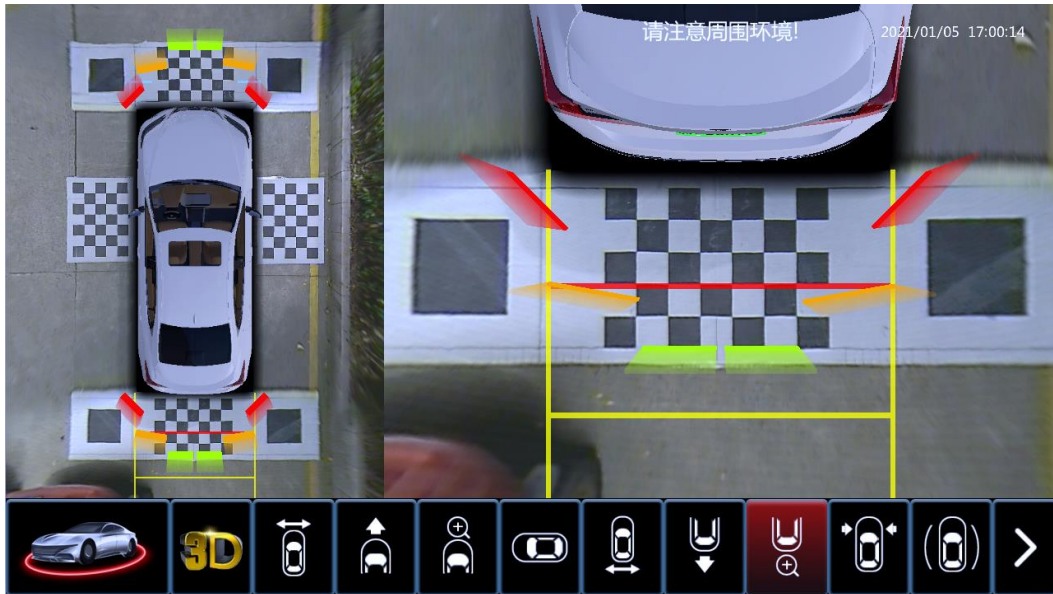


2D & Right turn view

Right turn signal can also acitve

3. Vehicle radar activate 360

3.1 Gear D or R, low speed moving, surround view system can be activated when radar detect obstacles around the car. Displays below.



4. Left/right turn activate 360

- 4.1 Enter "settings" -- "Control" -- "signal turn-3D view"
- 4.2 Then make left/right turn can active views below



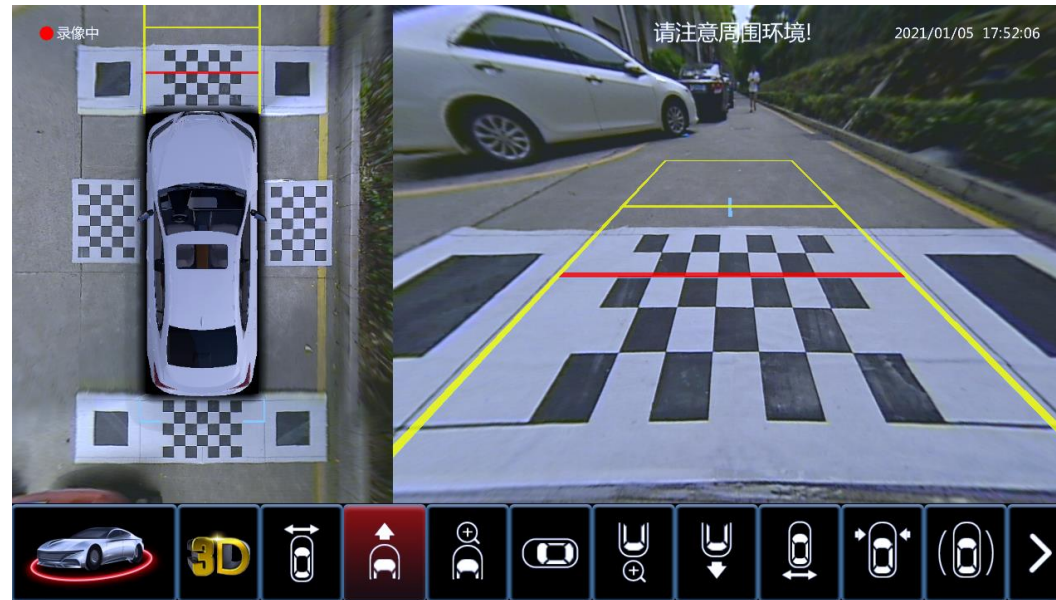
left turn display



right turn display

5. Double press Emergency light button activate 360

- 5.1 double press E-light button can activate or quit system;
- 5.2 Then front view displays, user can switch views by using remote.

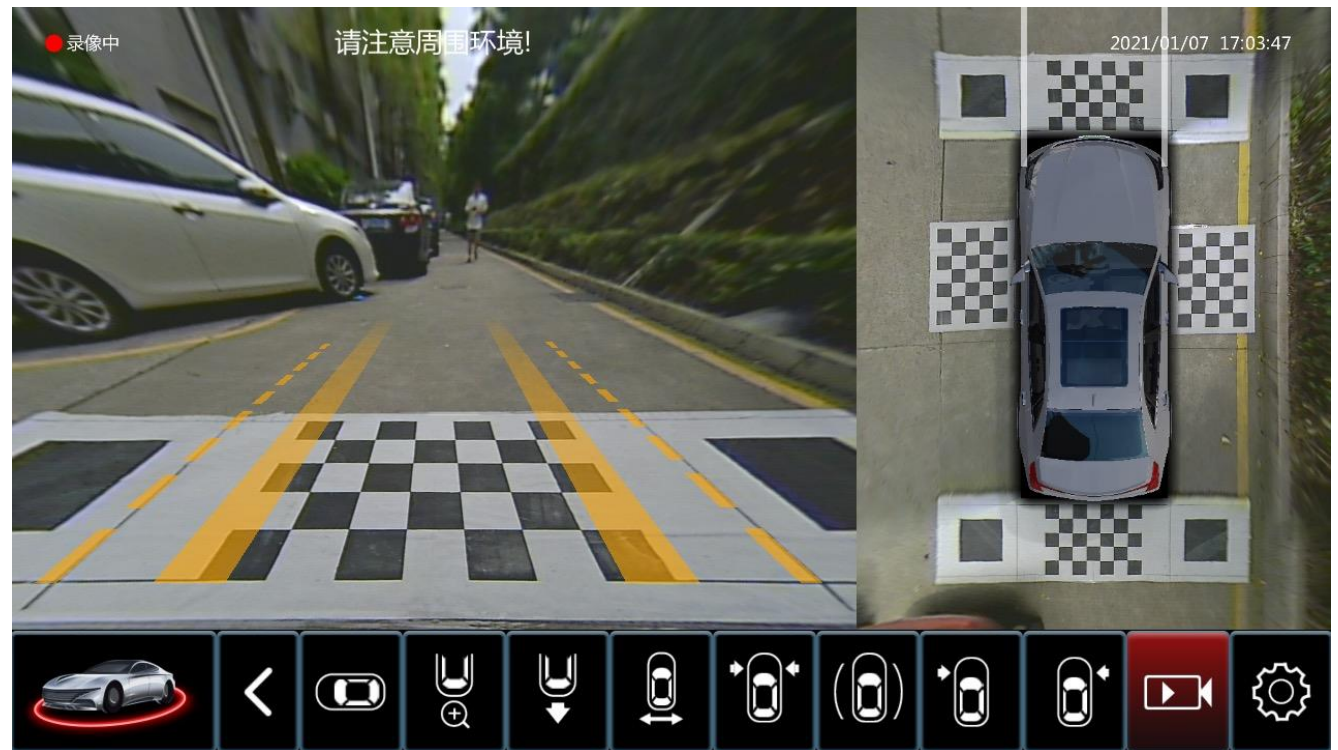


6. Recording status and video browsing

6.1 Recording status can be viewed in the upper left corner of the main interface. Red light indicates that recording is taking. Blue light indicates not. Then please check the storage;

6.2 Rotating the remote to recording icon, then press "OK". Enter the video browsing interface;

6.3 Built-in 16G storage, 16 hours of continuous recording time.



7. Videos playback and deletion

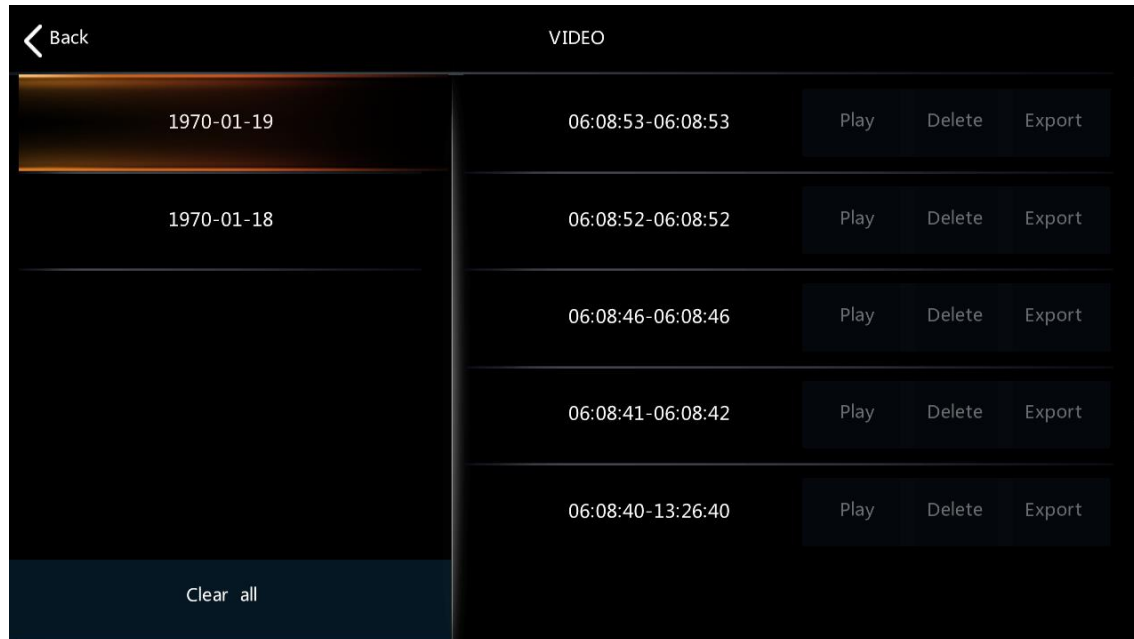
7.1 Selecting date and time period to watch videos.

7.2 **Clear all** All videos can be deleted;

7.3 **Play** Select the time period to play videos;

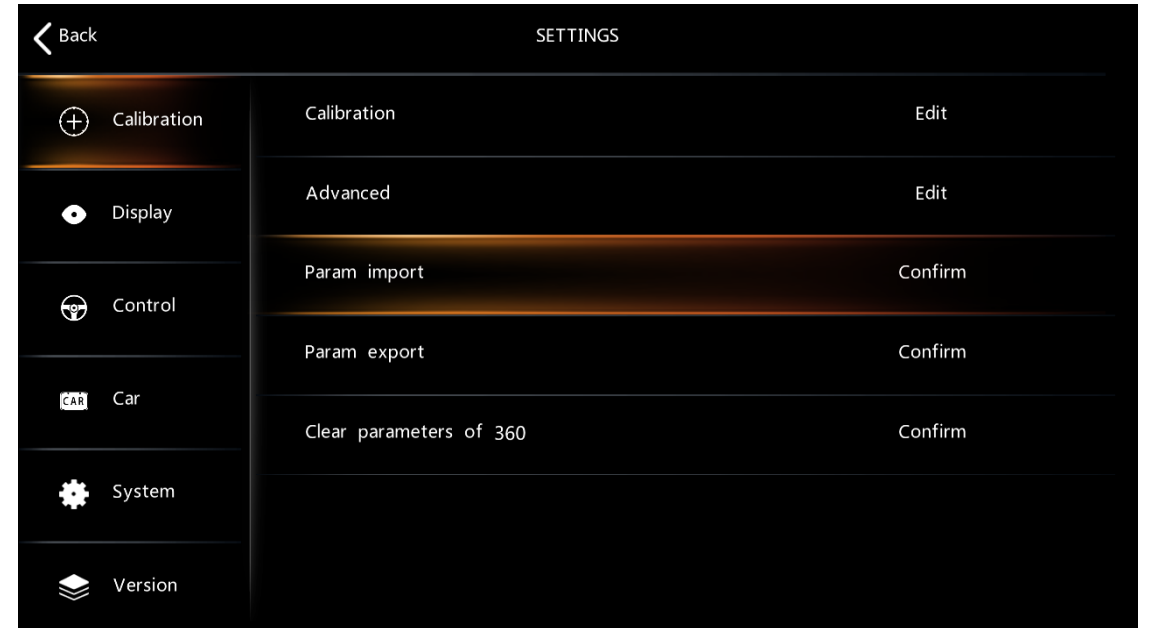
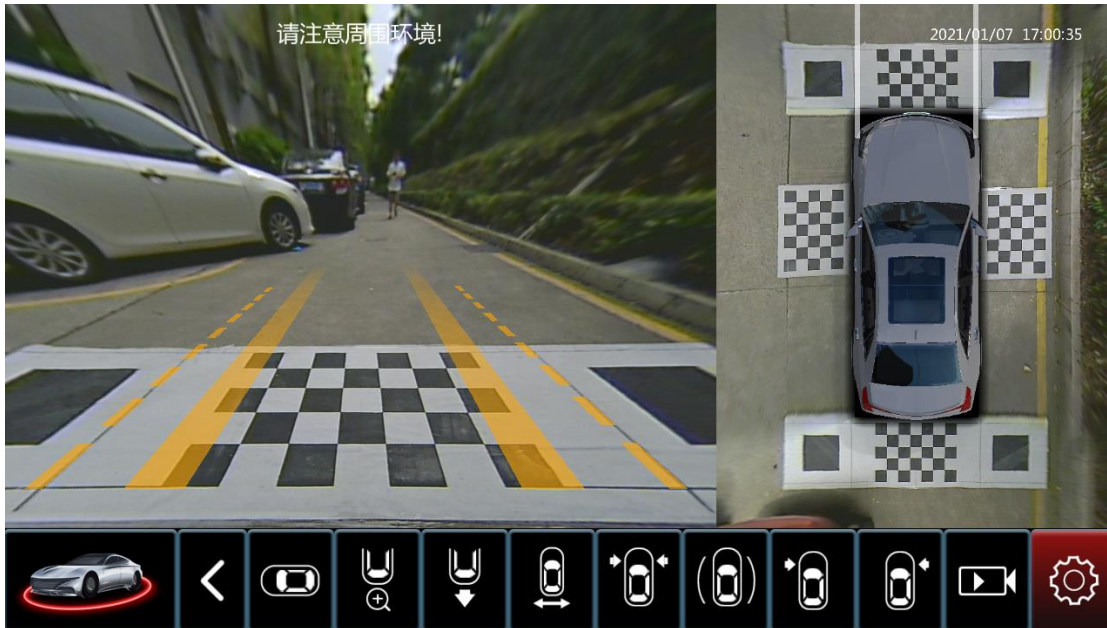
7.4 **Delete.** Delete a video for a certain period of time;

7.5 **Export.** Only built-in storage recordings can be exported to the USB stick.



8. Settings

Switch the bottom UI bar(Red) to Settings, then press “OK”to enter. Display below;



9. Installation



- ① Monitor
- ② Front Camera
- ③ Rear Camera
- ④ Left Camera
- ⑤ Right Camera

10. Calibration

10.1 Calibration: Picture below;

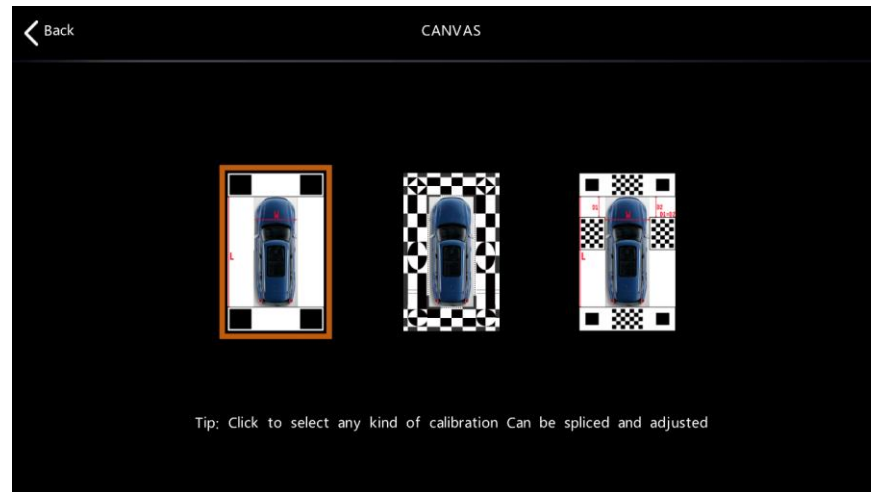
Step 1, choose Calibration cloth;

Step 2, through four camera image, put cloth down in front(back,left,right)of the vehicle;

Step 3, input vehicle parameter;Length, width,L-S(type of Lens and sensor)

Step 4, calibration start.

STEP 1

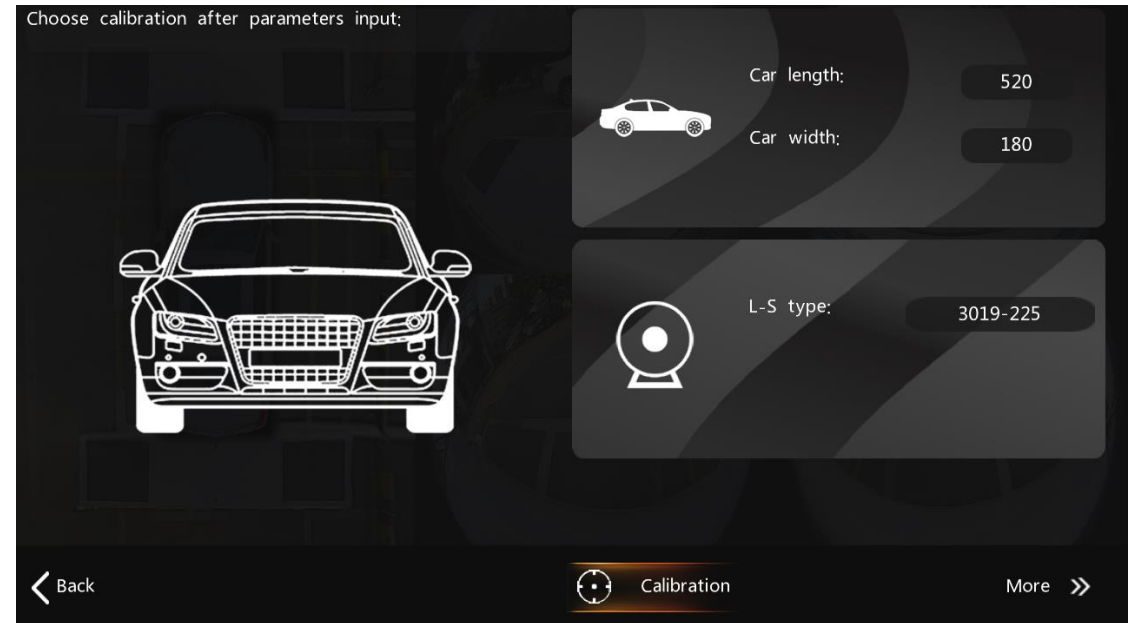


Calibration

STEP 2

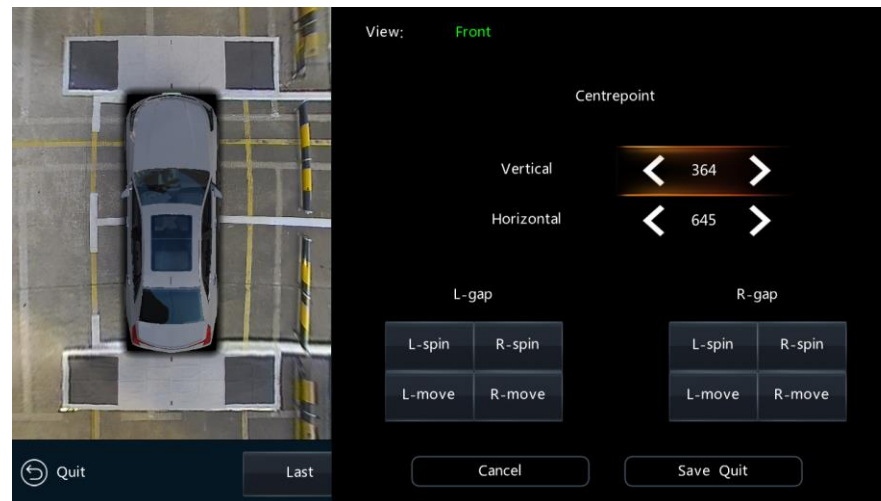


STEP 3 & 4



Calibration

10.2 Advanced: Advanced calibration, in case of the line of ground is not straight.



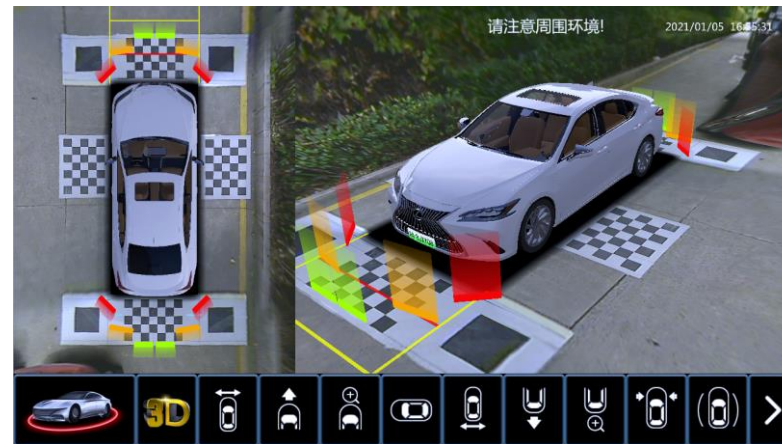
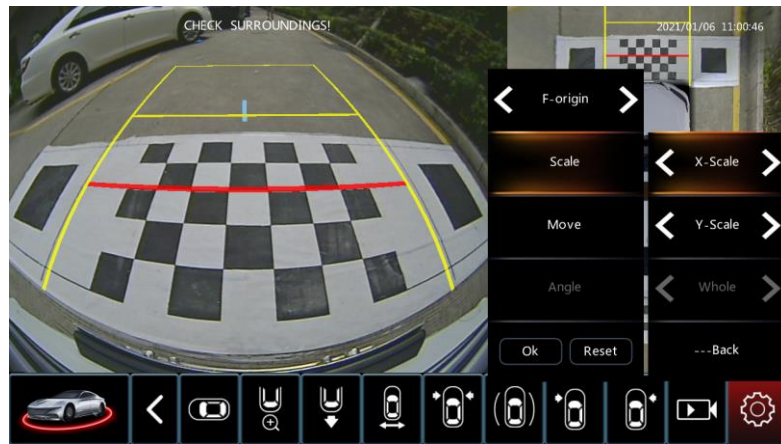
10.3 param import: user can import calibration parameters into system

10.4 param export: user can export calibration parameters out of system

10.5 clear parameters of 360: delete parameters.

11. Display

11.1 View Setup: There are 16 types of views can be customized by user;



11.2 Ruler line: Off by default. On, ruler line activated. Picture above;

11.3 Radar display: Radar wall activated when obstacle was detected. Picture above;

11.4 3D view mode: 4 kinds of 3D modes which are in different angles. Pictures below.



MODE 1



MODE 2



MODE 3



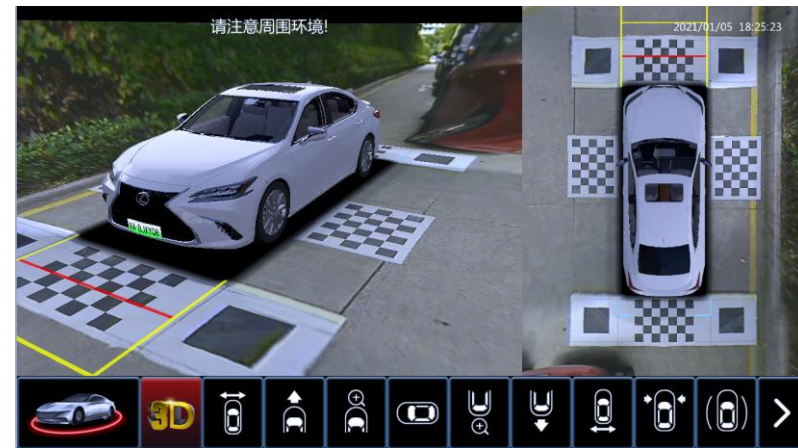
MODE 4

Display

11.5 Screen setting: 2D top view is on left or on right in the screen display;



LEFT



RIGHT



11.6 Logo import: Change logo/picture through USB;

12. Control

- 12.1 Startup around view: System starts, 3D rotate 1 round;
- 12.2 Signal turn: Switch for on/off to activate 360 when turning left/right signal;
- 12.3 Signal Turn-3D view: When activate 360, display 3D left/right;
- 12.4 Quick Emergency: Double click Emergency light button to activate 360 or off;
- 12.5 P On-360: Vehicle with P button which can activate 360;
- 12.6 Radar on: To activate 360 when radar detect obstacles;
- 12.7 Front/Rear Adjusting: Front/Rear views switched to adjusted views;
- 12.8 Sides Adjusting: Left/Right signal views switched to adjusted views;
- 12.9 Display off delay: From gear R to D, 360 will be off in 0s/15s/90s or never;
- 12.10 Emergency off delay: when using Emergency lights to activate 360, display off in 5s/15s/30s automatically;
- 12.11 Turn off delay: when using signal lights to activate 360, display off in 0s/3s/5s;

13. Vehicle

13.1 Car model: Picture right;

13.1.1 Model: More than 70+ vehicle models;

13.1.2 Trace: 14 types of trace lines;

13.1.3 Color: 9 different vehicle colors;

13.1.4 Length: Adjusting vehicle length in black shadow area;

13.1.5 Width: Adjusting vehicle width in black shadow area;

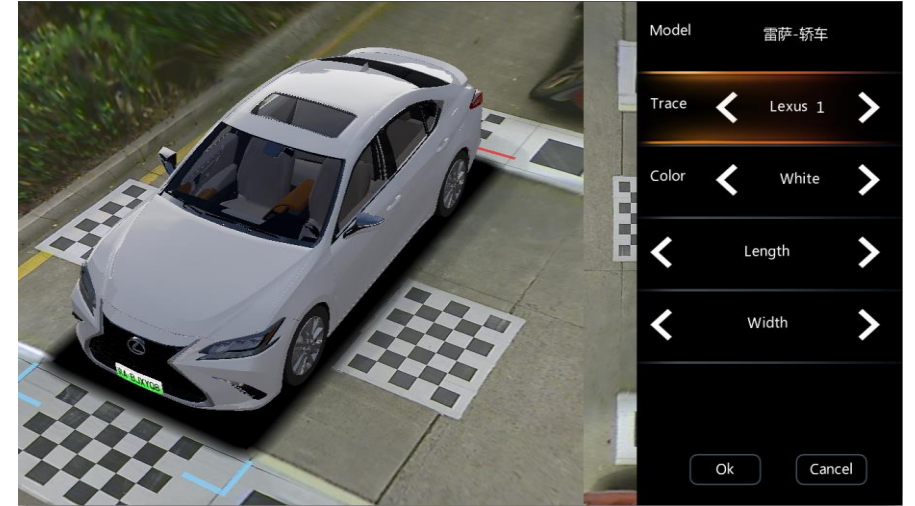
13.2 Licence plate type: choose plate type;

13.3 Licence plate: Input plate's number;

13.4 Wire control: Left/right signal or backing signal through wire connection;

13.5 Protocol: by using internal/External protocol;

13.6 Protocol type: P1/P2



14. System

14.1 Date;

14.2 Time;

14.3 Screen adjustment: To adjust screen margin;

14.4 Language setting: Simplified Chinese/Traditional Chinese/English;

14.5 USB formatting: To format USB when using a new USB;

14.6 System upgrade: To upgrade system by using USB;

14.7 Decoder upgrade: To upgrade Decoder by using USB;



15. Version

15.1 Version : Check Algorithm/Application/Decoder/UI Version;

