GFX • AI Dashcam

Datasheet

GFX

Connected 4-Channel Dashcam (ADAS + DSC)

Wide-Viewing Angle

4-Channel

Connected

Dual SD Storage

Wake Up on Demand

OBD Plug & Play

Product Summary

As a professional, user-friendly and cost-effective dash camera with built-in AI processor, the GFX detects risky driving events such as lane departure warning, forward collision warning and headway monitoring warning, as well as unsafe driving behaviours such as unfastened seatbelt, using mobile phones, yawning, distraction and smoking.

Key Features:

- 5MP resolution with 140° DFOV for ADAS
- 1080P resolution with 170°DFOV for DSC
- Support up to 4-channel video recording, H.264/H.265 video coding
- Dual Micro 256G SD card storage
- Supporting dual-stream recording
- Built-in Wi-Fi and 4G module
- Support 4-channel input, 1 channel CAN and 1 channel RS232
- Compact Design

- **Support OBD powering, easy installation**
- **Functions of built-in ADAS, supporting AI event detection (LDW, HMW, FCW)**
- **Support sleep mode, remote wake-up (power consumption less than 0.1W)**
- **Support echo suppression algorithm to improve the quality of two-way voice intercom**
- **6-axis gravity sensor detects intense driving behaviours (Harsh Acceleration, Deceleration, Sharp turn & Accident detection)**

Active Safety Features

The GFX uses machine vision-based on Video Analysis technology to automatically identify road risks and drivers' unsafe driving behaviours. Detected events will trigger audible and visual reminders to alert drivers in real time, event recordings will be uploaded to the cloud simultaneously.

ADAS Features

LDW
(Lane Departure Warning)

HMW
(Headway Monitoring Warning)

FCW
(Forward Collision Warning)

DSC Features

Unfastened seat belt

Using mobile phone

Yawning

Distraction

Smoking

Optional accessories for active safety DMS Features

A-pillar DMS

Driver Notified (R-Watch)

Lens Covered

Fatigue

Phone Call

Smoking

Distraction

No driver detected

Unfastened seat belt

Yawning

Technical Specification

Product Model

Model	FTDC-ADP-4CH
System	Embedded Linux
Language	Support Chinese, English, Spanish, Portuguese, French, Russian, Japanese

Video/Audio

Video/Audio Recording	4-channel video (default: 2 channels; extensible: 2 channels) + 1-channel audio
Total Resources (With 2-channel AI)	5MP @20fps (ADAS)+1080P @20fps (DSC)+1080P @20fps (AHD) +1080P @20fps (IPC)
Total Resources (Without AI)	PAL: 1 × 5MP@25fps (AHD) + 2 × 1080P@25fps (AHD) + 1 × 1080P@25fps (IPC) NTSC: 1 × 5MP@30fps (AHD) + 2 × 1080P@30fps (AHD) + 1 × 1080P@30fps (IPC)
Image Setup	Adjustable brightness, Chroma, contrast, color saturation, and sharpness
Video Coding	H.264 /H.265 (default: H.265)
Audio Compression Standard	ADPCM/G.711/G.726 (default: ADPCM)
CBR/VBR	Supported. VBR or CBR (optional), VBR by default
Audio	Built-in MIC
Loudspeaker	Built-in 3W loudspeaker

ADAS Camera Parameters

Sensor Type	1/2.7" 5-megapixel CMOS sensor

Shutter Speed	1/30s-1/100000s
Lens	2.8mm HFOV: 123° VFOV: 65° DFOV: 140°
Lens Mount	MDVR built-in lens
Wide Dynamic Range (WDR)	Digital WDR
Backlight Compensation	Supported
Signal-to-Noise Ratio (S/N)	≥48db

Cabin Camera Parameters

Sensor Type	1/2.9" 2-megapixel CMOS sensor
Shutter Speed	1/30s-1/100000s
Lens	2.2mm HFOV: 154° VFOV: 84° DFOV: 170°
Lens Mount	MDVR built-in lens
Wide Dynamic Range (WDR)	Digital WDR
Backlight Compensation	Supported
Signal-to-Noise Ratio (S/N)	≥45db

LED Indicator Status

Power Status Indicator	Off/Blue
Alarm Indicator	Off/Red
GPS Signal Indicator	Off/Red
Network Status Indicator	Off/Red
Wi-Fi Status Indicator	Off/Red/Green
Recording Status Indicator	Off/Red

Storage

Micro SD card	Support two Micro SD cards, with the maximum

		capacity of a single card is 256 GB
Sensor		
	Six-axis Sensor	Supported, Harsh Acceleration, Deceleration, Sharp turn & Accident detection
Engine Data Page		
	CAN Data Collection	Supported
Port		
	RS232	1
	IO Port	4-channel input
	CAN	1
	USB	1 × mini-USB port
Network		
	WIFI	Support 2.4G (IEEE Std.802.11a/IEEE Std.802.11b/ IEEE Std.802.11g /IEEE Std.802.11n)
	4G	Supported For North America: EC25AFXGA-128-SGAS LTE FDD: B2/B4/B5/B12/B13/B14/B66/B71 WCDMA: B2/B4/B5 For Europe and Asia: EC25-EC LTE FDD: B1/B3/B7/B8/B20/B28A WCDMA: B1/B8 GSM: B3/B8 For Latin America: EC25AUXGA-128-SGNS LTE FDD: B1/B2/B3/B4/B5/B7/B8/B28 LTE TDD: B40 WCDMA: B1/B2/B5/B8 GSM: B2/B3/B5/B8
Positioning		
	GPS	Supported GPS L1 1575.42MHz BDS B1 1561.098MH GALILEO E1B/C1 GLONASS L1OF 1602MHz SBAS: WAAS, EGNOS, MSAS, GAGAN
Protocol		
	Network Protocol	HTTP, TCP, ARP, UDP, FTP, DHCP, DNS, IPV4,

	NTP

Power Related

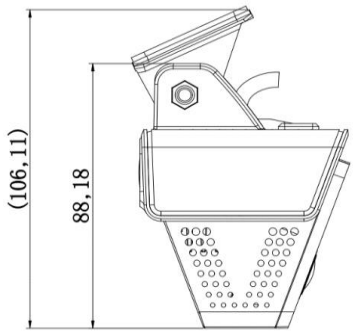
Power Supply	9-36V
Built-in Battery	Not supported
Power Consumption	Typical power consumption <8 W, maximum power consumption <12 W

General Specifications

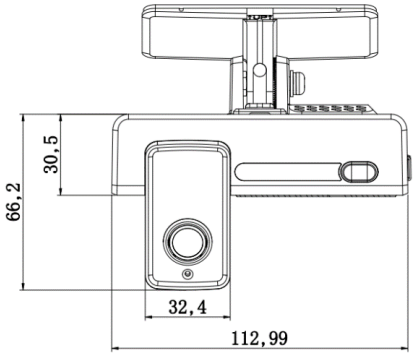
Dimensions	113.0 mm (length) × 67.8 mm (width) × 88.2mm (Height, without bracket)
Weight	MDVR: 306 g MDVR + bracket + screw: 330 g MDVR + bracket + screw + power supply box + power tail cable: 591 g
Operating Temperature	-40°C - +70°C (-40°F - +158°F)
Storage Temperature	-40°C - +85°C (-40°F - +185°F)
Humidity	15% - 90%

Dimensions

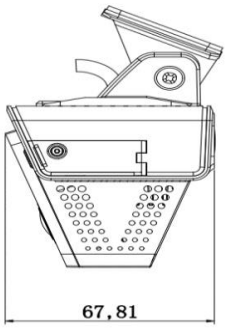
Unit (mm)



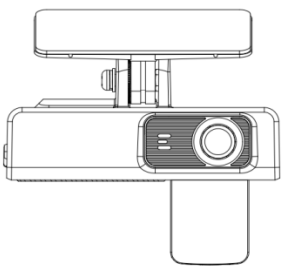
Left view



Front view

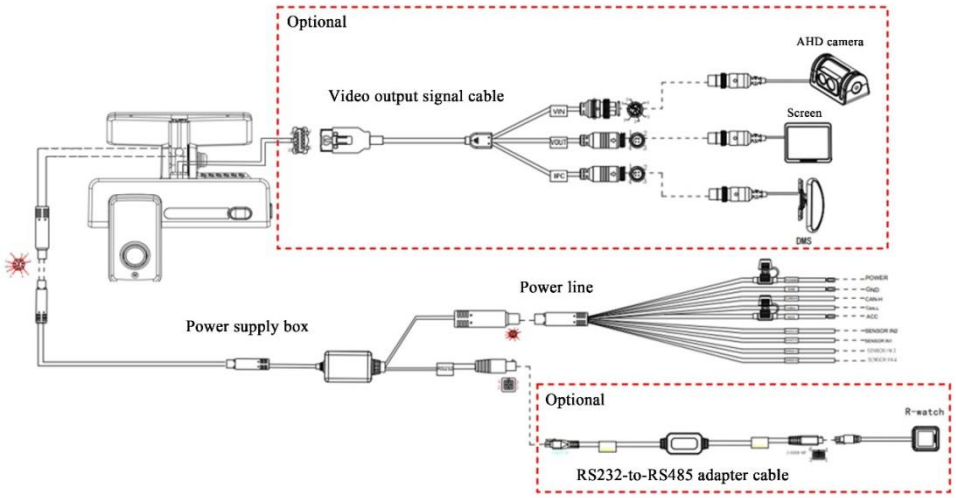


Right view

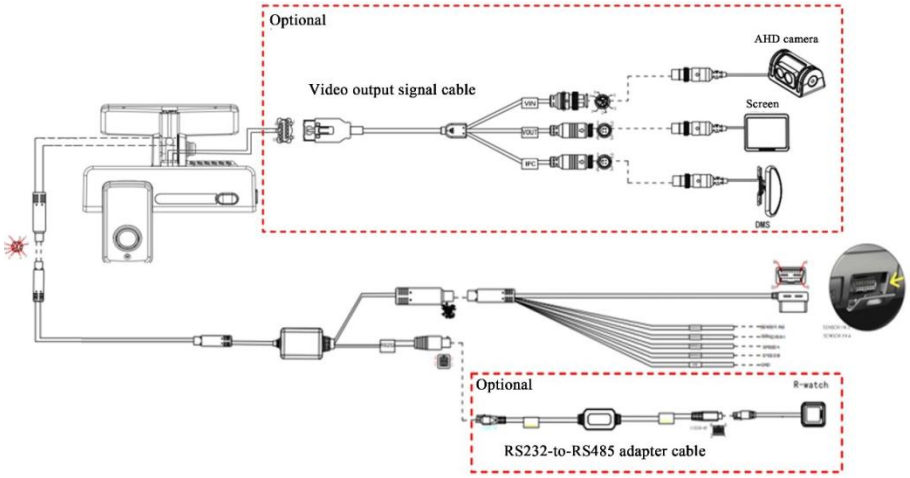


Rear view

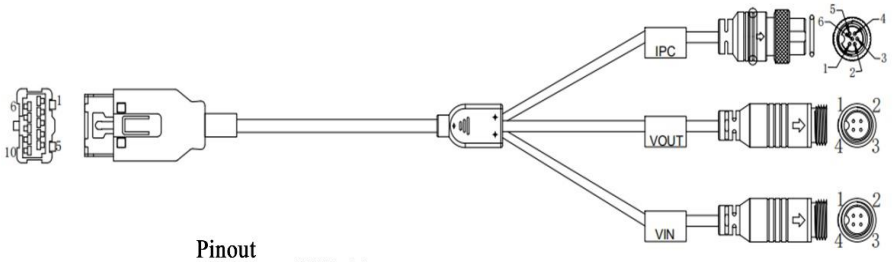
System connection diagram for power supply through loose wire



OBD wiring diagram



Video output cable connector pinout



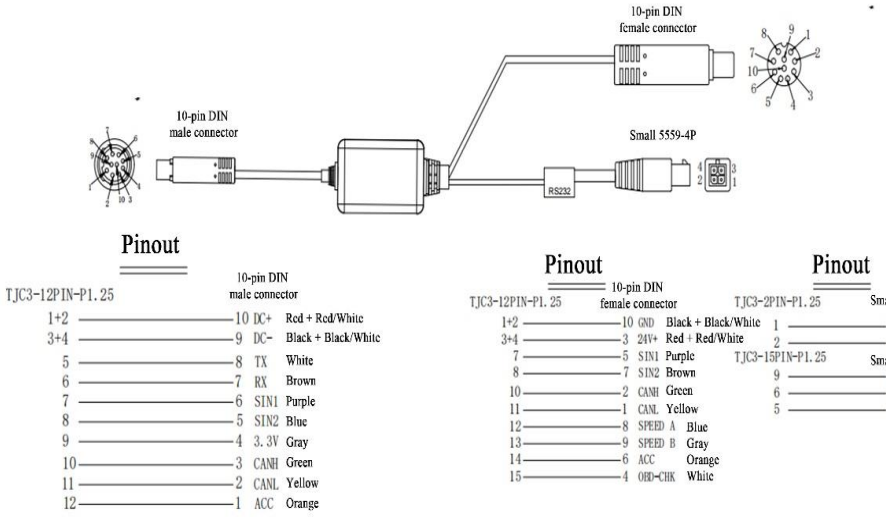
Pinout

10-pin GWM male connector		RS765-6 aviation female connector	
2		1 (TXN)	Black
7		2 (TXP)	White
1		4 (RXN)	Brown
6		5 (RXP)	Orange
10		3 (VCC)	Red
3		6 (GND)	Gray
Shell		Shell (Ground) × 3	

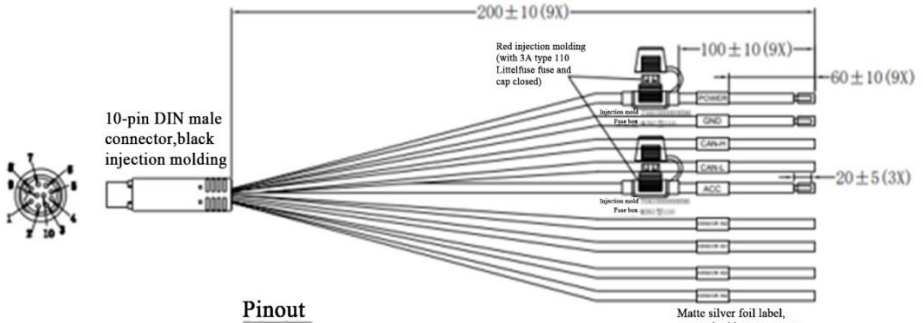
10-pin GWM male connector		RS765-4 aviation male connector VOUT	
4		4 (VOUT)	Yellow
5+9		2 (GND)	Shield

10-pin GWM male connector		RS7654 aviation male connector VIN	
8		4 (VOUT)	Green
3		2 (GND)	Shield
10		1 (+12V)	Purple

Power supply box connector pinout



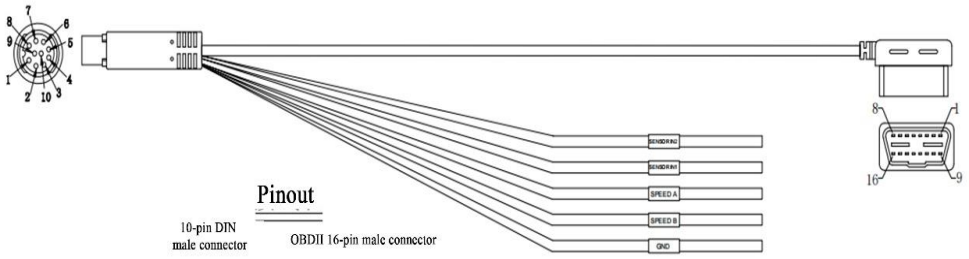
Power output cable connector pinout



Pinout

		Loose wire		10-pin DIN male connector
Semi-stripped	ACC	Orange	3A fuse boxtt	6
	CAN-L	Yellow		1
	CAN-H	Green		2
	SENSOR IN3	Blue		8
	SENSOR IN2	Green/Yellow		7
	SENSOR IN1	Gray		5
	SENSOR IN4	Green/Black		9
Semi-stripped	POWER	Red	3A fuse boxtt	3
Semi-stripped	GND	Black		10

OBD cable connector pinout



Pinout

10-pin DIN male connector		OBDII 16-pin male connector
GND Black	10+4	4+5
CAN-H Green	2	6
CAN-L Yellow	1	14
POWER Red	3 (3A resettable fuse)	16
SPEED A Green/Yellow	8	
SENSOR IN2 Blue	7	
SENSOR IN1 Gray	5	
SPEED B Green/Black	9	
CND Black	10	