360 degree full view bird view car recording system (without gap for four pictures)

# User manual

List

- 1. Product introduction;
- 2. Installation and test specification;
  - 2.1 whole set details;
  - 2.2 product parameters;
  - 2.3 notes before installation;
  - 2.4 cable connection;
  - 2.5 camera installation position and direction testing;
  - 2.6 software testing
- 3. Manual

## **1. Product introduction**

This product is made up of one central processing unit and four super wide view angle camera; Through the four wide view angle camera(left, right, front and back camera), the central processing unit catch the image all around the car, after processing, there will be a 360 degree full vertical view photo on the monitor. With this newest car recording system, driver could park the car or pass the crowded road easily without rubbing, colliding or dropping accident. (Following are real photo)



#### 1.1 Advantage

1.1.1 It is not only the full view parking assistant system, but also the four channels car driving recording system, which advance the driving and parking to be safest.

1.1.2 It combined front, back, left and right four direction image together, and make to be one vertical view. So no matter to driving forwarder, backing, turn direction, the car head, car back, left or right are exact on the monitor.

1.1.3 There are parking, left turn, right turn three ways force signal cable;

1.1.4 The camera is closer to the road than the driver, so the driver can see the road earlier;

1.1.5 We use high speed DSP processing unit, the picture is very smooth, no speed delay, and very real and nature.

1.1.6 The composed imaged is made by the fish eye image adjusting and view composed technical to make the whole image real and nature;

1.1.7 All camera is super wide view angel camera, CVBS signal, which is compatible to all models of car monitor;

1.1.8 It will adjust the image automatically, multi image to cover all around of the car.

## 2. Installation and test specification;

2.1 whole set details;

Complete 360 full view bird view car recording system (without gap) includes following items:

A. full view main machine;

B. remote control;

C. full view fish eye camera (front, back, left, right, total 4 cameras)

D.Camera connection cable(left, right, front cable length is 4 meters, back camera cable length is 6.5 meters)

E. Remote control receiver

F. 1 meters USB cable(to connect USB)

G.19.2mm bit

H.1.2 meters three pin power cable(yellow is to power, red to ACC, black is to

ground)

- I. 2 meters video output connection cable
- J. Packing box, manual book, checkerboard for the camera adjusting.

| 2.2 | product parameter |
|-----|-------------------|
|-----|-------------------|

| items                  | Device parameter    | details                     |
|------------------------|---------------------|-----------------------------|
| system                 | Operation language  | Chinese/English             |
|                        | Operation interface | menu (OSD menu)             |
| machine video          | input               | channels multi video input  |
|                        | output              | multi video output          |
|                        | display             | ew 360 degree vertical view |
|                        | standard            | PAL/NTSC                    |
|                        | compressor          | main profile. Compresso     |
|                        |                     | is 25D/Sec.                 |
| processing and storage | left                | Display left side view      |
|                        | right               | Display right side view     |
|                        | backing             | Standard full view          |
| Software upgrade       | Upgrade by USB      |                             |
| voltage                | 9-36V               |                             |
| current                | 440mA               |                             |
| temperature            | -30°-80°C           |                             |

## 2.3 notes before installation;

2.3.1 Confirm if the parking video interface and the video control cable on the car monitor is working. There are no backing control cable, only if video is priority display.

If monitor or DVD is controlled by the general cable, it can not be connected to our main machine. In this case, the user need to use the matched decompiler or transfer controller.

2.3.2 Find a spacious place.

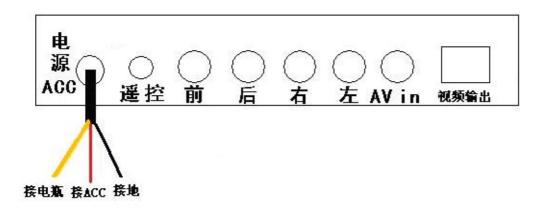
2.3.3 The testing tool you may use: checkerboard, 1.6M\*1.2M checkerboard cloth

strip. The checkerboard is to adjust the camera, cloth strip is to adjust the full view setting. Four role rules with 7 meters.

2.3.4 Do not adjust under the sun or with strong light.

2.4 Cable connection

Main machine panel photo as following:



1. power cable, the red is to connect ACC, the yellow is to connect power, black is to connect ground.



2. Remote receiver, to use the four pin earphone plug. When connect, to make sure that it connects properly. And put the receiver to the wide open place.



3. There are four meters cables for front, left and right camera. The white cable of

left and right connection cable is to connect to the positive pole on the left turn light or right turn light. The length for the back camera cable is 6.5 meters, and the white cable on the connection cable should be connected to the positive pole on the backing light.

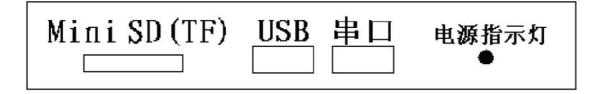


4. AV in interface is the extension video interface, no need to be connected;

5. Video output connector, use the standard video yellow av plug, The red cable on the yellow connector should be connected to the parking signal control cable on the DVD monitor. Notes: The red cable can not be connected to the car lamp or ground. If there was parking camera fixed on the car before, please cut the positive pole of the parking lamp.



Main machine interface panel:



Mini SD(TF) card, USB storage device to record, software upgrade

Serial connector: for different connector

Power light: it flashes after power on for 3 second, and then be on always.

During installation way, if you need to cut the cable and then connect, pls not the cable definition: White is control cable, red is camera power cable(5V), yellow is video, the naked cable is to be ground.

2.5 camera connection position and direction adjusting

Please follow these steps to adjust the camera



1.Press the power key on the RC



2.Press OK key to come into setting menu

| 行车记录          |  |
|---------------|--|
| 0-00-00 m     |  |
| 12:01 (2) (B) |  |
| -             |  |
| RECEIPTION    |  |
| 题本信息          |  |

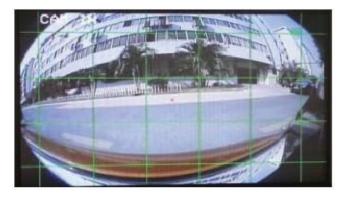
3. To choose full view adjust



4.Input password654321 and then press OK key



5.Come into full view adjust

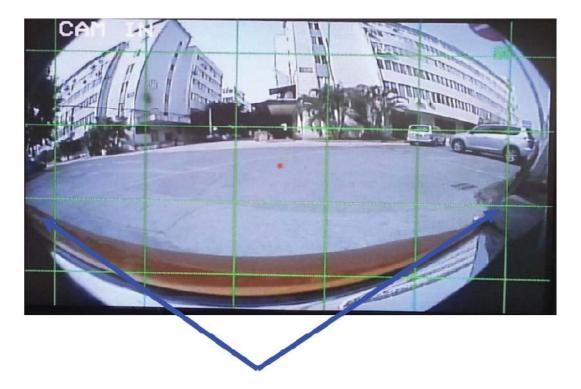


6. Adjust the camera lens: The default picture after you press OK key is the front

image. You press the up, down, left and right arrow to change to left camera, right camera and back camera.

#### Front camera

When you fix the camera, try to make the lens to face to the ground, and try to not to face the car bumper. Keep the camera to be on lever.



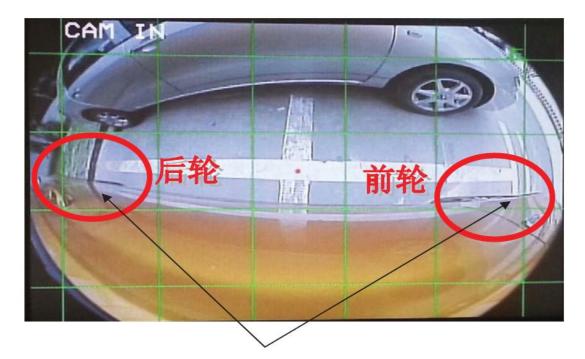
Left and right camera installation position and hole making solution

The hole saws for camera diameter is 19.2mm. The hole should be made as close as the edge of the rearview mirror (the outboard), much closer to the edge, much better for the connection photo effects. The two Oblique rings is to fix the camera to be vertical to the car body. The gule is to make the open to be more beautiful. Note that the holes on the right and left should be almost same, and not to hide the lens movement as following photo show:



## Left camera

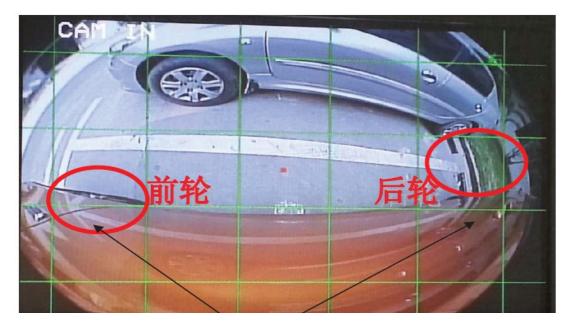
Left camera should be fixed to be vertical to the ground, so the image and monitor can be horizontal. Both the front wheel and read wheel should be in the camera lens.



Car is in the middle of frame of the green line, try to keep the car body to be balance.(horizontal).

## **Right camera**

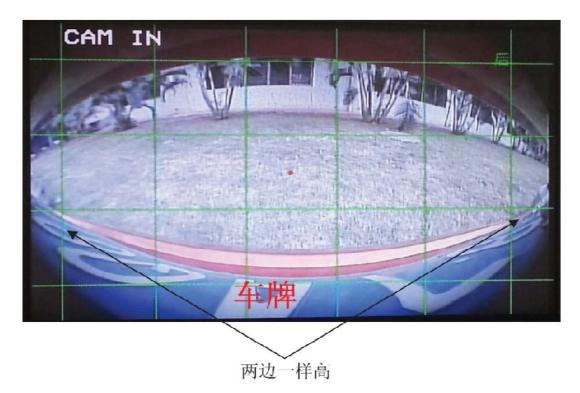
Right camera should be fixed to be vertical to the ground, so the image and monitor can be horizontal. Both the front wheel and read wheel should be in the camera lens.



Car is in the middle of frame of the green line, try to keep the car body to be balance.(horizontal).

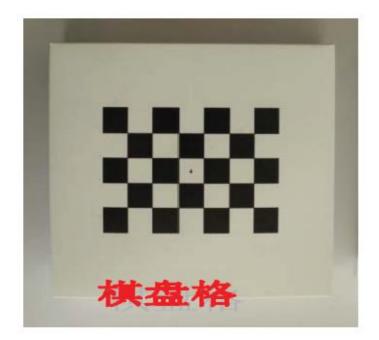
## Rear view camera

Normally, the rear view camera should be special based on different car model. Just to keep the image to be horizontal.

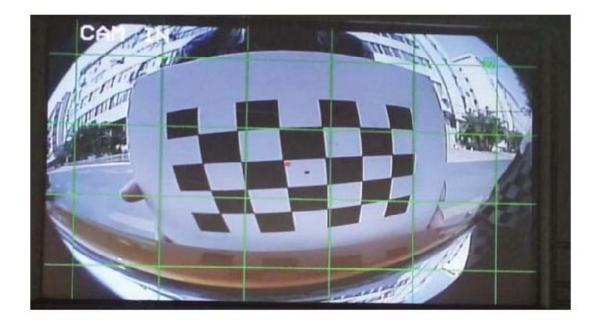


- 2.6 Software adjust
- 1. Adjust the lens

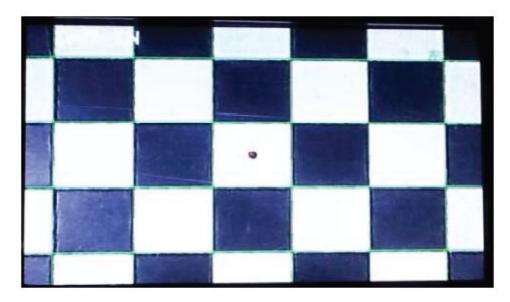
Press Power on the RC----OK key----full view adjust---- adjust lens. Take out the checkerboard and put it to be close to the camera. It needs two people to cooperate, one is to bring the checkerboard to the camera, after fix the location, the other one press OK key on the RC.



## Checkerboard



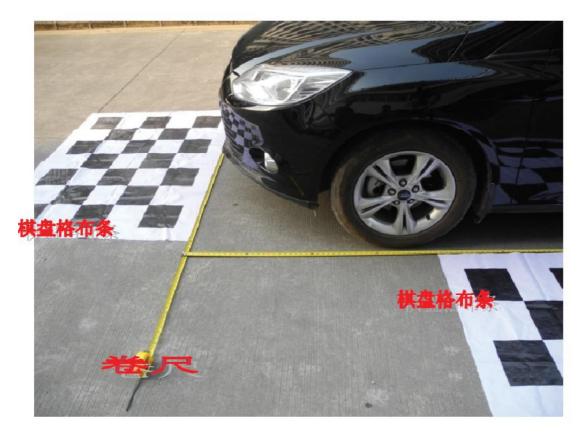
The picture after you bring the checkerboard close to the camera



Press OK key, after adjusting, the photo on the monitor will be like above photo. The other three camera, just follow this way. After all, press save key.

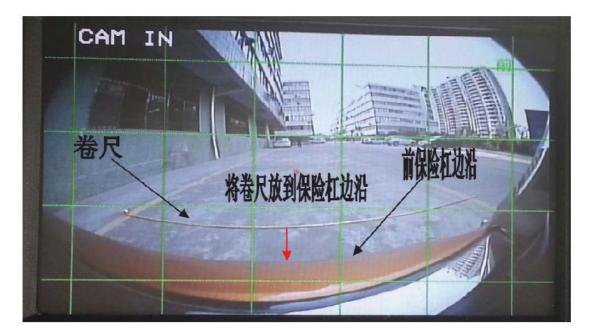
The tools needed for 360 full view system adjusting.

Four 7 meters flexible rules, 1.6\*1.2 meters checkerboard,



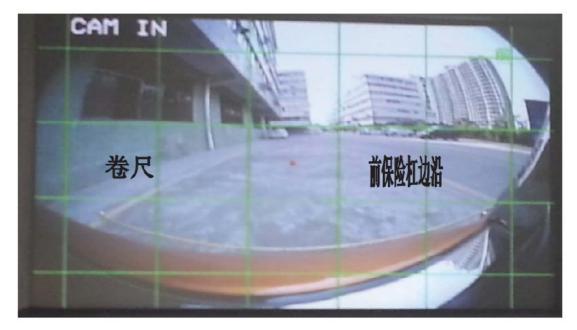
How to put the checkerboard and flexible rules

Press power on RC----OK key-----full view adjust----- adjust lens-----press † to show front camera. Open the flexible rules, and put it to the visible position of the camera as following photo:

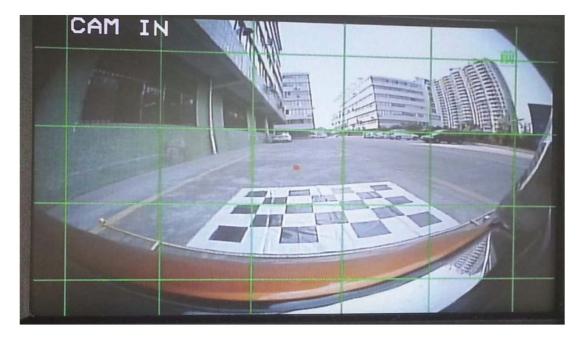


Put the flexible rules to the edge of the bumper, where is visible on the monitor by

the camera



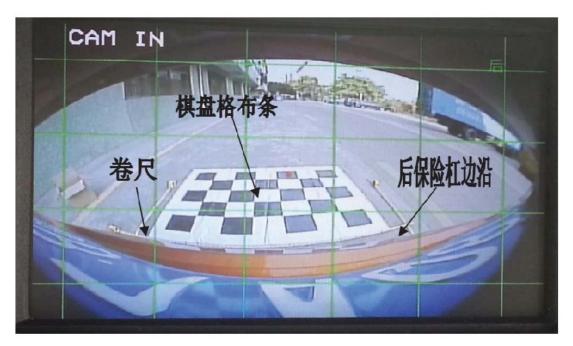
Put the checkerboard near to the flexible rule with the 1.6 meter end, keep it



in the middle of the car as following photo:

Rear checkerboard and flexible rule

Same as above

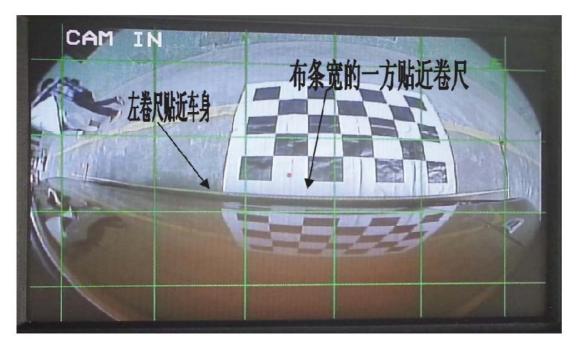


Left flexible rule and checkerboard

Put the flexible rule to be close to the wheel, and pull the rules from the headstock to the tailstock



Checkerboard



Right flexible rule and checkerboard

It is same with the left side, but note that the checkerboard starting position should be same as left checkerboard starting position.



## 2. Adjust 360 full view system



Come into full view adjustment, input three number as photo:

Model choose: Medium (system default)

- Car width: car body width ( you can check on the website or on your car driving license), calculate by mm.
- Car length: car body length (you can check on the website or on your car driving license), calculate by mm.
- Left right shifting: the distance from the front checkerboard to the left and right checkerboard, calculate by mm as following photo show:



After all parameter setting is fixed, move the mouse to the full view adjustment and press OK. Note that there is nobody around the car.



Adjustment finish----save----return

Now you can use this device.

## **3.** Product operation details

After installation, follow these steps:

- 1. There is full view on the monitor when backing+ rearview photo;
- During driving, press emergency light twice or press Power on RC to start full view. If you need to close, operate same way.
- 3. If you need to record during driver, connect USB or TF card to the main machine. When you want to play back, come into menu and choose playback.