

ML214

4-CH offline BSD solution

1. Production Introduction

1.1 item Lists

Item	Description
1	10.1-inch IPS Touch Screen
2	4-CH Infrared waterproof camera (IP67)
3	Sound and light Alarm Sensor
4	4*20M extension cable for 4-CH BSD Camera
5	1*7M extension cable for the Sound and light Alarm Sensor

1.2 Production Specification



Item	Specification
LCD	10.1-inch IPS Touch Screen
Screen Resolution	1024*R.G.B*600 IPS
Backlight	LED, Brightness: 500cd / cm ²
Function	Touch Screen, Video, Music Video Playback, Video Playback, BSD Alert, Parking Monitor, Fuel Theft Monitor, Brightness, Contrast, Color, Language, Mirror.
Input	4-CH*720P/1080P Video Input
Power Supply	12V - 36V
Power Consumption	< 10W
Operating Temperature	-20°C - 65°C
Storage Temperature	-30°C - 80°C
Power Video Interface	CircularConnector Power Cord Supply
Appearance Size	254*156*88.5 mm



Item	Specification
Camera	Front view&Rear view Camera
Lens Module	1/2.9"AHD/CMOS

Resolution	1080P
Format	PAL
Total Pixels	1920 (H) *1080(V)
Minimum Illumination	0.1LUX/ 0LUX with IR
Electronic Shutter	PAL : 1/50 ~ 1/100,000s
Signal-to-noise ratio	> 46dB
White balance	Auto White Balance
Day/Night Switching	Color Mode
Digital Wide Dynamic	Turn on
Audio	No
Viewing Angle	DFOV 140 °
Interface	M12 4-pole aviation connector
Power supply	DC 12V
Operating Temperature	-20°C ~ 70°C
Ingress Protection	IP67



Item	Specification
Camera	Side View camera (Left&right)
Lens Module	1/2.9" AHD/CMOS

Resolution	1080P
Format	PAL
Total Pixels	1920 (H) *1080(V)
Minimum Illumination	0.1LUX/ 0LUX with IR
Electronic Shutter	PAL : 1/50 ~ 1/100,000s
Signal-to-noise ratio	> 46dB
White balance	Auto White Balance
Day/Night Switching	Color Mode
Digital Wide Dynamic	Turn on
Audio	No
Viewing Angle	DFOV 140 °
Interface	M12 4-pole aviation connector
Power supply	DC 12V
Operating Temperature	-20°C ~ 70°C
Ingress Protection	IP67



Item	Specification
Alarm Sensor	Sound and light Alarm Sensor
Power Supply	DC:8V-36V

Operating Temperature	-40°C ~ +80°C
Maximum Power	12W
Alarm Mode	Sound and light alarm
Speaker Power	5W
Color Display	Red
Mounting Fixing Holes	4 mounting holes
Screw Specifications	M5
Waterproof Level	IP69K
Shell Material	Aluminum Alloy
Sizes	127 × 97 × 42mm
Weights	430g
Case Color	Black

2. Solution Introduction

2.1 Overview

Panoramic Blind - Spot System

The panoramic blind - spot solution is designed with four high - definition cameras positioned at the front, rear, left, and right of the vehicle. These cameras are engineered to collect real - time 360 - degree image information surrounding the vehicle. The data captured is then transmitted to a 10 - inch touch - screen display, enabling the driver to have a comprehensive and intuitive view of the vehicle's surroundings. This setup significantly enhances the driver's situational awareness, facilitating more informed driving decisions.

Integrated within this system is the Blind Spot Detection (BSD) function. Leveraging advanced sensor technology, the BSD function continuously monitors the blind spots on both sides of the vehicle. When a vehicle enters the blind - spot area, the system promptly provides early - warning prompts to the driver. This proactive approach effectively mitigates the safety risks associated with lane - changing and turning maneuvers, thereby reducing the likelihood of collisions.

Moreover, when the vehicle is parked, the system can be configured to activate the fuel theft alarm monitoring feature. In the event of an attempted fuel theft, the system triggers a linkage sound - and - light alarm. This not only serves as a deterrent to potential lawbreakers but also alerts the vehicle owner and passers - by, safeguarding the vehicle's fuel and overall property.

This system has been rigorously tested and proven to be compatible with a wide range of vehicle types, including passenger cars, commercial vehicles, and specialized vehicles. Its adaptability and reliability make it an essential component for ensuring driving safety, providing peace of mind to drivers and passengers alike.

2.2 Key Features:

- **360-Degree Surround View:** Equipped with 4 high-resolution cameras, the system provides comprehensive coverage, eliminating visual blind spots and ensuring a safer and more confident driving experience.
- **Blind Spot Detection (BSD):** Real-time monitoring and alerts for vehicles in blind spots, enhancing safety during lane changes and turns.
- **High-Definition Recording:** Captures crystal-clear video footage of the driving process, serving as reliable evidence for accident liability determination.
- **Parking Surveillance:** Monitors your vehicle 24/7, safeguarding against theft, vandalism, and fuel siphoning while parked.

Touch screen operation: With a 10 - inch large touch - screen display, operation is more convenient and intuitive.

2.3 Mounting Position Reference

