

User Manual

MTPMS-02

1、Product Description

The tire pressure monitoring system uses sensors installed on the tires to monitor the internal pressure and temperature of the tires, and uses wireless radio frequency technology to transmit the collected data information to a receiver installed in the cab. It can monitor the air pressure and temperature information of automobile tires in real time, as well as alarm abnormal conditions such as low pressure, high pressure, air leakage, and high temperature of tires, and remind car owners to take corresponding effective measures, so as to play a role in safety assistance.

2、Product Photos



Receiver



Tyre pressure sensor

3、Product Specifications

3.1 Receiver Parameters

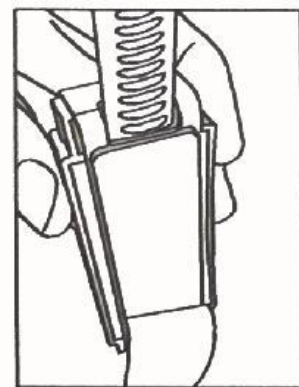
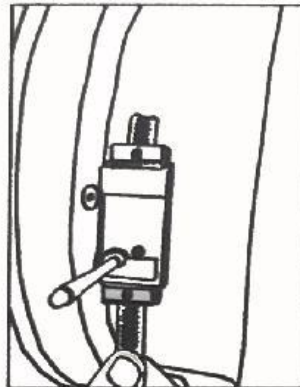
Items	Parameters
Operating Mode	Receive sensor data transmission
Operating Voltage	12V
Operating Current	≤10mA
Operating Frequency	433.92MHz
Operating Environment	-35℃~+80℃
Display Accuracy	±0.1bar
Shell Material	ABS+PC
Weight	55g

Dimensions	93*40*32.2mm
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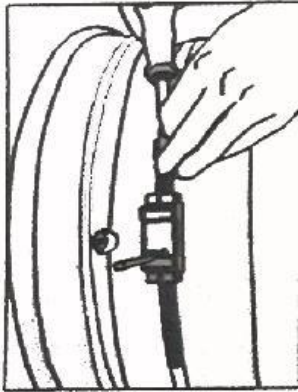
3.2 Built-in Sensor Parameters

Installation Method	Strap-on
Battery	CR2450H(460mAh)
Standby Current	<0.7uA
Emission Current	<10mA
RF Signal	FSK
Transmitted Frequency	433.92MHz±30KHZ
Pressure Measurement Range	0-15Bar
Temperature Measurement Range	-25°C~+99°C
Pressure Display Accuracy	±0.1bar
Temperature Measurement Accuracy	±2°C
Operating Temperature Range	-35°C~+125°C
Battery Life	More than 3 years (non-replaceable)
Dimensions	79*27*16.6mm

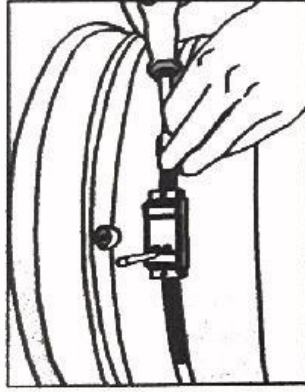
4、Built-in Sensor Installation



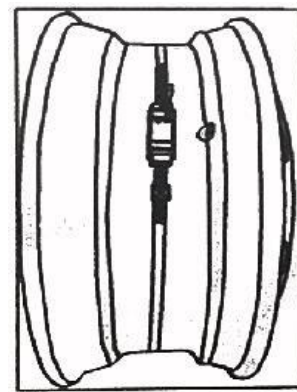
- ① Wrap the strap around the hub ② Thread the sensor on the perforated strap
③ Tighten the screws slightly to secure the strap



④ Install anti-slip rubber pads



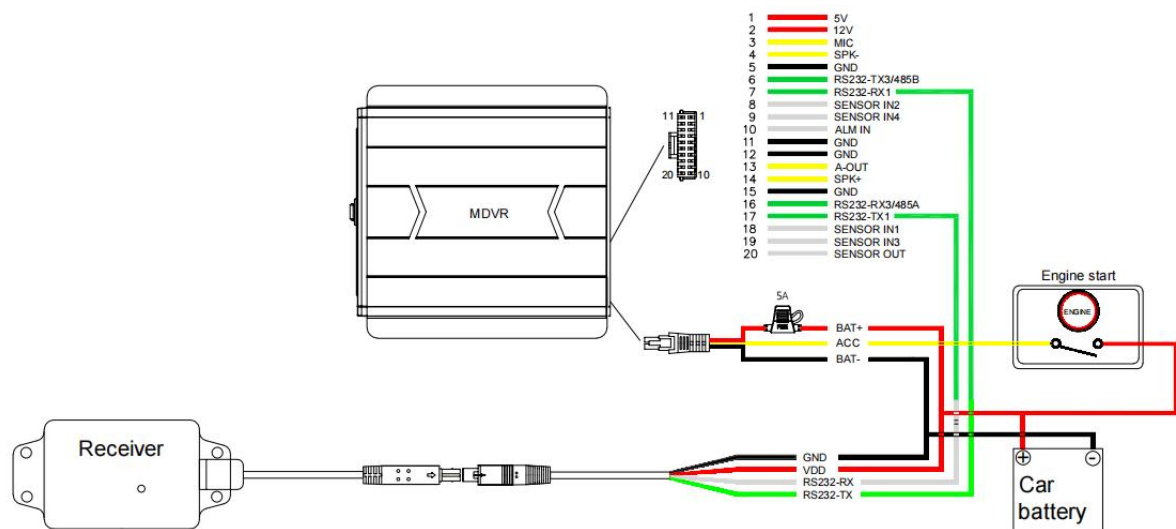
⑤ Tighten the strap screws



⑥ The installation is complete

5. Receiver and MDVR Wiring

The RS232-RX of the receiver should be connected to the RS232-TX of the MDVR. The RS232-TX of the receiver should be connected to the RS232-RX of the MDVR. The VDD of the receiver and the BAT+ of the MDVR should be connected to the B+ of the power supply. The GND of the receiver and the BAT- of the MDVR should be connected to the GND of the power supply.



6、Dashcam & MDVR Host Configuration

After completing the wiring, power on the main unit and accessories. Connect your mobile phone to the main unit's Wi-Fi network, then use the configuration app (MCTool) to set the parameters. The specific configuration is as follows:

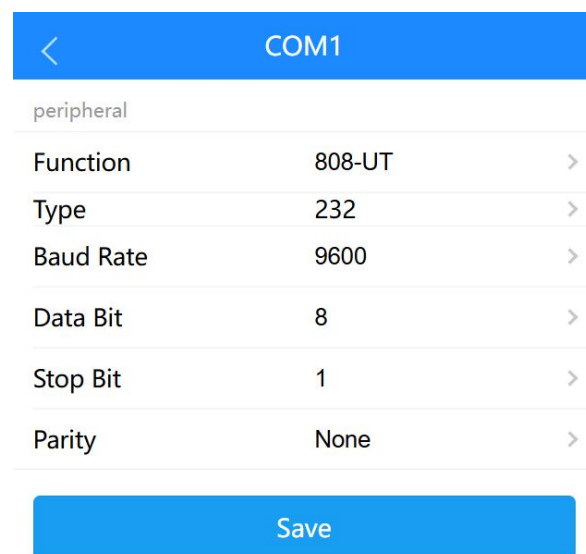
1) MCTool > Setting > Peripheral > COM1

Function selected as 808-UT

Type selected as 232

Baud rate selected as 9600

Other settings remain at their default values.



COM1		
peripheral		
Function	808-UT	>
Type	232	>
Baud Rate	9600	>
Data Bit	8	>
Stop Bit	1	>
Parity	None	>
Save		

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2) MCTool > Setting > Serial Information

Check whether the status of COM1 is normal

Serial Information	
Name	COM1
Function	808-UT
Status	normal
Remarks	

9、MettaXIOT Platform configuration

1) Monitor

Please first ensure that the device has been deployed on the MettaXIOT platform and possesses valid positioning information.

2) Devices > IMEI > Search > Edit

Locate the device requiring configuration within the platform and proceed to edit it.

MettaX IoT

DashboardCustomersUsersDevicesMonitorVideoReports

17:00:49(UTC+08:00)

liaower

Devices

IMEI5679

ModelSelect

Device NameEnter device name

LabelSelect

Activation Time

Start date - End date

Device statusSelect

PhonePlease enter your phone num

☐ Include sub-customer data

Search

Reset

Sell Devices

Export

Batch Commands

Batch Update

Add

Add Devices in Bulk

License Binding

Tag Management

No.	Device Name	IMEI	Model	Activation Time	Expiration Time	ICCID	Assigned customer	Operation
1	MC202-75679	940077775679	MC202	2024-11-26 19:35:08	2035-01-25	-	DevTest	EditCommand

3) Sensor Configuration > Add Sensors

Add a new sensor

MC202-75679(940077775679)

Basic Information

Calculation Rules

Sensor Configuration

License

Data

Daylight Saving Time

Add Sensors

Sensor No defaults to 1

Sensor Name may be customised as required.

Sensor Type may be selected as required (this document uses tyre pressure sensors as an example), with TPMS selected.

Sensor Model selected as TPMS01

Number of Tyres Number of Tyre Pressure Sensors

RFID tags for tyre pressure sensors (enter the number of RFID tags per tyre pressure sensor)

Sensor Configuration

Get Sensor Value

* Sensor Type

TPMS

* Sensor Model

TPMS01

Basic Information

* Sensor No.

1

* Sensor Name

TPMS01

Sensor Information

Number of Tires

4

No. 1

RFID

1B02438A

* Tire Pressure(kPa)

Tire Pressure(kPa)-left_front

* Tire Temperature(°C)

Tire Temperature(°C)-left_front

Save

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Sensor Configuration

Get Sensor Value

No. 1

RFID

1B02438A

* Tire Pressure(kPa)

Tire Pressure(kPa)-left_front

* Tire Temperature(°C)

Tire Temperature(°C)-left_front

No. 2

RFID

* Tire Pressure(kPa)

Tire Pressure(kPa)-right_front

* Tire Temperature(°C)

Tire Temperature(°C)-right_front

No. 3

RFID

1B0439B6

* Tire Pressure(kPa)

Tire Pressure(kPa)-left_back

* Tire Temperature(°C)

Tire Temperature(°C)-3left_back

No. 4

RFID

* Tire Pressure(kPa)

Tire Pressure(kPa)-right_back

* Tire Temperature(°C)

Tire Temperature(°C)-right_back

Save

10、 MettaXIOT Platform Information Display

Report generation for tyre pressure sensors and viewing historical reports

My Report

353076329902

Report Type: Sensor Report

Time Range: Today

Auto Report

Auto Report

My Report

Report Type

Sensor Report

Report Name

Sensor Report_20251223190456

Time Type

Time Range

Customize

Time Range

Today

Device

Customer

Customer

coffee

Sensor Name

Please enter Sensor Name

Attribute Name

Please enter Attribute Name

Sensor Model

Please enter Sensor Model

Cancel

Search

Save

MettaX Dashboard Devices Monitor Video Reports 19:03:23(UTC+08:00) coffeeSU

My Report Add

353076329902
Report Type: Sensor Report
Time Range: Today

Auto Report

Sensor Report

Date: 2025-12-23 00:00 ~ 2025-12-23 23:59:59 Device: Customer * Device: MC904-2 Sensor Name: Please enter Sensor Name

Attribute Name: Please enter Attribute Name Sensor Model: TPMS / TPMS01 Sensor No.: Please enter Sensor No. Search Real

No.	Device Name	IMEI	or Name	Attribute Name	Sensor Type	Sensor No.	Reported Data	Report Time
1	MC904-29902	353076329902	IMS01	Tire Pressure(kPa)-left_front	TPMS01	1	122	2025-12-23 19:01:01
2	MC904-29902	353076329902	IMS01	Tire Temperature(°C)-left_front	TPMS01	1	26	2025-12-23 19:01:01
3	MC904-29902	353076329902	IMS01	RFID	TPMS01	1	1B043986	2025-12-23 19:01:03
4	MC904-29902	353076329902	IMS01	Tire Pressure(kPa)-left_back	TPMS01	1	122	2025-12-23 19:01:03
5	MC904-29902	353076329902	IMS01	Tire Temperature(°C)-left_back	TPMS01	1	26	2025-12-23 19:01:03
6	MC904-29902	353076329902	IMS01	Tire Pressure(kPa)-left_back	TPMS01	1	121	2025-12-23 19:02:44

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7、Warm Reminders

① The installation process should be operated in strict accordance with the content of this manual, and be sure to ask experienced tire installation technicians to disassemble and assemble, if there are any problems caused by irregular installation, our company will not be responsible.

② When you need to disassemble and assemble the tire again, avoid the tire pressure sensor to prevent damage.

③ When setting the alarm value, it is necessary to strictly abide by the range of the alarm value, and different models should be set according to the parameters of their tires or manuals, and the range given by the agent, and there is no need to modify the system parameters after setting them.

④ Please check and confirm the battery level to make sure that it is charged.