

Ai 360° Bird Eye View Camera System



☐ Sedan Car



☐ Truck/Bus

Ai 360° Bird Eye View Camera System



360° Bird View
Camera System



Main Features

Digital HD AI 3D 360 Bird Eye View Camera System

AI Intelligent Recognition Of Pedestrians And Vehicles

Display Distance And Direction Of Movement From Other Vehicles And Pedestrians

AI Intelligence Alerts Through Color Changes And Sound

3.5D\3D\ 2D Multiple View Display

Multiple Styles 3D Car Model Image Available

4-in-1 High-definition Video Real-time Recording

Record Video Files Using H.265 Compression Format

Support AHD, TVI, CVI, HDMI, VGA, And CVBS Video Output

Parking Recording Mode With Intelligent Voltage Detection

Product Introduction

This Product is real 3D 360 birdview parking & recording system .It takes four pictures from the millions HD and big angle cameras seamless splicing into one bird view picture ,and output to the screen real time .It can show the car position and the surroundings circumstances through the screen to help the driver parking and driving safety .Real time display of pedestrian and vehicle distances relative to one's ownvehicle through AI intelligent core algorithms .It cancycle recording by U Disk saved at the same time .Please kindly read the instruction manual before usage .

Multi-view images for driving and parking



AI+Rear View



2D+3D Rear View



Front Wide View



AI+Front View



2D+3D Front View



Rear Wide View



2D Bird View



Limit View+Bird View



2D+Front View Zoom

Remark: More Multi-view modes for choosing in the machine .

4CH HD camera Recording Real time



Front\Back\Left\Right 4CH HD camera video recording realtime,Cyclesaving,can be stored in U Disk.Play back through the remote control,Or on a computer with a "Thunder" playback.

Mark:To make the recording smoothly,Please format the U disk on the system,after the U disk used on computer or other systems.

Smart battery voltage detection function

For sedan car only,During parking mode,when the system detects the car battery voltage is below 11V\11.2V\11.4V\11.6V\11.8V\12V\12.2V,the system willbe power off automatically

3 Ways for DVD or monitor display on and off:

- 1.DVD or monitor display on by engaging reverse gear trigger,turn off when the car power off;
- 2.DVD or monitor display on and off by remote control;
- 3.DVD or monitor display on and off pressing caution light button two times.

Specification

	Item	Technical Parameters	
HOST	CPU	ARM Cortex A7 Quad core, 1.2GHz	
	RAM	DDR3 1GB	
	ROM	DDR-4G	
	USB	USB2.0(Maximum support: 128G)	
	Record Trigger	ACC ON	
	Parking off Voltage (For sedan car only)	(Optional: 11V\11.2V\11.4V\11.6V\11.8V\12V\12.2V)	
	Video System	AHD\TVI\CVI\HDMI \ VGA for interface	
	Video Format	MP4 H265	
	Video Resolution	1920x1080P\1280x720P\Select to breed	
	Working Voltage	DC11 ~ 30V	
CAMERA	Max Working Current	DC12V < 485mA (2083)	DC24V < 300mA (2083)
		DC12V < 680mA (307)	DC24V < 395mA (307)
	Working Temperature	-20°C ~ +65°C	
	Recording time	21H/32GB SD card	
	Sensor	IMX307 <input type="checkbox"/>	GC2083 <input type="checkbox"/>
	Effective pixels	1920x1080P	1920x1080P
	Minimum Illumination	0.1Lux	0.3Lux
	Lens aperture	F1.8	F1.8
CAMERA	S/N	> 53dB	> 35dB
	Dynamic Range	> 100dB	> 74dB
	Angle	210°	210°
	Water-proof Class	IP67	IP67
	Input Voltage	DC4.5 ~ 5.5V	DC4.5 ~ 5.5V
	Working Temperature	-20°C ~ +65°C	-20°C ~ +65°C
	Video System	TVI	TVI

Parts List



HOST X1



Remote Control X1



☐ 4pcs Digital HD Camera for Truck or Bus



☐ 4pcs Digital HD Camera for Sedan Car

Host function description

Cameras and Uart Harness

Cameras and Uart Harness

Power and video out Harness

Power cable ,CVBS and AHD Video Out



VGA harness

Connect to decoder, connect to original monitor by the decoder

Video output format setting

Please refer to page four for the settings of dialing code

HDMI Singal Putout

Connect to the decoder with HDMI interface function, and input to the original car screen through the decoder to realize high-definition display (or directly input to the display with HDMI interface)

Status indicator

Red light on, system powered on,
Green light on, the system is working normally;
Blue light on, switch to 360
The green light is flashing,
Recording files are stored on U disk
The blue light is off, exit 360.

Remote Control Introduction

The remote control is RF connection, which can be used one-to-one after matching. It is mainly used for calibration, view switching, system operation, video playback and other operations. When the control is not sensitive enough, please replace battery.

Remote Control Matching Introduction

When the remote control is for the first time use, it needs to match with the host. Please follow the steps below

1. Start the 360 host
2. Do not install the battery, and press the black part in the middle of the remote control
3. Install battery. During this period, hold pressing the remote control for 5 seconds
- 4, 5 seconds later, release the remote control button, pairing completed, you can operate the remote control



Remote Control Manual



Rotate the outer ring to switch function, or rotate the vehicle model angle



Press the middle of black is the confirmation function

Electrical Connect Instruction

Remark:

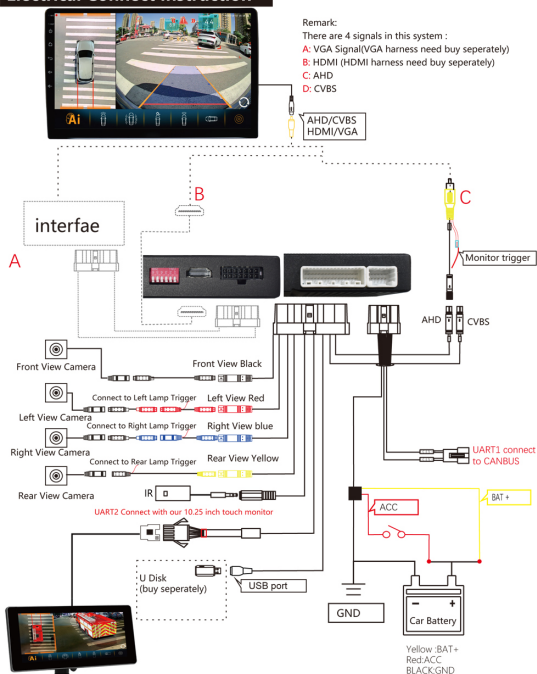
There are 4 signals in this system :

A: VGA Signal(VGA harness need buy separately)

B: HDMI (HDMI harness need buy separately)

C: AHD

D: CVBS





Buy separately

Yellow :BAT+
Red:ACC
BLACK:GND

Video output format setting



Output format dialing rules			Schematic diagram of dialing
Video output format \ Dialing rule	Dial number 1	Dial number 2	<div> All off  All on  </div>
AHD or TVI or AV	OFF	ON	
HDMI	ON	ON	
VGA	ON	OFF	
Determined by setting item selection or serial port protocol	OFF	OFF	

Resolution dialing rules				
Resolution \ Dialing rule	Dial number 3	Dial number 4	Dial number 5	Dial number 6
720*480	ON	OFF	OFF	OFF
720*576	OFF	OFF	ON	ON
800*480	ON	ON	ON	ON
960*480	OFF	OFF	OFF	OFF
1024*480	OFF	ON	OFF	ON
1280*480	ON	ON	OFF	ON
960*540	OFF	ON	ON	OFF
1280*540	OFF	ON	OFF	OFF
1440*540	ON	ON	ON	OFF
800*600	OFF	OFF	ON	OFF
1024*600	OFF	OFF	OFF	ON
1280*640	ON	OFF	OFF	ON
1280*720	ON	ON	OFF	OFF
1540*720	ON	OFF	ON	ON
1920*720	OFF	ON	ON	ON
1920*1080	ON	OFF	ON	OFF
AV_NTSC	ON	OFF	OFF	OFF
AV_PAL	OFF	OFF	ON	ON
AHD_720P_25 FPS	ON	ON	ON	ON
AHD_720P_30 FPS	ON	ON	OFF	ON
AHD_1080P_25 FPS	ON	ON	ON	OFF
AHD_1080P_30 FPS	ON	ON	OFF	OFF
TVI_1080P_25 FPS	OFF	ON	ON	ON
TVI_1080P_30 FPS	OFF	ON	OFF	ON
TVI_720P_25 FPS	OFF	ON	ON	OFF
TVI_720P_30 FPS	OFF	ON	OFF	OFF
In-software configuration	OFF	OFF	OFF	OFF
Protocol 1	OFF	OFF	OFF	ON

Video output format setting

Protocol 2	OFF	OFF	ON	OFF
Protocol selection description: Select protocol 2 when board 1 dials protocol 1 and protocol 1 dials the display of the splash screen is abnormal. Select protocol 2 for boards 3 and 10.				

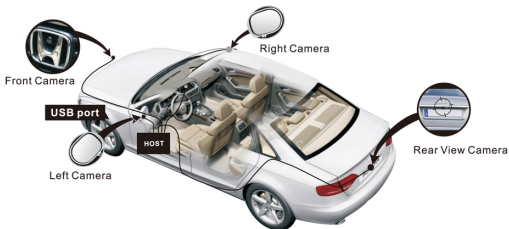
AI detection status description



Producton Installation

1、Bird View Box:

we suggest it' s installation under the seat so as the user can take out the U Disk easy.



2.Camera Installation :

Attention::

1. All cameras installation position must be higher than the ground 400mm , it is better for calibration .
2. Because the temperature around the car engine is high , please making sure the front view camera installation position is safe ,and cover hear protection materials into the video and power cables .Pay attention to the water proof on each cnnection point of cables .
3. It needs make a hole under the side view mirrow ,pay attention to the symmetric of the left and right installation position .(We suggest test the picture from the DVD or monitor then make sure the hole position .)After installation ,pay attention to below side cameras installation picture)

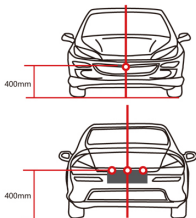
Calibration Process

1. Adjust camera view angle

1.1 Front and Rear View Camera

(1) The car body should appear the bottom position of the DVD or monitor, the camera installation position must be higher than the ground 400mm

(2) The car front and back body should appear the bottom 1/3 area position of the DVD or monitor. The angle between camera and car body should be 45° ~ 75° . After finished adjustment, please lock the camera angle.



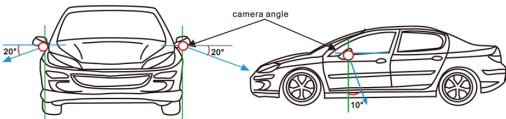
Installation effect (as shown in the figure below)



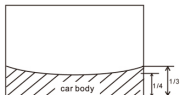
Front and rear cameras (full display)

1.2, Left and Right View Camera

The car body should appear 1/3 or 1/4 on DVD, and the car body is parallel to the fisheye reference line. The angle adjustment plate (one piece for each device inside and outside the mirror) is used to make the camera tilt 10 degrees towards the rear of the car, to make the calibrated picture more realistic after adjustment



Installation effect (as shown in the figure below)



Left camera (both front and rear white/black square should appear clearly)

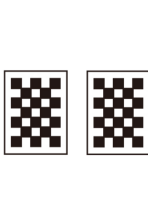
Right camera (both front and rear white/black square should appear clearly)

Calibration

Put calibration textile

Put calibration textile is placed at the front of the car, Rectangle calibration textile is placed at the back of the car, close to the rear of the car and align with the corresponding scale

The textile area should be flat, after placing, the car is in the center, in the middle of the textile



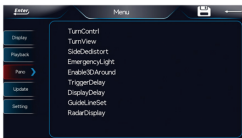
1, Lay the placed calibration textile flat

2, Drive the car in the center mark: The car must be parallel to the calibration textile and the car is in alignment

3, Calibration can be performed according to confirmation



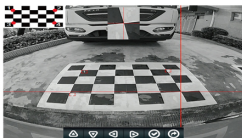
Calibration Textile Instruction



After placing textile ,enter Menu → Pano



→ Auto Mode



Automatic point tracing one by one



→ StitchCloth → Mode2



→ Modify Car "Width &Length"
→ Calicate



Calibrated successfully!
→ Return

Before calibration, refer to the above pictures and adjust the imaging views of the 4 cameras. Note: the front and rear cameras images should not exceed the line.

The left and right camera images need to display the front and rear body of the car completely, and the body should be parallel to the calibration textile. Calibration can be performed according to confirmation

If the calibration failed, please check whether the calibration textile is placed as requirements, whether the front and rear splicing points are aligned, whether the calibration textile is straight, wrinkled or folded, whether the surrounding light is uniform, whether there is exposure, etc

Menu Instruction



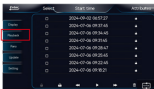
Choose "Display " to set 360 bird view display



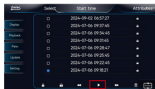
Set TurnView :Choose 2D\3D\3.5D



Set DisplayDelay :Choose display time



Choose "Playback " to play record file



Choose the file then put "play"



Four cameras can be selected to playback, or one of them can be selected to playback



System Setting: system time setting



The system time can be set when the system time is not synchronized



Mode,Select the desired car model then,put "save" to Change the car model



Ultype choose:Select Required UI



ScanLine Type:adjust Parking line position



AISet: Modify AI Detect function



Update:After downloading the upgrade file, select "Reboot"



After entering the settings menu, select the language option for selection



Parking recording mode parking voltage setting

TROUBLES

ISSUE	REASON	SOLUTION
Installed and calibrated well ,After using for a period of time, the stitching is disordered	Cameras installation angle changed	Installed cameras again , and calibrate again following as manual
Blurred or distorted display	1: Something on camera lens 2: Ice on camera lens 3: Driving in Heavy rain or fog day 4: Camera damaged	1: Clean the camera 2: Thaw by salty water 3: be careful in heavy rain or fog days 4: change new camera
The picture is incomplete	1: harness disconnect or damaged 2: camera damaged	1: Connect harness or change new harness 2: change new camera
No image	1: Video singal/video putout or power harness damaged 2: monitor damaged 3: car fuse is broken	1: change new harness 2: change or repair monitor 3: change car fuse
No video	1: rear view trigger disconnect 2: no Video out to monitor 3: harness connect wrong	1: connect trigger 2: press hazard or remote control or rear view trigger to trig video 3: check harness connection
Host can not work	1: host harness connect wrong 2: host damaged	1: check BAT,ACC,GND connection 2: change new host
No recording light	1: no U disk 2: U disk damaged	1: connect to U disk 2: change new U disk



DISCLAIMER:

This Product Is A Record Of The Image And Sound Of The Vehicle In The Course Of Driving. The Information Stored By The Instrument Is For Reference Only.we Are Not Jointly And Severally Liable For Any Loss Caused By Bad Files, Data Loss, Etc. In The Case Of Any Abnormal Use Of This Product. For Avoid Users Have A Misunderstanding, The Following Special Instructions: The Machine Must Be In The Normal Working State Of Video Recording Records.

However, The Image Will Be Damaged Or Lost In The Following Situations:

1. In The Process Of Video Storage, Incorrect Pulling Out The Memory Card Will Cause The Last Video File To Be Damaged Or Lost.
2. Power Failure During Video Recording Will Result In Damage Or Loss Of The Last Video File.
3. Video Recording Is Damaged Or Lost During The Video Recording Process.
4. The Incorrect Wiring Of The Product Installation Leads To The Time Reset Of The System And The Inability To Overwrite The Old Documents, Which Makes The Recent Video Documents Unable To Be Saved Properly,please Adjust The Normal Time Of The Machine According To The Instructions Before Using.
5. Use Of Fake Memory Cards (pirated, Non-branded, Not Formatted On Other Machines After Use By The Local Machine, Not Determined According To Instructions Formatting Stored Cards, Etc., May Cause Video Files To Be Unable To Save.
6. Failure To Operate In Accordance With The Instructions Leads To The Failure To Keep The Files Properly
7. Any Other Abnormal Use Of The State Of The Machine.