

Streamax

Professional BSD Camera

960C53

Product Specification



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Preface

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Product Name Explanation

960C53 is the dual-lens model with one built-in side-view camera and one built-in rear-side-view camera. And **960C53** can be connected one extern AHD camera for front blind spot.

Symbol Explanation

The following symbols are used to categorize and explain potential hazards that may arise from improper operation

Symbol	Explanation
	Warning: Conditions that could jeopardize the safety of the user or cause injury
	Important: Conditions that may lead to data corruption or damage to the device's firmware or hardware
	Note: Additional information, explanations of terms, and other relevant details

Abbreviation Explanation

Abbreviation	Full Name
BSD	Blind Spot Detection System

BSIS	Blind Spot Information System
MOIS	Moving Off Information System

Product Overview

Product Introduction

960C53 is an intelligent IPC designed to detect pedestrians and cyclists in blind spots of large vehicles. Its AI-based detection capabilities comply with the European regulation R151. It is suitable for a variety of large- and medium-sized freight vehicles, and can be connected to an external AHD camera to monitor blind spots at the front of the vehicle, and provides early warning to both the driver and surrounding pedestrians via an external display and internal/external audible and visual alarms. The product features high quality, reliability, easy installation, user-friendly operation and high cost-efficiency.



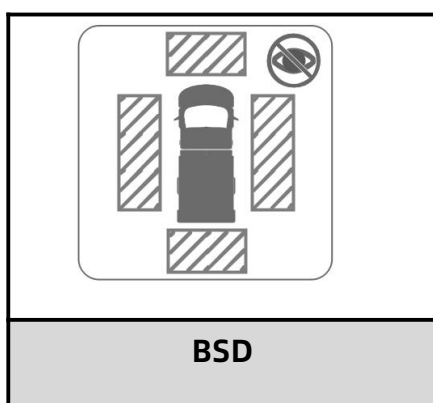
Functional Features

- Ultra-wide-angle lens covering roads, supporting 1080P HD video
- Rear-view road telephoto lens, supporting 1080P HD video
- Built-in 6-axis gravity sensor, capable of detecting rapid acceleration, deceleration, sharp turns, and collisions
- Supports the expansion of one AHD camera for blind spot monitoring in front of the vehicle
- Supports one AHD 720P LCD display
- Supports one CAN line connection

- Supports external GPS module connection
- Supports effective safety alerts with a minimum illumination of 0.5 LUX
- With standalone AI, pure vision solution, simple installation, effective and accurate detection of targets in all blind spots
- Supports semantic segmentation algorithm to effectively filter out road edges, pavement edges, railings and other isolation facilities
- Supports alarm suppression algorithm, and contaminant detection on the lens to ensure driving safety
- Supports relative motion trend analysis algorithm to reduce false alarms

AI Features

The 960C53 utilizes advanced video analysis technology and machine vision to automatically detect road hazards and unsafe driver behaviors. The system continuously monitors and issue both visual and audible alerts to remind the driver to pay attention to safety. Additionally, relevant alarm footage is automatically uploaded to the cloud for real-time monitoring and review through the DVR.



Product Specification

General

System	Embedded Linux
Language	Options: Chinese and English Default: English

Video

Video Recording	2-channel of videos with 1-channel expanded AHD
Maximum Resources	2*1080P@30fps+1080P@30fps(AHD)
Image Setup	Brightness, chroma, contrast, color saturation, sharpness can be adjusted
Video Coding	Options: H.264, H.265 Default: H.264
CBR/VBR	Options: VBR, CBR Default: VBR

Parameters of Overhead Road Camera

Sensor Type	1/2.8" 2.0 megapixel CMOS sensor
Shutter Speed	1/30s-1/100000s
Lens	Focal length 1.9mm HFOV: 175°; VFOV: 92°; error: ±5°
Minimum illumination	Color: 0.05Lux/F1.2
Lens Mount	Camera built-in lens

Wide Dynamic Tange (WDR)	Digital wide dynamics
Backlight Cmpensation	Supported
Signal-to-Noise Ratio (S/N)	≥45dB

Parameters of Rear View Mirror Camera

Sensor Type	1/2.8" 2.0 megapixel CMOS sensor
Shutter Speed	1/30s-1/100000s
Lens	Focal length 6mm HFOV: 56°: VFOV: 31°; error: ±5°
Lens Mount	Camera built-in lens
Wide dynamic range (WDR)	Digital wide dynamics
Backlight Compensation	Supported
Signal-to-noise ratio (S/N)	≥45db

Sensor

Six-axis Sensor	Supporting rapid acceleration, rapid deceleration and rapid turning detection
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Port(Peripheral Version)

RS232	1-channel
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RS485 1-channel

IO Port 3-channel

Speed Port 2-channel

AHD Port 1-channel

MDVR Port 1-channel

AHD Video Output Port 1-channel

1-channel (supporting standard J1939 protocol)



Warning: Since vehicle manufacturers will customize some data fields, the final data used in actual test shall prevail. If the required data is not supported, protocol can be provided for integrated development

CAN

Protocol

Network Protocol HTTP, TCP, ARP, UDP, FTP, DHCP, DNS, IPV4, NTP

Power

Power Supply 9-36V

Power Consumption Typical power consumption: 4.2 W

Full-load power consumption: 6 W

Environment Parameters

Operating Temperature -40°C~ 75°C (-40°F~ 167°F)

Operating Humidity 0% - 90%

Protection Rating IP69K

Dimension and Weight

Standard: L123mm × W88mm × H53mm

(L4.84" × W3.46" × H2.09")

Dimension

Extended: L237mm × W124mm × H55mm

(L9.33" × W4.88" × H2.17")

Deviation: ±2mm (±0.08")

Net weight: 365g (0.8lb)

Weight

Gross weight: 1120g (2.47lb)

Deviation: ±10g (0.02lb)

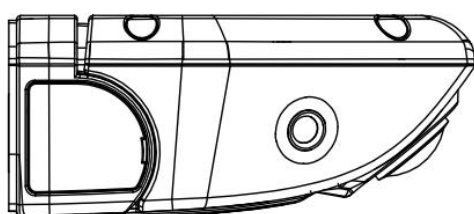
*The actual dimension and weight may vary depending on configuration, manufacturing process, and measurement method of the product

Packing List

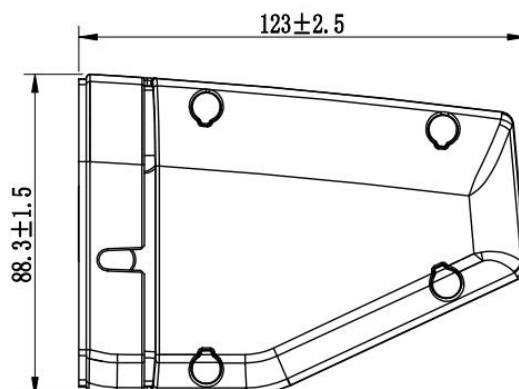
960C53*1, power box*1, power wire*1, short bracket*1, several screws, B3 alarm*1

* Contents may vary depending on the region and specific requirements

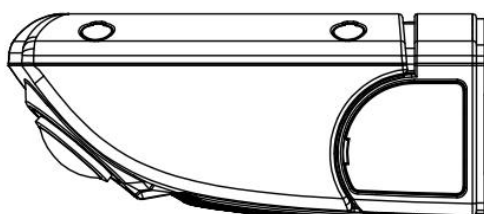
Dimension Diagram



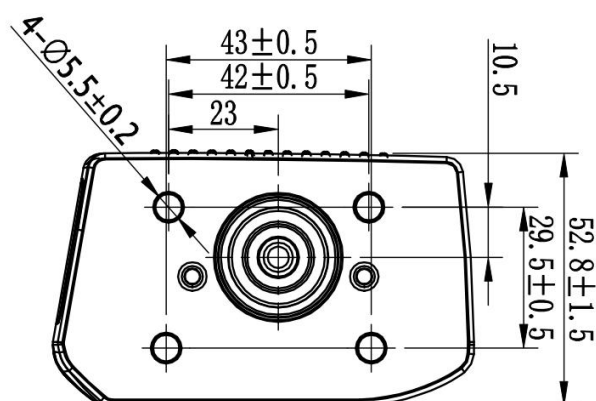
Left view



Front view



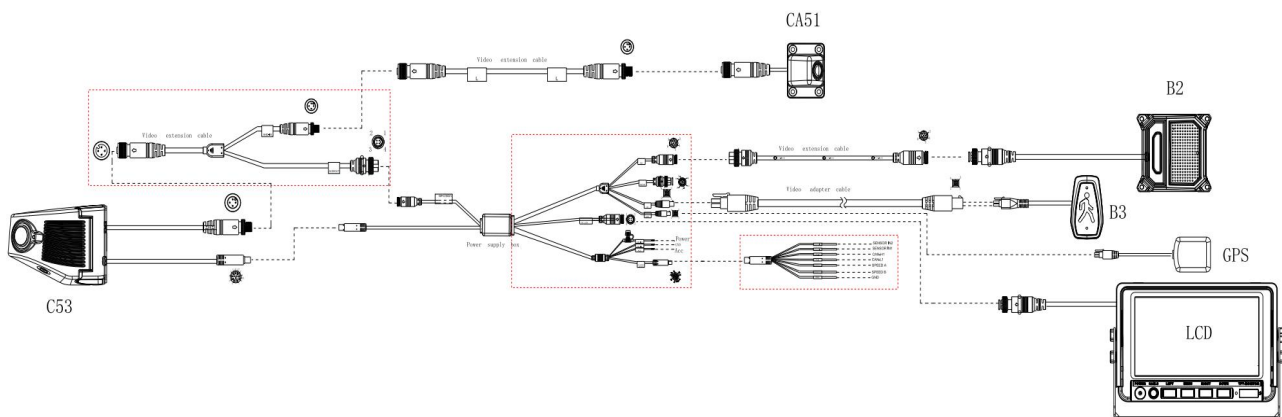
Right view



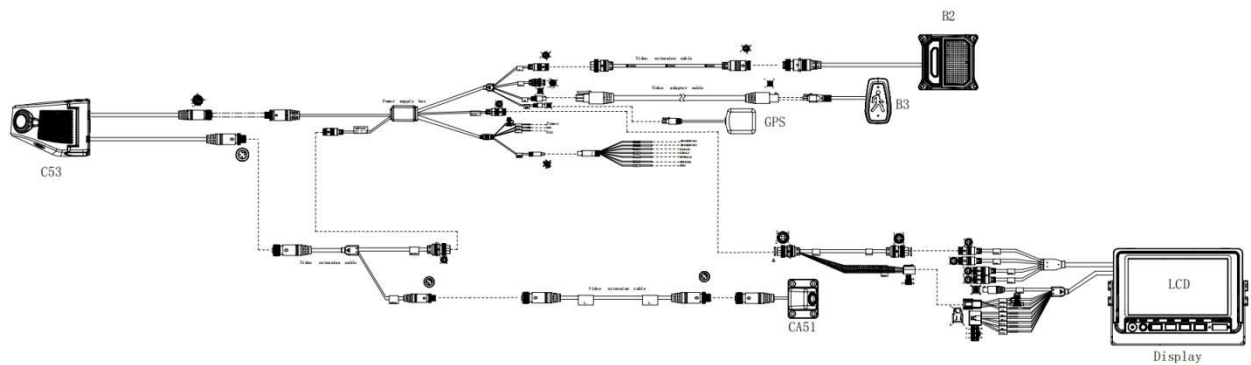
Rear view

(Unit:mm)

System Connection Diagram

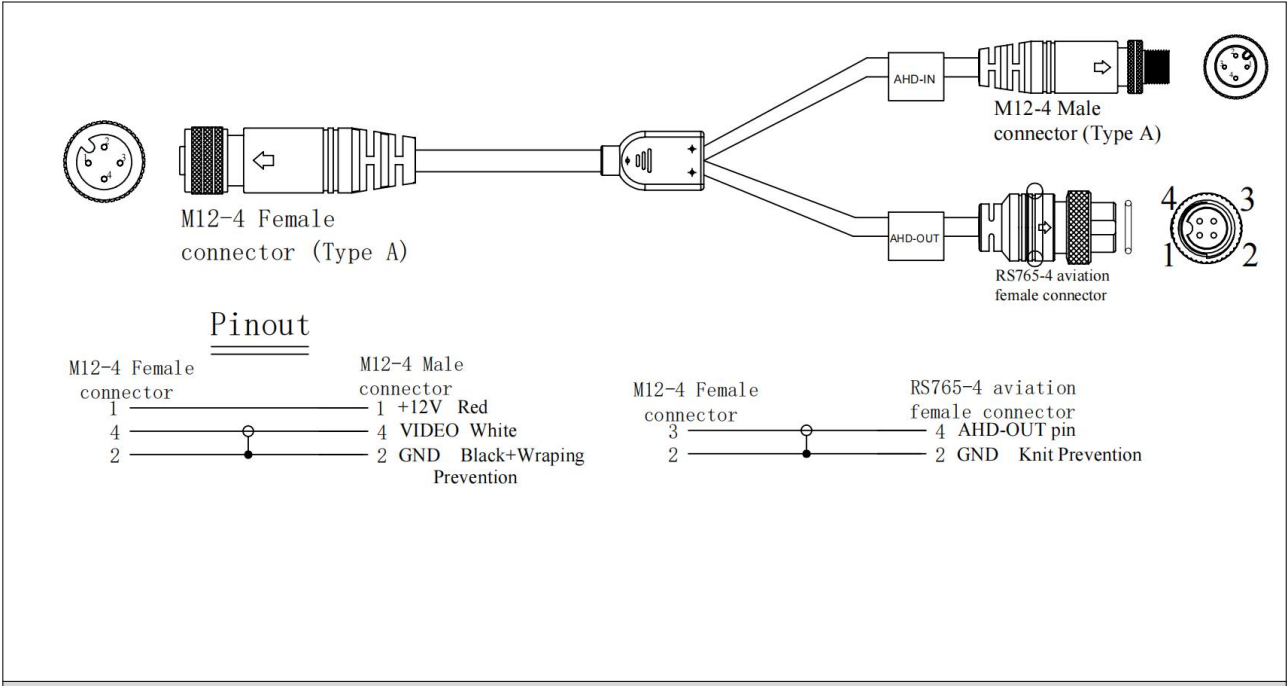
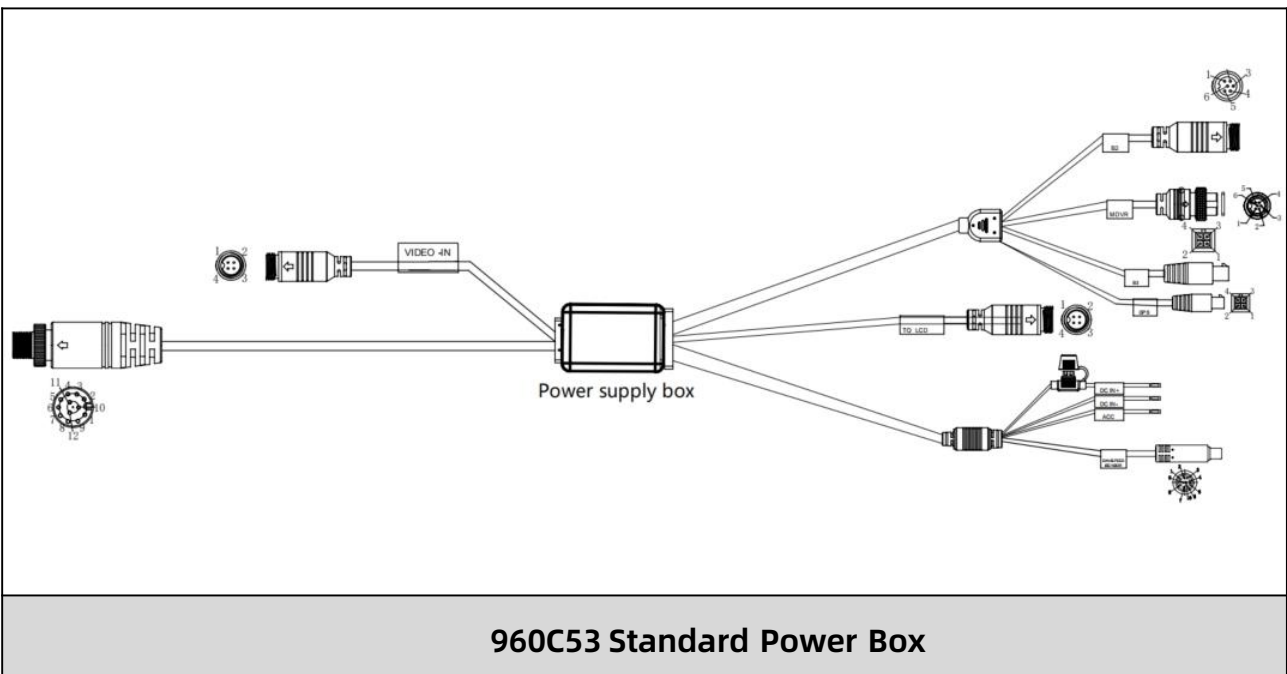


Note: C53 device provides power to the screen.

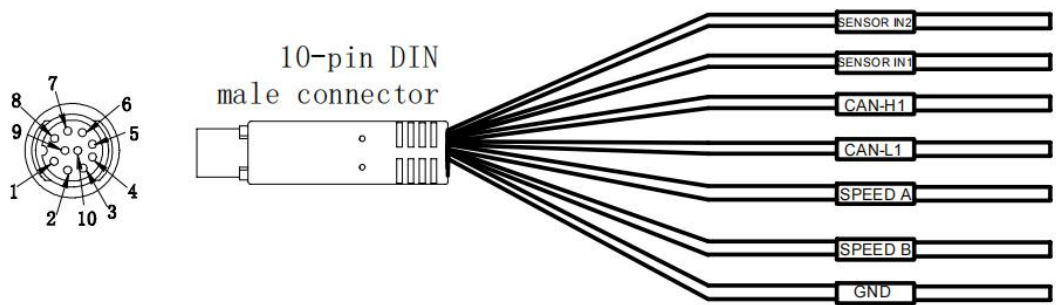


Note: C53 device provides power to the screen(Power for DP7S)

Cable Details	
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AHD video input and output extension lines



Pinout

10-pin DIN male
connector

1	SPEED B	Gray
2	CAN-L1	Green
3	CAN-H1	Yellow
5	SPEED A	Blue
7	SENSOR IN1	Green/black
8	SENSOR IN2	Green/yellow
10	GND	Black

Function pins of equipment

Special Notes

- This product shall be installed by professionals, otherwise there is a risk of falling off
- When used under direct sunlight, the surface temperature of this product may exceed 60°C. Please avoid touching the sun-exposed surface to prevent burns.