

## Five in One 4CH HDD Mobile DVR (MR9704C)



### FEATURES:

- Built-in high performance chipsets, coded with H.265/H.264 standard, high compression rate and image quality
- AHD/TVI/CVI/IPC/ANALOG five in one video input, wide compliance
- Maximum 5 channels live preview and storage
- 1CH synchronized CVBS AV output, 1CH VGA output
- Hard Disk Auto-Heating System (Optional)
- Support UPS power input
- Built-in G-sensor, monitor the driving habits
- Reverse Assistance
- Adjust the camera image horizontally and vertically

### Power:

- Professional In-Vehicle power design, 8-36V DC Wide Voltage Range
- Multiple protection circuits like under-voltage, short, reversed plug-in
- Smart power management system, shutdown under low voltage, low consumption when standby

- Report the GPS info to the server regularly with very low power consumption, compliant with JT/T 794-2011 standard

#### Data Storage:

- Built-in super capacitor to avoid data loss and disk damage caused by sudden outage
- Special file management system to encrypt and protect the data
- Proprietary technology to detect the bad track of the disk which can make sure the continuity of video and long service life of the disk
- Support 2.5 inch HDD/SSD, maximum 4TB
- Support SD card storage, maximum 512GB

#### Transmission Interface:

- Support GPS/BD/GLONASS (optional), high sensitivity, fast positioning
- Support wireless download by WiFi(optional), 802.11b/g/n, 2.4GHz
- Support 3G/4G transmission, LTE/HSUPA/HSDPA/WCDMA/EVDO/TD-SCDMA

#### Technical parameter:

Item	Device Parameter	Performance
System	Operating System	Embedded Linux OS
	Operating Language	Chinese/English
	Operating Interface	GUI, Support USB mouse
	Password Security	Two Layer password Admin/User
Audio & Video	Video standard	PAL/NTSC
	Video compression	H.265/H.264
	Image resolution	720P/960H/D1/CIF
	Playback quality	720P/960H/D1/CIF
	Decoding ability	4ch 720P real time
	Recording quality	Class 1-6 optional
	Image display	Single/QUAD display optional
	Audio Compression	G.711A / G.711U / G.726
	Audio recording	Audio & Video synchronized recording
Recording	Recording mode	Automatic/Alarm

& Playback	Video bit rate	Full frame 4096Mbps, 6 classes image quality optional
	Audio bit rate	8KB/s
	Storage media	SD card + HDD/SSD storage
	Video inquiry	Inquiry by channel/Recording type/Alarm Type
	Local playback	Local 4CH
Firmware upgrading	Upgrading mode	Manual/Automatic/Remote/Emergency Recovery
	Upgrading method	USB disk/Wireless network/SD card/Hard disk
Interface	AV input	4ch 4pin aviation + 1ch 6pin aviation for IPC
	AV output	1ch VGA video output, 1ch aviation AV output
	Alarm input	4 digital inputs (4Positive/Negative trigger)
	HDD/SSD	1 HDD/SSD (up to 4TB, support hot plug/unplug)
	SD card	1 SDXC High speed card (up to 512GB)
	USB interface	1 USB 2.0 (support U disk/mouse)
	Ignition input	1 ACC signal
	UART	1 LVTTTL Level
	LED Indication	PWR/RUN
	Ethernet	1 x 6 pin aviation to RJ45 (10M/100M) 500mA@12V
	Disaster Recovery	1 x 5PIN aviation interface
	Disk lock	1
	Debug port	1
Function Extension	GPS/BD/GLONASS	Support detecting antenna Plug in/Unplug/Short circuit
	3G/4G	Supports CDMA/EVDO/GPRS/WCDMA/FDD

		LTE/TDD LTE
	WIFI	802.11b/g/n, 2.4GHz
	IPC	6Pin M-12 aviation interface
Others	Power input	8V~36V DC
	Power output	5V 300mA
	Power consumption	Standby 4Ma/12A Power consumption: AVG 6.24W (excluding peripherals)
	Working temperature	-20 --- 70°C
	Storage Size	H.265 720P 270MB/h/channel H.264 720P 510MB/h/channel
	Dimension	162mm*153mm*52mm


## The interface definition

### 1. Power interface

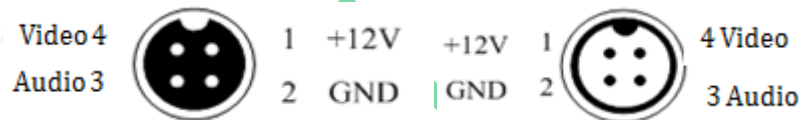
<b>9-36V</b>	<b>9-36V</b>	<b>ACC</b>
<b>GND</b>	<b>Reserve</b>	<b>GND</b>

### 2. I/O Interface definition

<b>1</b>	<b>3</b>	<b>5</b>	<b>7</b>	<b>9</b>
<b>2</b>	<b>4</b>	<b>6</b>	<b>8</b>	<b>10</b>

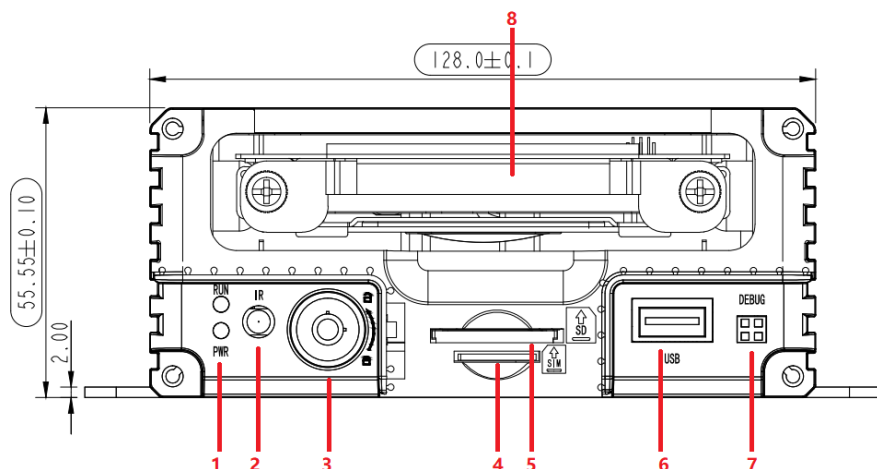
					
PIN	Color	Line mark	PIN	Color	Line mark
1	Blue	OUT	2	Black	GND
3	Purple	IN2	4	Purple	IN1
5	Purple	IN4	6	Purple	IN3
7	Red	5V	8	White	RS232_TXD(TTL)
9	Grey	IR	10	Yellow	RS232_RXD(TTL)

### 3. Audio and video interface definition

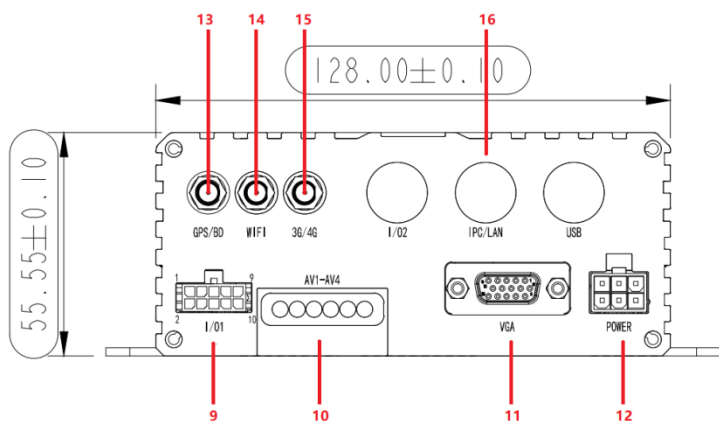


### 4. External interface

Front Panel:



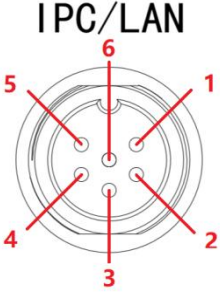
Back Panel:



Number	Instructions	Number	Instructions
1	LED	9	I/O1
2	IR	10	AV1-AV4(Contains CVBS output)
3	SD Lock	11	VGA
4	SIM Card	12	POWER
5	SD Card	13	GPS/BD Antenna

6	USB	14	WIFI Antenna
7	DEBUG	15	3G/4G Antenna
8	HDD	16	Network

Network Interface Definition

 IPC/LAN	SN	Definition
	1	TX-
	2	TX+
	3	VCC
	4	RX-
	5	RX+
	6	GND

5. Outline

drawing

## 6. Outline drawing

