

MekedeTech DU-TPMS

MekedeTech DUDUAUTO Car TPMS Tire Pressure Monitoring System DU-TPMS User Manual



Figure 0.1: The MekedeTech DUDUAUTO External TPMS system, featuring the digital LCD monitor and four external tire sensors.

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of your MekedeTech DUDUAUTO Car TPMS (Tire Pressure Monitoring System) with external sensors, model DU-TPMS. This system is designed to monitor your vehicle's tire pressure and temperature in real-time, enhancing driving safety by alerting you to potential tire issues. **Important: This external TPMS system is designed to be used with DUDUAUTO Car Multimedia systems. Some functions may not be supported when used with other multimedia systems.** Please read this manual thoroughly before using the product.

2. SAFETY INFORMATION

- Ensure all components are securely installed to prevent detachment during vehicle operation.
- Do not attempt to disassemble or modify the sensors or monitor, as this may void the warranty and cause malfunction.
- Regularly check tire pressure with a calibrated gauge, as the TPMS is an aid and not a substitute for manual checks.
- Pay attention to all alerts and address tire issues promptly.
- Keep the monitor and sensors away from extreme temperatures and direct sunlight for prolonged periods to ensure optimal performance and longevity.

3. PACKAGE CONTENTS

Verify that all items listed below are included in your package:

- 1 x TPMS Monitor (Host Display)
- 4 x External Tire Sensors
- 1 x USB Charging Cable
- 1 x Installation Tool (Wrench)
- 4 x Anti-theft Nuts
- 1 x User Manual

Package Contents



DUDU-External TPMS



Figure 3.1: Contents of the DUDUAUTO External TPMS package, including the monitor, four external sensors, installation tools, and charging cable.

4. SETUP

4.1. Monitor Activation

To activate the TPMS monitor, press and hold the power button until the display turns on. The monitor will then be ready to receive data from the sensors.

4.2. Sensor Installation

Install the external sensors onto your vehicle's tire valve stems. Ensure each sensor is tightened securely using the provided anti-theft nuts and wrench to prevent air leakage and theft. The monitor will automatically detect and display the corresponding tire pressure and temperature data once the sensors are installed and the vehicle is in motion or the tires are rotated.

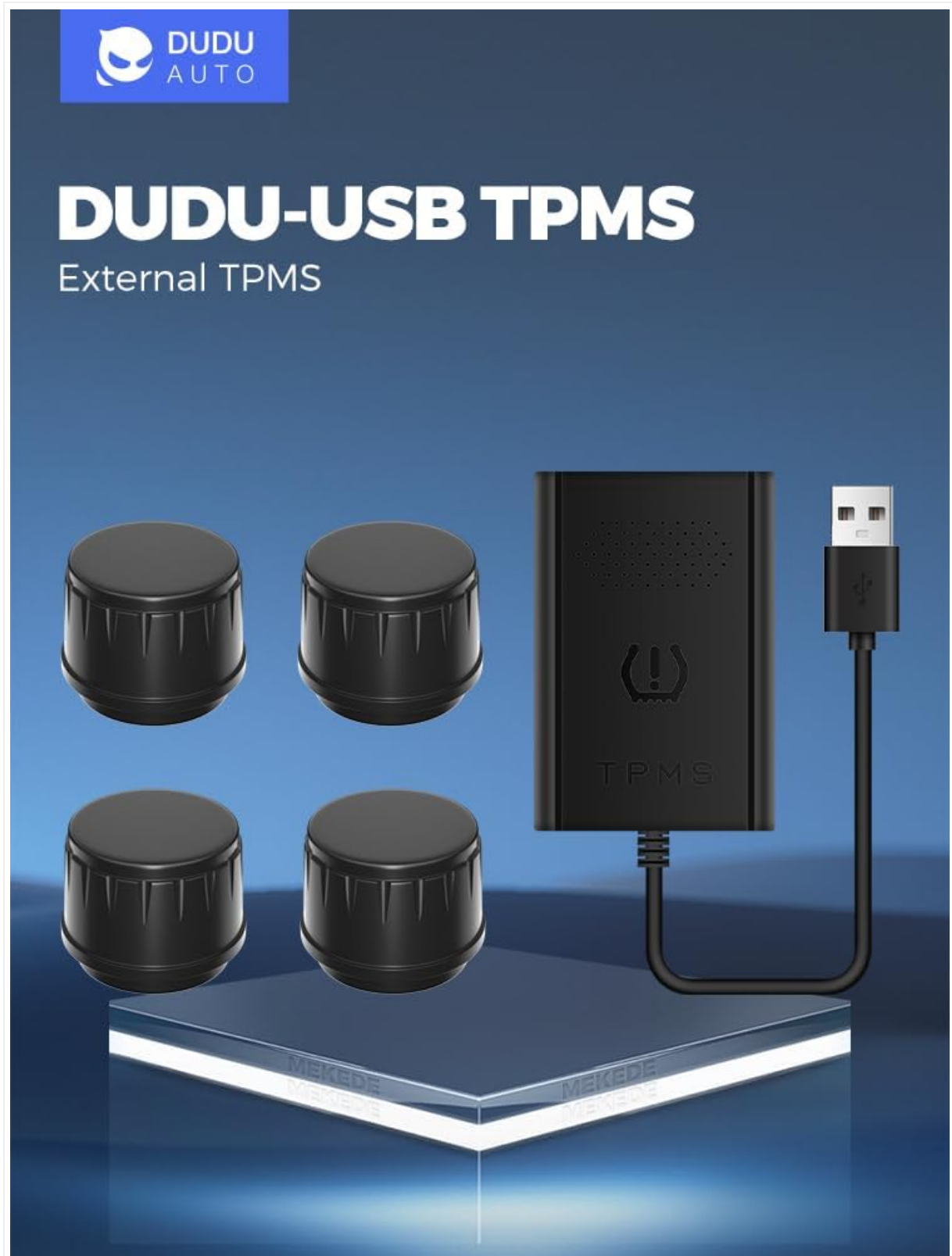


Figure 4.1: Close-up view of the four external tire pressure monitoring sensors and the main USB unit.

Easy to Monitor Tire Status

Working principle



Built-in
TPMS



External
TPMS



USB tire pressure host



Car Navigation

1

Built-in or external sensors detect tire pressure data and send it wirelessly to the tire pressure host.



2

The tire pressure host is connected to the vehicle USB interface, and the tire pressure data is transmitted to the navigation.



3

The navigation receives tire pressure data, which is displayed directly on the desktop.

Figure 4.2: Diagram illustrating the working principle of the TPMS: sensors detect data, transmit to the USB host, which then sends data to the car navigation for display.

5. OPERATING INSTRUCTIONS

5.1. Real-time Monitoring

Once installed, the TPMS monitor continuously displays the pressure and temperature for each tire. The display typically shows the front left, front right, rear left, and rear right tire data. This allows for immediate awareness of your tire conditions. The TPMS data can be viewed directly on the desktop after installing the DUDU TPMS APP on your compatible DUDUAUTO Car Multimedia system.

Tire Pressure Desktop Direct Display

It's very convenient

We can view the TPMS data directly at the desktop after install DUDU TPMS APP



Figure 5.1: The TPMS monitor displaying real-time tire pressure and temperature data on a car's multimedia system desktop.

5.2. Alerts and Warnings

The system is equipped with an alarm function. If a tire's pressure or temperature deviates from preset safe ranges, the monitor will flash the corresponding tire's data and emit an audible alert. This immediate notification helps prevent potential accidents and tire damage.

6. MAINTENANCE

- **Charging:** Recharge the monitor using the provided USB cable when the battery indicator is low. The monitor may also feature solar charging capabilities.
- **Sensor Care:** Periodically check the external sensors for tightness and cleanliness. Replace sensor batteries as needed (CR1632 type, 180mAh).
- **Cleaning:** Wipe the monitor and sensors with a soft, dry cloth. Avoid using harsh chemicals or abrasive cleaners.

7. TROUBLESHOOTING

- **No Signal/Missing Data:** Ensure sensors are correctly installed and tightened. Drive the vehicle for a short period to allow sensors to transmit data. Check monitor battery level.
- **Inaccurate Readings:** Verify tire pressure with a reliable manual gauge. Recalibrate or re-pair sensors if discrepancies persist.
- **Alarm Sounds Continuously:** Check all tire pressures and temperatures. If a tire is outside the safe range, inflate/deflate or allow to cool. If the alarm persists without apparent cause, consult customer support.

8. SPECIFICATIONS

Feature	Specification
Brand	MekedeTech
Model	DU-TPMS
Sensor Type	External
Sensor Battery Type	CR1632 (180mAh)
Sensor Standby Current	< 0.7uA
Sensor Transmit Current	< 8mA
Temperature Measurement Accuracy	±4°C (-20°C to 50°C)
Operating Temperature Range	-20°C to 60°C
Pressure Measurement Range	0-8 Bar
Accuracy (Infineon Chip)	As small as 0.1 Bar



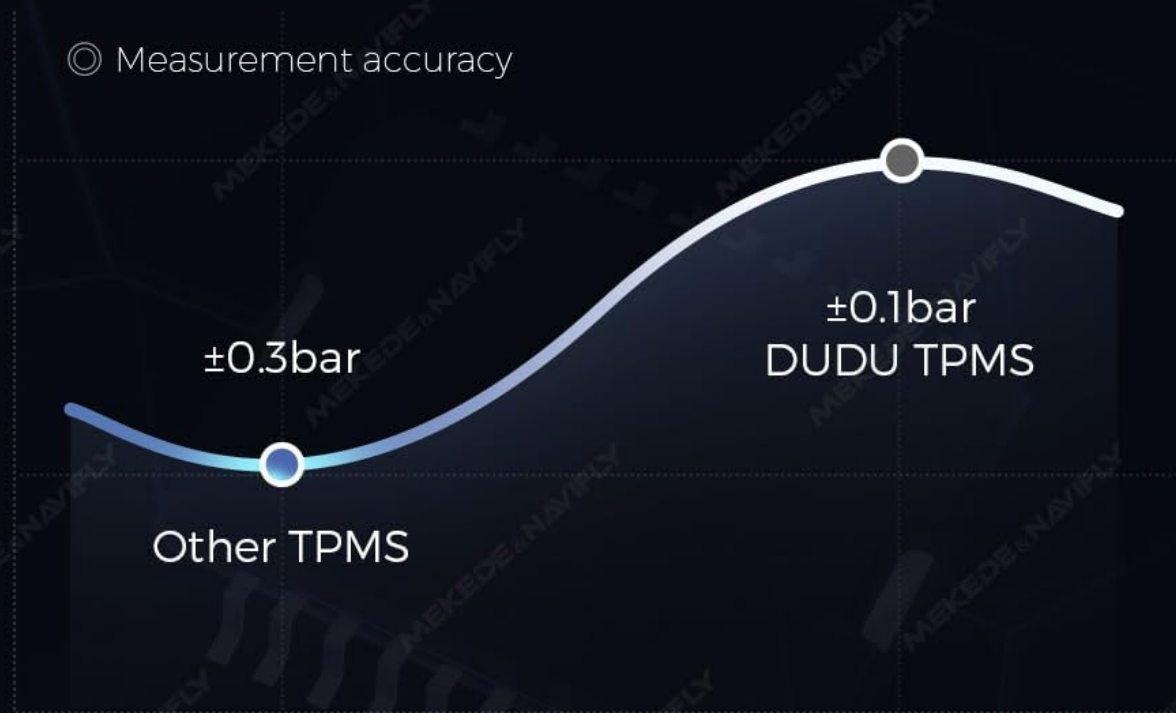
Battery type	CR1632 (180mAh)	Standby current	< 0.7uA
Temperature Measurement Accuracy	±4°C -20°C~50°C	Operating Temperature Range	-20°C ~60°C
Pressure Measurement Range	0-8Bar	Transmit current	< 8mA

Figure 8.1: Detailed specifications and dimensions for the external tire pressure sensors.

For Infineon sensing chips

Accuracy is as small as 0.1bar

Thanks to the German For Infineon high-precision detection chip, the tire pressure measurement accuracy can be as fine as 0.1bar, which brings greater safety for your driving.



* The above data is based on laboratory data

Figure 8.2: Graph illustrating the improved measurement accuracy of the DUDUAUTO TPMS with Infineon sensing chips compared to other TPMS systems.

Built-in versus external distinction

External OR Internal



External sensor

Accuracy	★ ★ ★ ★ ★
Installation Process	★ ★ ★ ★ ★
Battery Life	★ ★ ★ ★ ★
Anti-theft	★ ★ ★ ★ ★
Usage Environment	★ ★ ★ ★ ★



Built-in sensor

Accuracy	★ ★ ★ ★ ★
Installation Process	★ ★ ★ ★ ★
Battery Life	★ ★ ★ ★ ★
Anti-theft	★ ★ ★ ★ ★
Usage Environment	★ ★ ★ ★ ★

Figure 8.3: Comparison highlighting the distinction between built-in and external TPMS sensors, showing installation and general characteristics.

9. WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the contact details provided with your product packaging or visit the official MekedeTech website. Keep your purchase receipt as proof of purchase for any warranty claims.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question