3D 360° Around View Driving Assistance System

blind spots

Collision

Racketeer

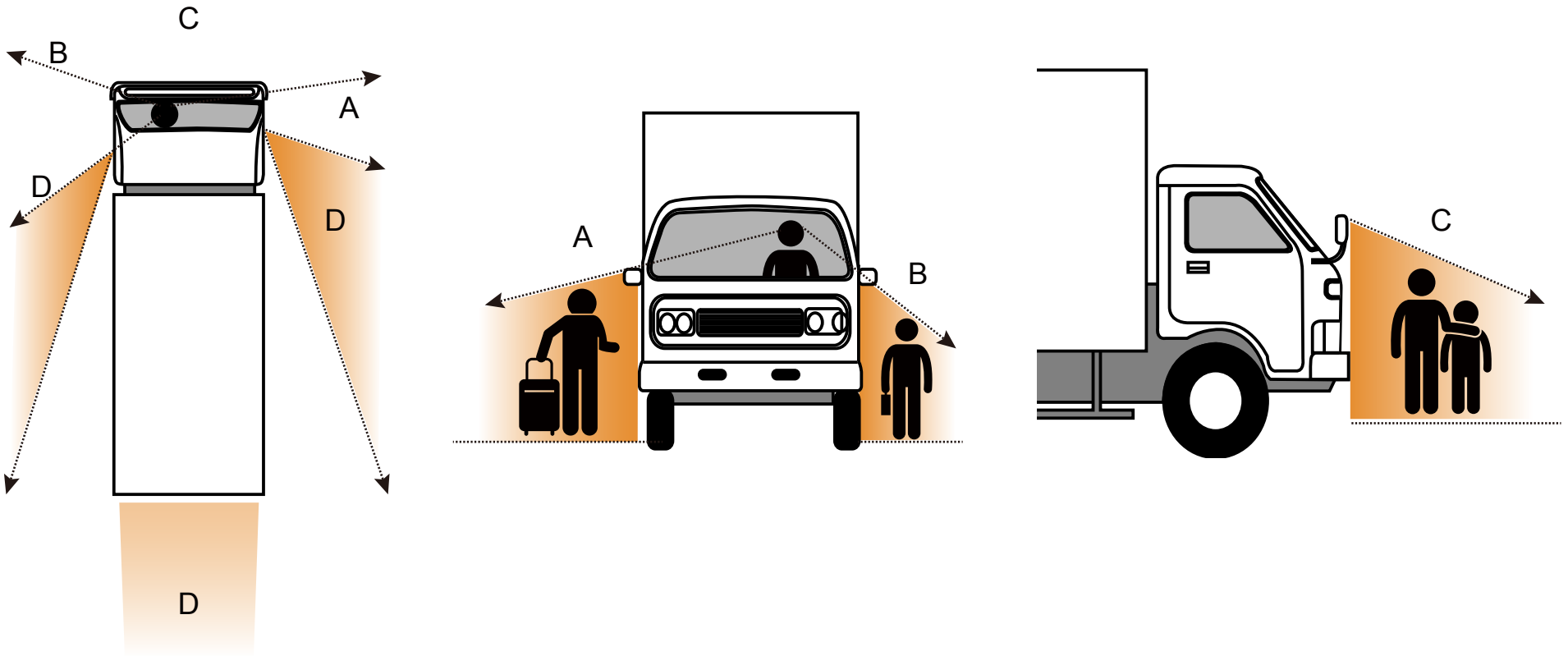
Scratch

Why your fleet vehicles need the 360-VSS Around View Driving Assistance System?

1. How to keep safe when potential dangers hidden in the blind areas?
2. Possibility of scratching in narrow roads while no one shares the cost?
3. Difficult to avoid situation of racketeer for car accident?
4. Indeterminate responsibility for rear-end collision?

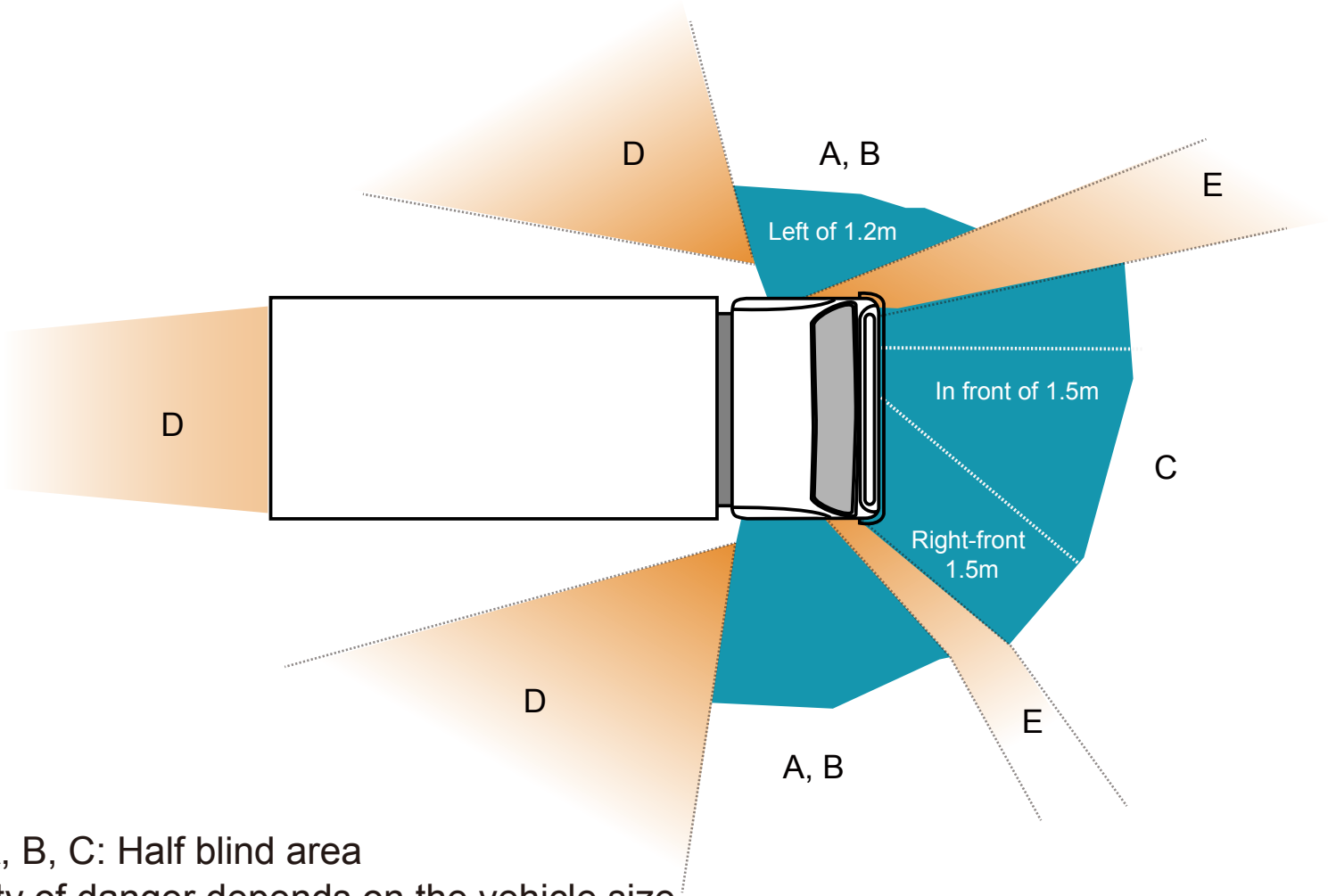
Vehicle Blind Spots Schematic Diagram

Among all road accidents, those caused by blind spots have taken up a large proportion, which is a great threat to our lives.



It turns out that although A, B or C area is normally not a blind area, lower part of the high vehicle could actually formulate a blind area.

Vehicle Blind Spots Schematic Diagram



Area A, B, C: Half blind area
Severity of danger depends on the vehicle size.

Area D: Full blind area
Beyond the sight of the driver and the 3 rear view mirrors.

Area E: Full blind area
Pillar A near the windshield hinders the vision, which creates the blind spots.

1 3D 360° Surround View Driving Assistance System

- 1080P full HD video input and output
- 3D/2D switchable
- Featuring FCW function, no extra camera or installation
- 3-second start up time
- Super rear view display with 3D scene
- Video Recording: 2 x 128GB SD cards
- Support IP camera
- Support RTSP video output
- Compatible with pedestrian detection cameras
- One-minute Automatic Calibration
- Automotive operating temperature -40ºC ~ +85ºC
- Compact size control box
- GPS tracking (optional)
- Compatible with radars and parking sensors, supporting real-time video and audio overlay to actively warn the drivers to avoid obstacles and other potential dangers

2 Technical Parameters

ECU Parameters

Item	parameter		Index
Panoramic video parameter	Input video		Max.4CH×1080P@25fps/1080P@30fps
	Display mode		2D/3D
	High definition output	Resolution	1080P
		Refresh rate	25/30fps
Recorder parameter	Storage		Max. 2×128GB SD card
	Compressed encoding		Max. 4CH×1080P H.264 encoding
	Video stream		4M/2M

2 Technical Parameters

ECU Operating Parameters

Parameter	Parameter Range
Operating voltage	10 ~ 32V
Operating voltage range for external trigger signals	10 ~ 32V
Operating electric current	<2A/12V
Operating temperature	-40°C ~ +85°C
Storage temperature	–40°C ~ +85°C
Operating humidity	10% ~ 95%

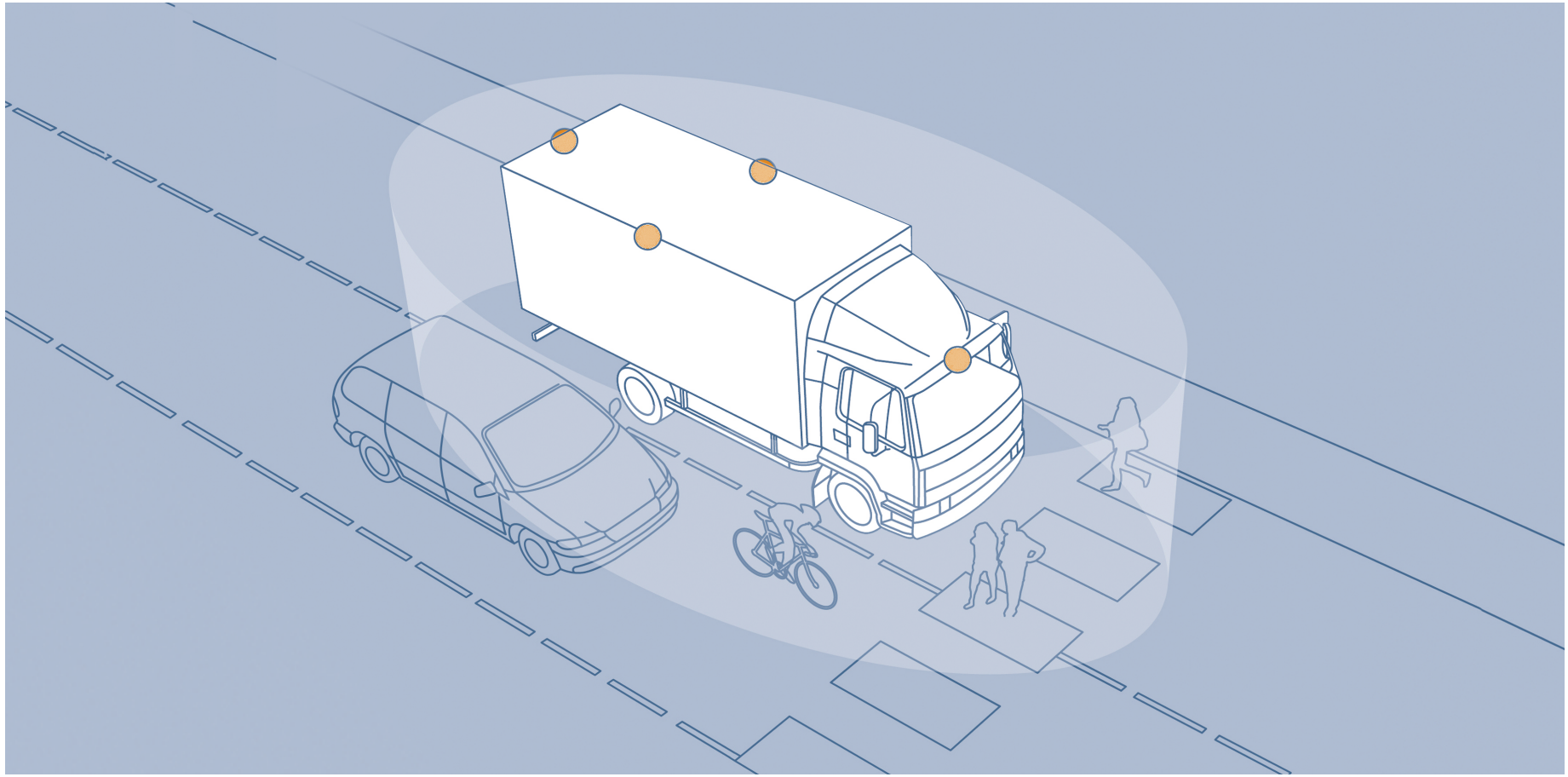
2 Technical Parameters

Camera parameters

Parameter	Parameter range
Image device	1/2.9 " CMOS
Frame rate	25/30
Effective pixels	1920(H) x 1080 (V)/1280(H) x 720 (V)
Pixel size	2.9 μm x 2.9 μm
Resolution	1080P/720P
Video output	1.0Vp-p, 75Ohm
White balance	Auto
Viewing angle	>170(H)
Power supply	12V
Operating temperature	–40℃ ~ 85℃, RH95%MAX.
Storage temperature	–40℃ ~ 85℃, RH95%MAX.
IP rating	IP69K

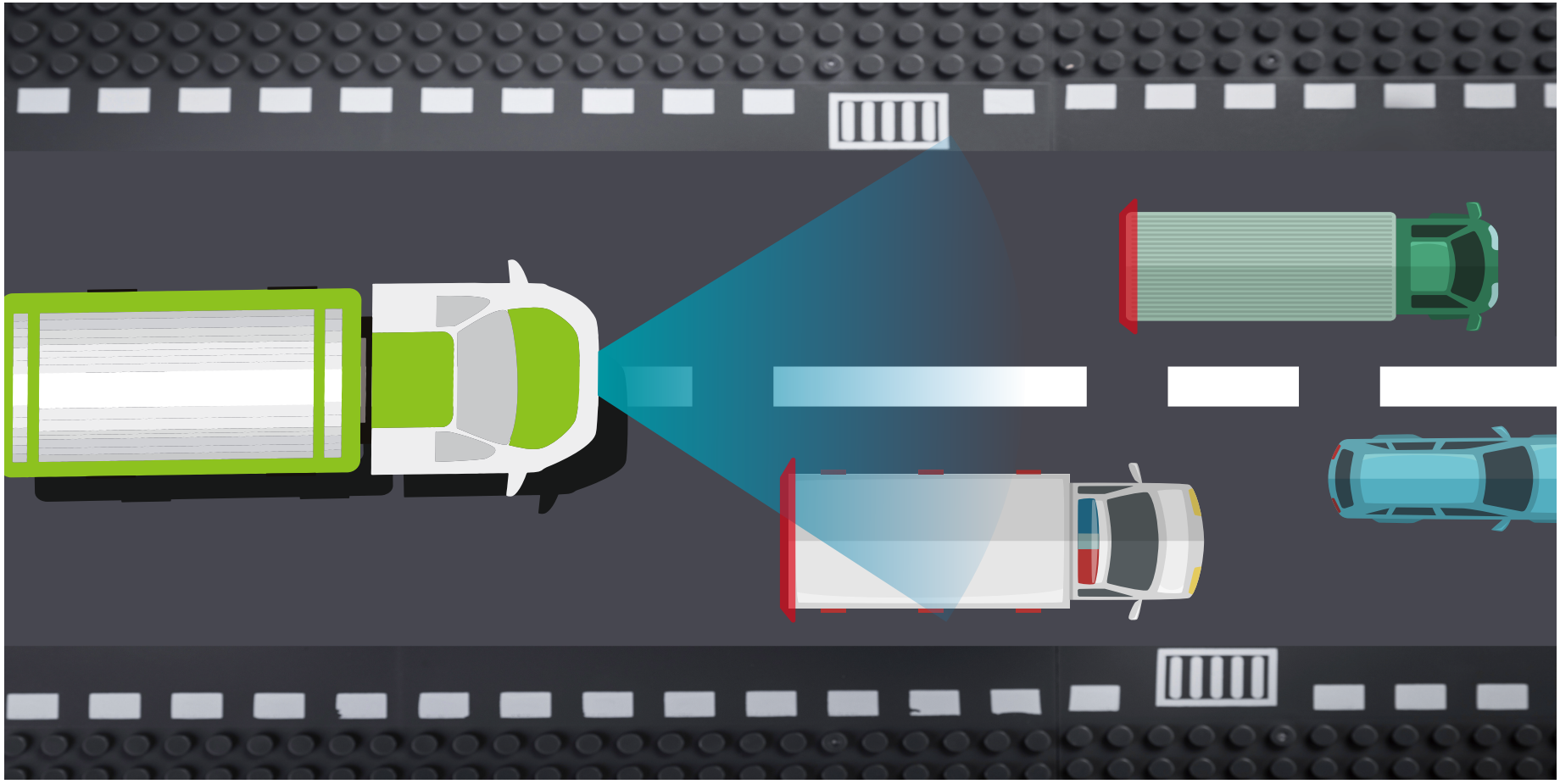
3 Panoramic Seamless Stitching

4CH 190° super wide viewing angle cameras can realize true 360° panoramic bird-view monitoring, to ensure driving safety.



4 Featuring FCW function

Support forward collision warning without extra camera, saving time and money. With forward collision warning technology, the system can intelligently and accurately analyse the distance and relative speed between the vehicle and the preceding vehicle, estimate the potential risk of rear-end collision, and send warnings to the driver to avoid accidents.



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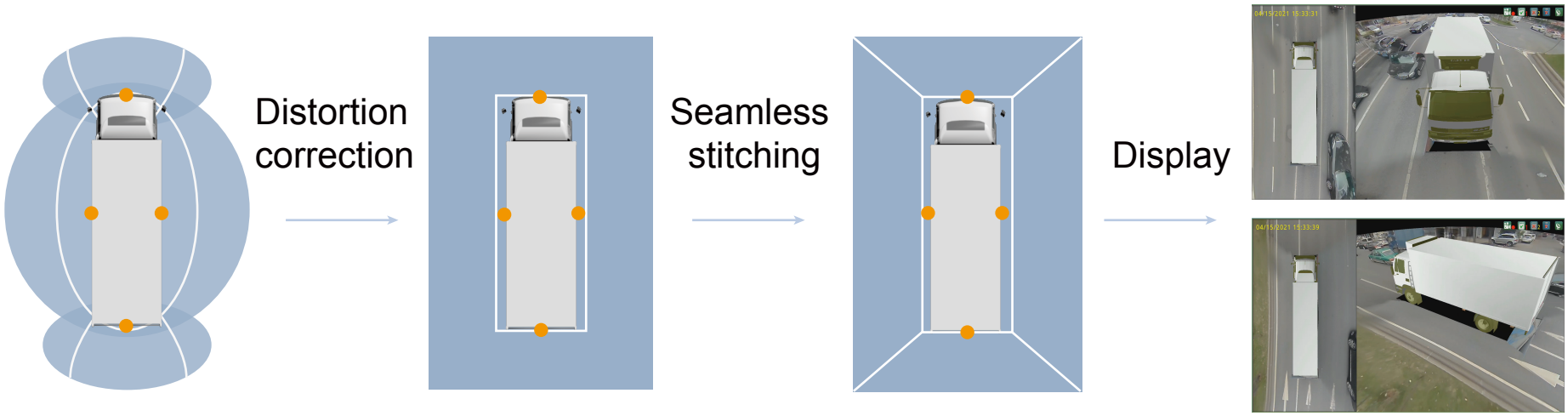
Panoramic Image Synthesis Technology

Panoramic image synthesis technology: The 4CH 1080P full HD images are seamlessly stitched after distortion correction, and then rendered into 3D scene to simulate the real driving scene.



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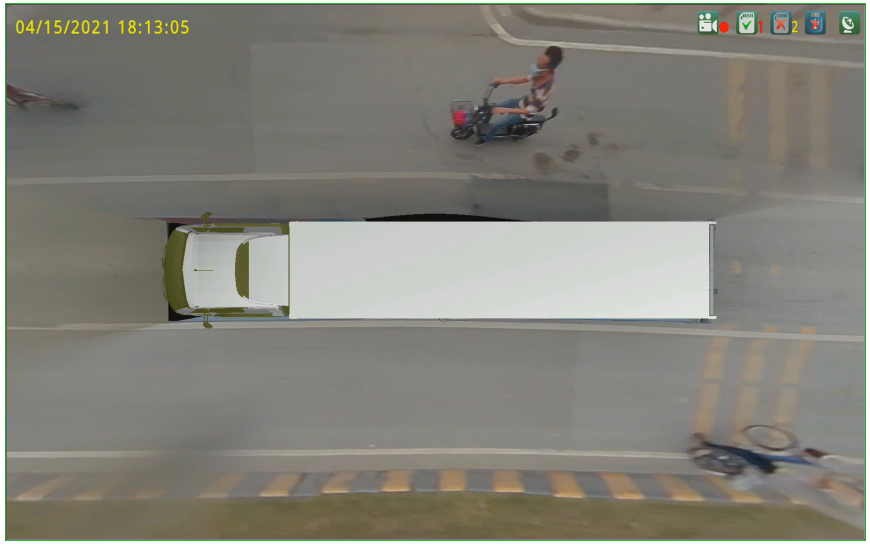
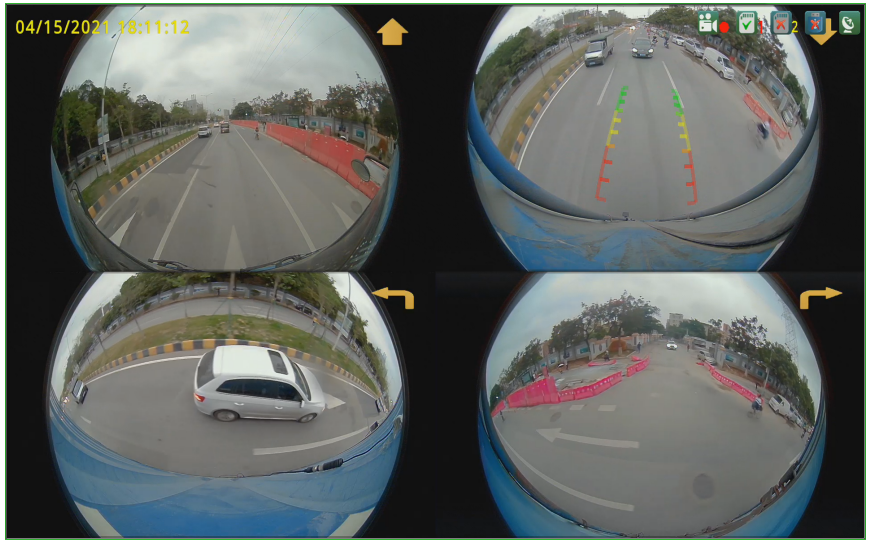
1080P Full HD Images

3D 360° around view image system supports two viewing modes, 3D and 2D switchable.





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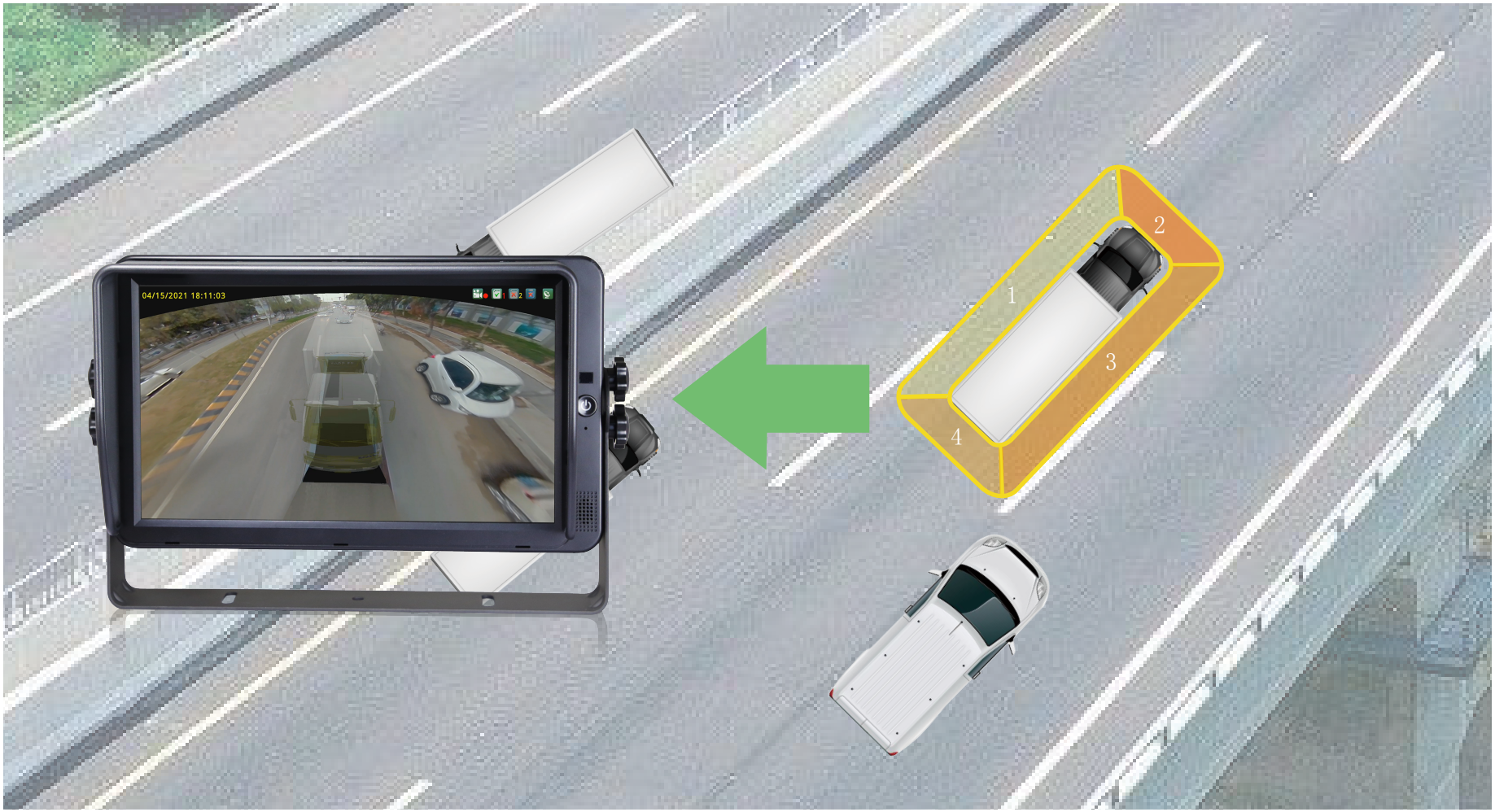
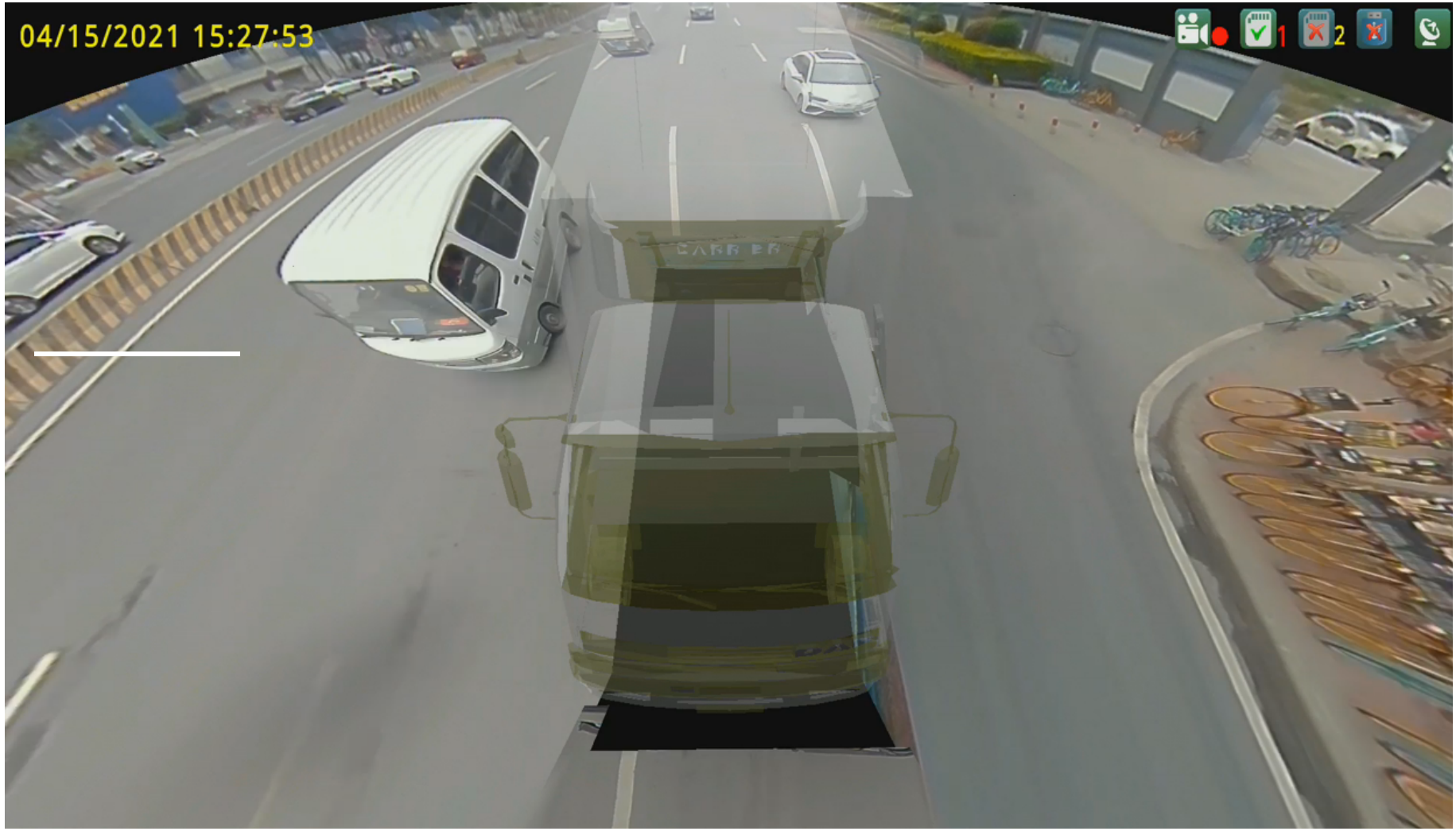
3-Sec Start up Time, RTSP Feed Support

It takes only 3 seconds from boot to image display.It supports third-party equipment to obtain the 360° around view image through the RTSP protocol,in order to achieve the integration of the panoramic images, with latency less than 250ms.



8 Large Field of View (Super Rear View Vision)

The bird view can show a larger field of view on both left and right of the vehicle, providing one more driveway scene than the similar products in the market, which greatly enhances the driving safety.



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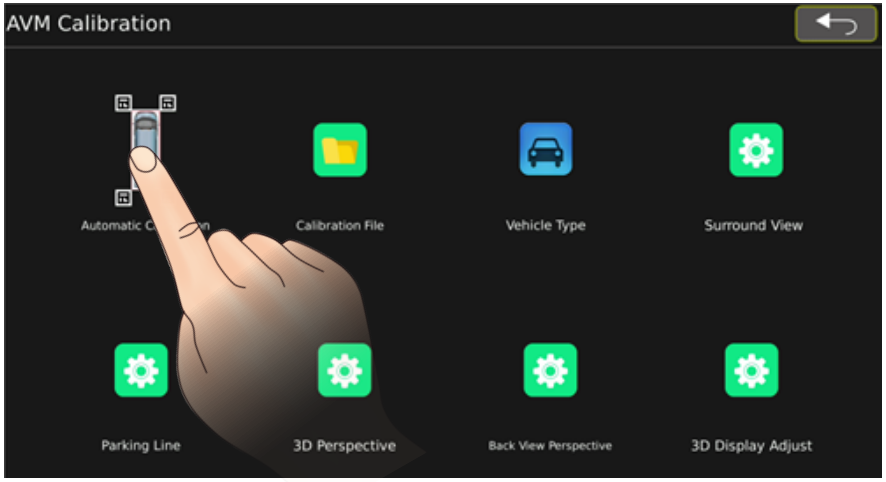
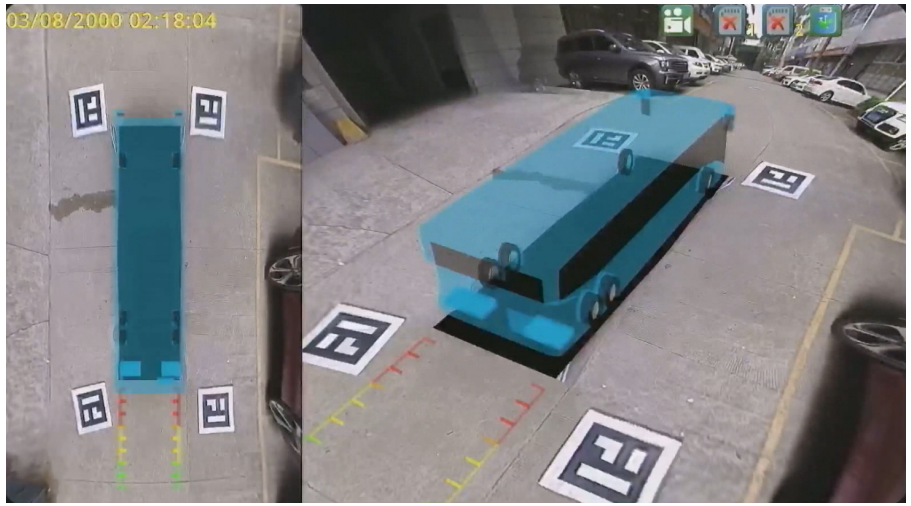
Simplified and Quick Calibration

The 360 system comes with automatic calibration, which can be done in 1 minute through the touch screen or remote control. Only four calibration mats are needed, and they can be placed randomly to achieve accurate calibration.





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Video Recording

2 × 128GB SD cards

2 x SD crads

Resolution	channels	Storage	Transmission rate	Recording time
1280 x 720	4	2 x 128 GB	2Mbps	72Hrs

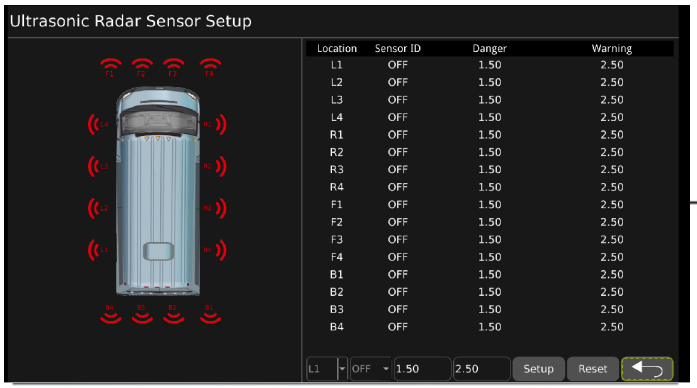
11 Compatible with Radar and Parking Sensor System

The 360 system is compatible with radars and parking sensors, supporting real-time video and audio overlay to actively warn the drivers to avoid obstacles and other potential dangers.

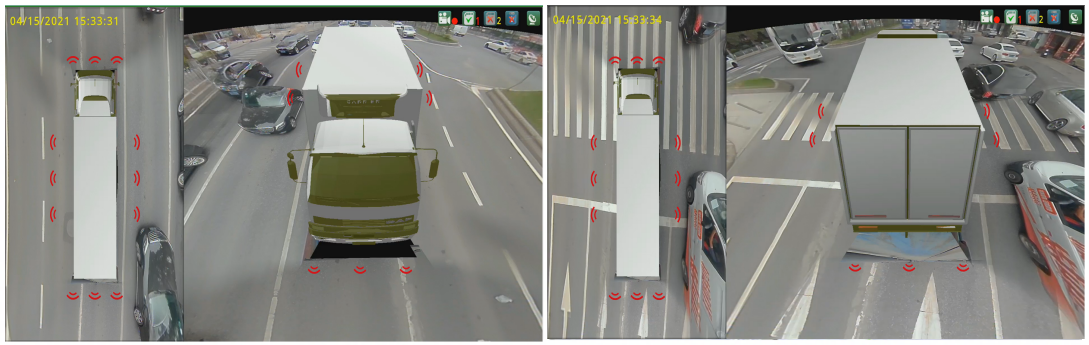
Up to 12 sensors

Radar setup

Allowing for cooperating with a 24GHz millimeter-wave sensor for reversing, increasing detection range (up to 20 m)

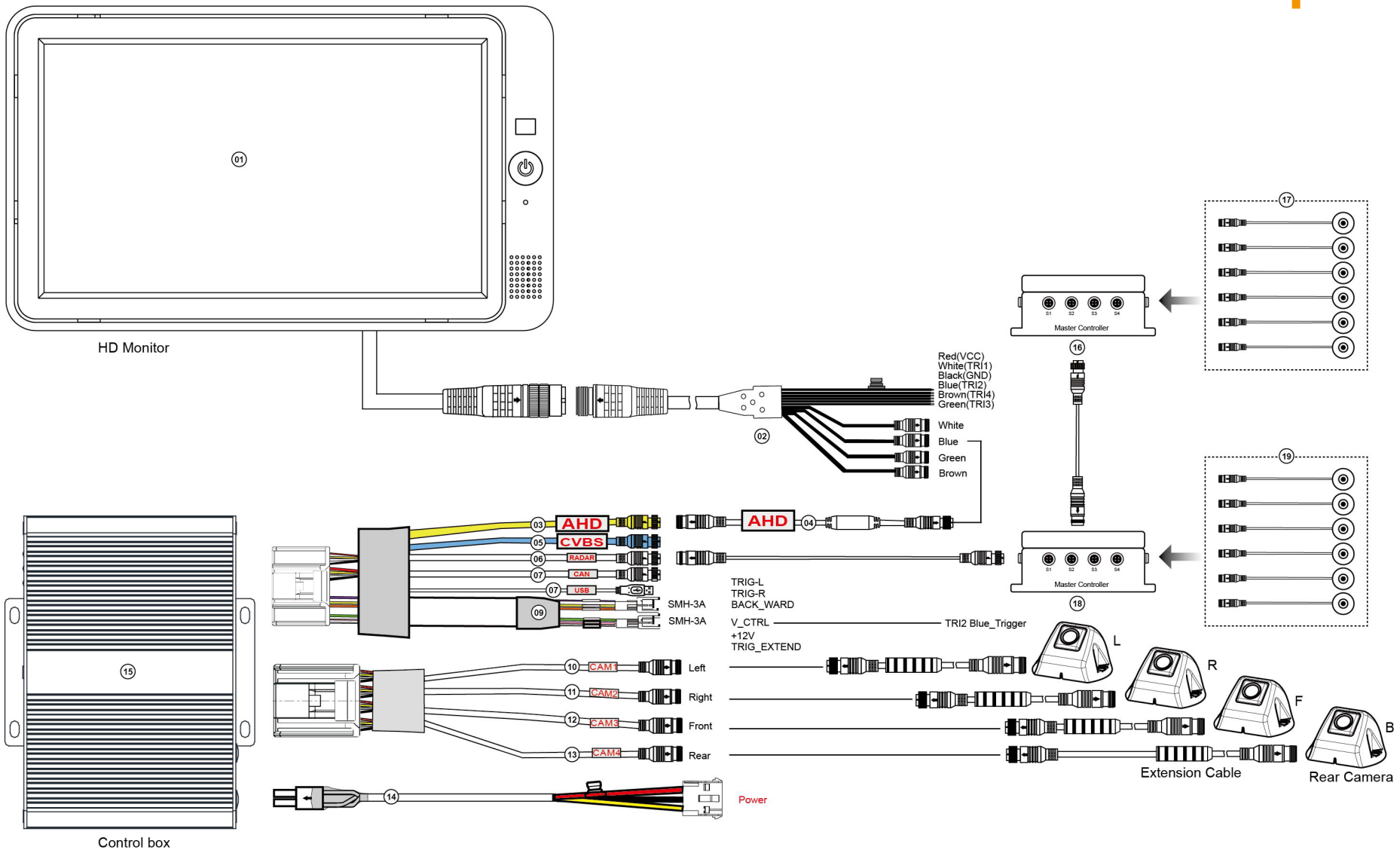


Display

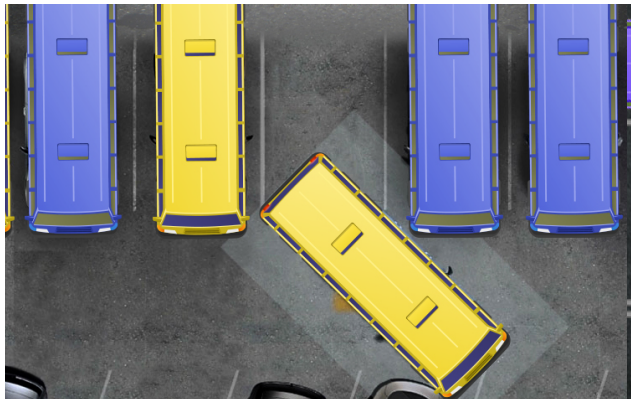


12 Connection Diagram

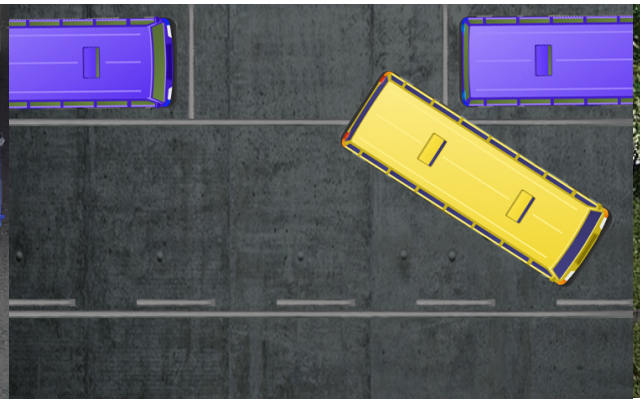
Simultaneous HD/SD output



3D 360°Around View Driving Assistance System



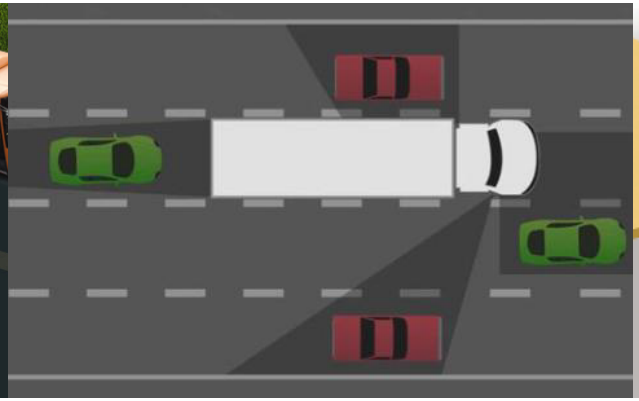
Reverse Parking



Side Parking

Narrow Road

Congested Road



Blind Area

Diversion Assistance

Steep Slope

Road Trap

Driving Record

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