



Purchase with Confidence. Install with Ease.

The TWD-1500 was designed and engineered for a simple, worry-free installation. DIYers can follow the clear step-by-step guide. Or any trailer, RV, or fleet service center can install it quickly using standard tools. Just hand them your TWD-1500 box — everything they need is inside.

Most installations take less than an hour.

1. Before You Begin

You'll need:

- Your **TWD-1500 kit**
- A smartphone with the **TrailerWatchdog App** (iOS / Android)
- Basic tools (listed below)

Tip: TPMS sensor position data comes pre-loaded on your TWD-1500. Simply install each sensor to its marked location and connect via the app.

2. What's in the Box

- 1 × Master TWD-1500 unit (black box with product label)
- 2 × Rear-mounted slave modules
 - The two smaller, matching modules are the slave units. - Right module marked with **red 4-pin power connector**)
- 1 × Wire harness (“Slave Unit Splitter” connector goes to the rear of the trailer)
- 2 – 8 × Magnetic axle temperature sensors (depending on axle count)
- 2 – 12 × Screw-on TPMS tire sensors (depending on tire count)
- 1 × Packet of mounting hardware (misc screws, zip ties, anchors, wire crimps, etc...)





3. Tools You'll Need

Choose Your Installation Method:

You can install the TWD-1500 using method A or B:

1. **Option A: No-Drill Adhesive Mounting**

OR

2. **Option B: Traditional Screw Mounting**

Common Tools (for both methods):

- Cleaning solvent and a clean rag (to clean mounting surfaces of installation sites; Acetone or Alcohol works well)
- Basic socket set (for power connection)

Additional Tools (if you choose to Option B - Drill):

- Electric drill + 1/8" drill bit (for pilot holes)
- 1/4" driver bit (for self-tapping screws)



Most users find the adhesive mount strong and simple for standard trailers. The drill method is ideal for heavy-duty applications or high-vibration environments.

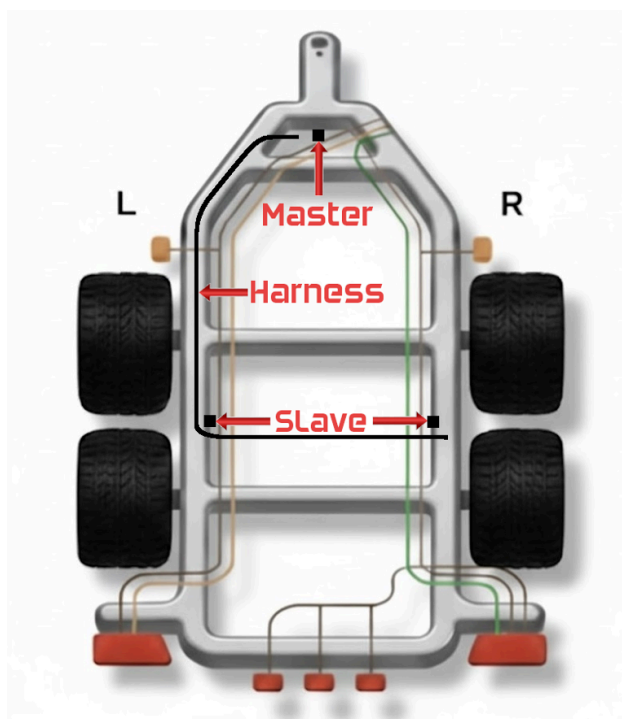
4. Mounting the Modules

Your TWD-1500 system includes **three modules**:

- **1 Master Unit** (main control box)
- **2 Slave Units** (identical in size, located near each axle group)

A. Identify Each Module

- The **Master Unit** is the **larger box** with the main product label and power leads.
- The **Slave Units** are the **two smaller, identical modules**.
 - The **right-side slave** is marked with a **red 4-pin power connector** for easy identification.





B. Choose Mounting Locations

1. Master Unit (Main Controller):

- a. Mount the **Master Unit** near the **neck of the trailer**, as close as practical to the **main electrical junction or power connection point**.
- b. Choose a location that provides:
 - i. Easy access to the trailer's **main wiring harness or junction box** (for power connection).
 - ii. A clear cable path to both **left and right slave modules**.
- c. The unit can be mounted on the **inside of the main frame rail** or within a **protected enclosure** to shield it from moisture and road debris.
- d. Keep the unit accessible for maintenance or inspection, but out of direct line with any moving parts.

Mounting the Master Unit near the trailer neck ensures the cleanest power connection and the most efficient cable routing to both slave modules.



2. Slave Units (Left & Right Axle Modules):

- a. Mount each slave unit **near the outermost trailer axles**, close to the wheel hubs they monitor.
- b. The modules can be mounted **inside or outside the trailer rail**. *Inside is preferred* for added protection.
- c. Ensure both units are positioned symmetrically for clean cable routing to each axle's sensors.





C. Prepare the Mounting Surface

1. Clean the mounting area thoroughly using a **solvent and rag** to remove dirt, oil, or grease.
2. Let the area dry completely before mounting. This ensures a strong and lasting bond.

D. Mount the Modules

You can install your modules using one of two options:

Option A: No-Drill (Adhesive Mounting)

Ideal for quick installation or when drilling into the trailer frame isn't desired.

1. Peel off the protective film from the **pre-applied adhesive backing** on each module.
2. Carefully position the module in the chosen location and press firmly for **at least 30 seconds**.
3. Allow the adhesive to cure for **15–30 minutes** before connecting cables to unit.

Option B: Drill Mounting

Recommended for heavy-duty applications or high-vibration environments.

1. Mark the mounting hole locations through the pre-formed holes in each module's bracket.
2. Drill **1/8" pilot holes** and use the included **self-tapping screws** to secure each module firmly in place.

Final Check:

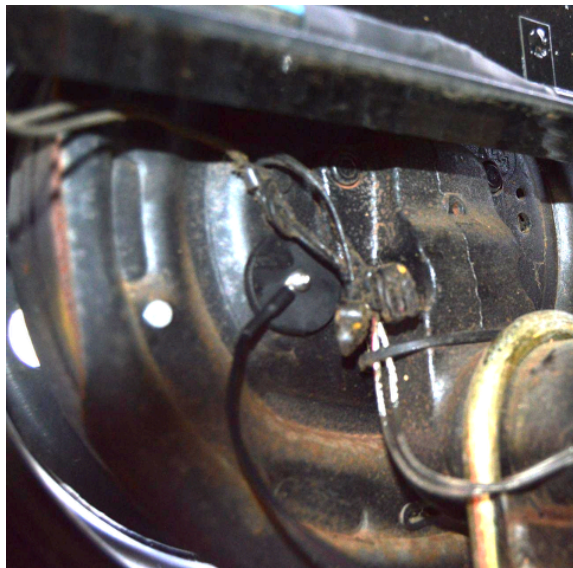
- All modules should be mounted securely, with cables routed away from moving parts, suspension travel, and direct water spray.
- Confirm the adhesive or screws are holding firmly before proceeding to the next step.

5. Install Axle Sensors

Each **slave module** connects directly to the axle temperature sensors on its respective side of the trailer.

- The **left-side slave** controls the sensors on the **driver's side**.
- The **right-side slave** (with the **red 4-pin connector**) controls the sensors on the **passenger side**.





A. Choose Sensor Locations

1. Locate a **flat, clean metal surface** on each axle, ideally as close as possible to the **center or bearing point**.
2. The surface should be identical on every axle to ensure consistent temperature readings.
3. Each magnetic sensor is rated for **30 lbs of holding force**, so a clean and flat surface ensures a strong connection.

For drop axles or custom setups, position sensors where they remain clear of suspension movement and road debris.

B. Prepare the Mounting Surface

1. Wipe each chosen mounting spot clean with a solvent and rag to remove dirt, grease, and rust.
2. Let the surface dry fully — a clean surface ensures maximum magnetic grip and accurate temperature readings.

C. Mount the Sensors

1. Align each magnetic sensor to its designated mounting point.
2. Press firmly until you feel the magnet lock into place.
3. Double-check that each sensor is **secure and level**, not angled or rocking on uneven metal.
4. Confirm each sensor location matches across axles (for example, all near the hub or bearing centerline).



D. Connect Sensors to the Slave Modules

1. Route each sensor cable back toward its **side's slave module** (left or right).
2. Plug each sensor into the **into each input port** on the slave unit (**Axle 1 input begins in the corner position of each slave unit**) example: Left side Axle 1 is bottom right corner position of the module:
 - o Axle 1 → Input 1
 - o Axle 2 → Input 2
 - o Axle 3 → Input 3 (if applicable)
3. Repeat for both sides so that each slave module has its own correctly numbered sensor connections.

Make sure axle numbering is consistent between the left and right sides — Axle 1 on the left should match Axle 1 on the right.

E. Secure and Protect the Sensor Cables

- Use the included **zip ties and adhesive anchors** to secure the cables neatly along the axle or frame.
- Avoid contact with hot, sharp, or moving parts.
- Clean each anchor point before applying to ensure proper adhesion.

Neat cable routing not only protects wiring but also gives a professional finish.

Final Check:

- Each axle sensor is firmly attached and aligned.
- All connectors are fully seated and secure.
- Cables are tidy and clear of moving components.

Once this is complete, you're ready to move on to **Step 6: Connecting the Harness and Power.**

6. Connect the Harness and Power

The TWD-1500 system connects all three modules — the **Master Unit** and the two **Slave Units** — through the provided **main wiring harness**. This harness links the system together and delivers both power and data between components.





A. Understand the Connection Layout

Here's the basic setup:

- **Master Unit:** Central control hub that powers and manages the entire system.
- **Left Slave Unit:** Connects to temperature sensors on the **driver's side** of the trailer.
- **Right Slave Unit:** Connects to sensors on the **passenger side** and is identified by the **red 4-pin power connector**.
- **Main Harness:** A "Slave Splitter" cable is used to link the master to both slave modules.

Think of the master as the brain and the slave modules as the hands monitoring each side of your trailer.

B. Connect the Harness

1. **Locate the harness connectors:**
The **single end** of the harness plugs into the **Master Unit**.
The **two split ends** of the harness "Splitter Cable" connect to the **Slave Units** on each side.
2. **Routing tip:**
 - Run the harness neatly along one side of the trailer frame.
 - Use the included adhesive anchors and zip ties to secure it in place.
 - Clean surfaces before sticking anchors for best adhesion.
3. **Crossover connection:**
 - The "Splitter Cable" will need to cross the width of the trailer frame to reach the opposite slave module.
 - It doesn't matter which connector attaches to which slave — both are interchangeable.

The goal is a neat, secure cable path that keeps all wiring protected and out of harm's way.

C. Connect Power to the Master Unit

Your Master Unit comes pre-wired with **red (+)** and **black (-)** power leads, each terminating in **ring connectors** for quick installation. Below are some examples that show which wires to connect to using the ring terminals. **If your trailer doesn't have a terminal block style connection, use the included crimp ends to make the appropriate splice onto the corresponding wires.**

1. **Locate your trailer's main power source:**
 - Look for a **junction box** or **terminal block** where trailer wiring connects.
 - If none is present, you can splice directly into the trailer's running light or auxiliary power circuit using the included crimp connectors.



- o Please see diagram examples below

2. Connect the power leads:

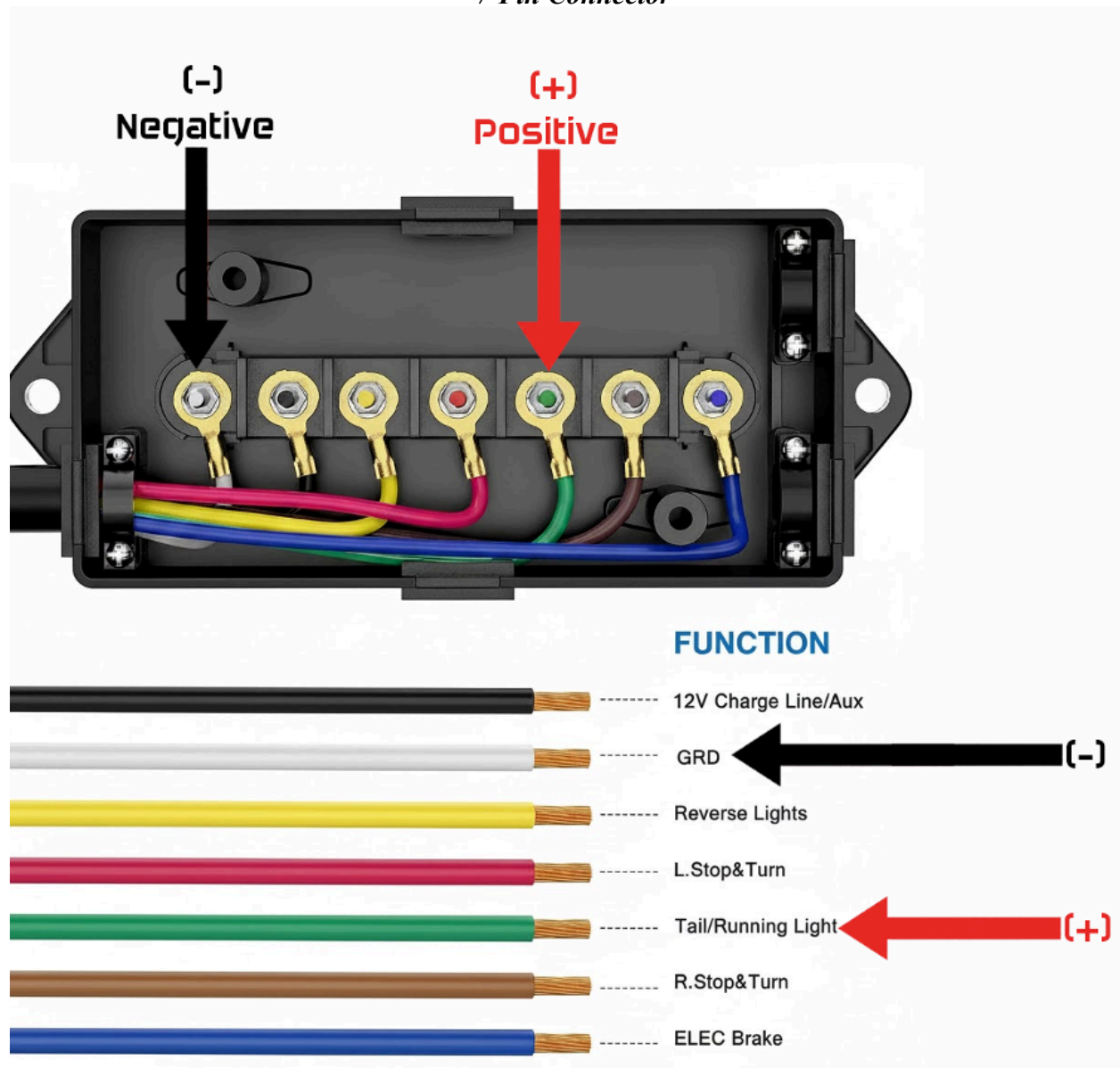
- o Attach the **red (+)** lead to any **12–24V switched power source** (*recommended: running light circuit).
- o Attach the **black (-)** lead to a **good chassis ground** or the negative terminal in the junction box.

3. Confirm power connection:

- o Once connected, turn on your trailer's running lights or ignition, and verify you see it as a device to connect to within the TrailerWatchdog app.

The system draws minimal power (0.1 amps) and is designed for both 12V and 24V trailer systems.

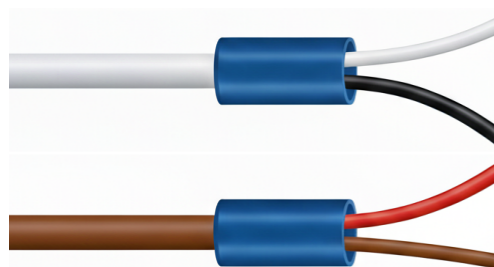
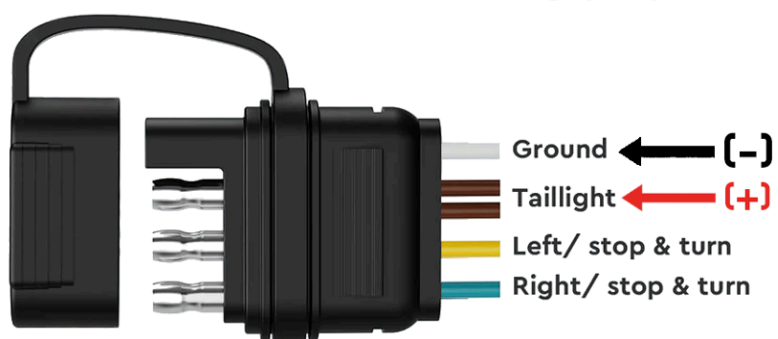
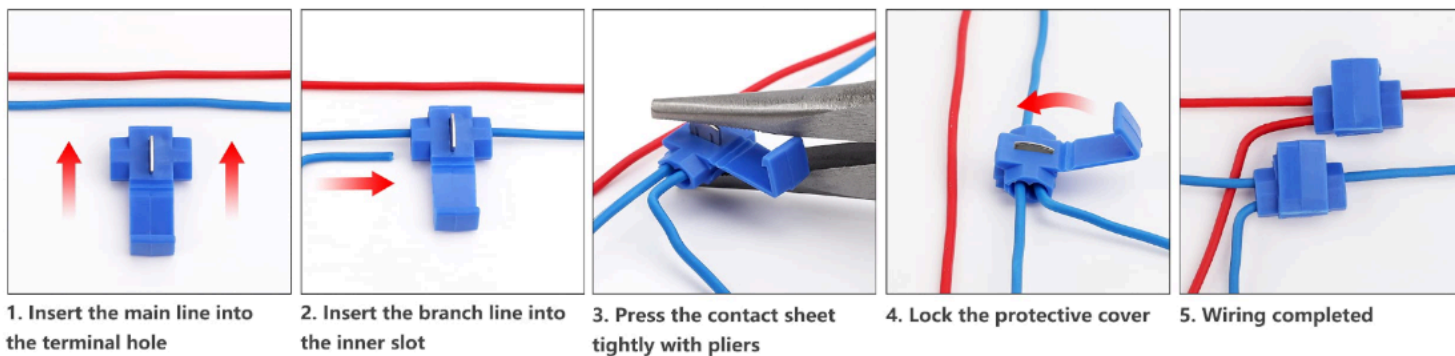
7-Pin Connector



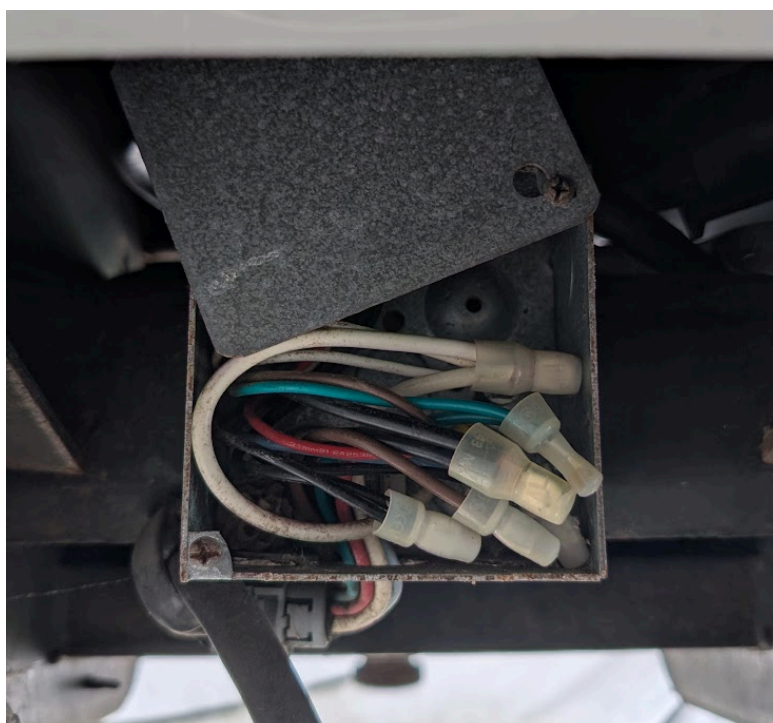


If there is no **junction box** or **terminal block** where the trailer wiring connects, you can splice directly into the trailer's running light or auxiliary power circuit using the included crimp connectors following the instructions below.

4-Pin Connector



Trailer Junction Box





D. Final Cable Check

Before completing the installation:

- Confirm all connectors are **fully seated and secure**.
- Verify all cables are **routed cleanly and tied down**.
- Ensure wires are **clear of suspension movement, heat sources, and sharp edges**.

Congratulations! You've now completed the physical installation.

Next, install your TPMS sensors and connect to your TWD-1500 using the TrailerWatchdog App.

7. Install TPMS Sensors to Marked Locations

Your TWD-1500 comes with TPMS sensor position data pre-loaded. Simply screw each TPMS sensor onto its corresponding marked tire valve stem, then connect to your device using the TrailerWatchdog App — no pairing required.

A. Download and Open the App

The TrailerWatchdog App is available for both iOS and Android:

Android: [Google Play](#)



iOS: [Apple App Store](#)



Once installed, open the app and create or sign into your account.

B. Connect to Your TWD-1500

1. Power on your trailer (running lights or switched power).
2. In the app, tap "Connect".



3. Select your system — it will appear as **TWD-1500-XXXX**, where “XXXX” are the last four digits of your unit’s ID.
4. Once connected, your app will display live communication status with the Master Unit.

C. Final Confirmation

Once connected, your system is ready for use.

You now have **real-time tire pressure, temperature, and axle temperature monitoring** directly on your smartphone.

Exciting news! Your TWD-1500 is now fully active and ready to protect your trailer on every trip.

Next Step:

Proceed to **Section 8: System Check & Alerts** to learn how to monitor, customize notifications, and understand what your TrailerWatchdog is telling you.

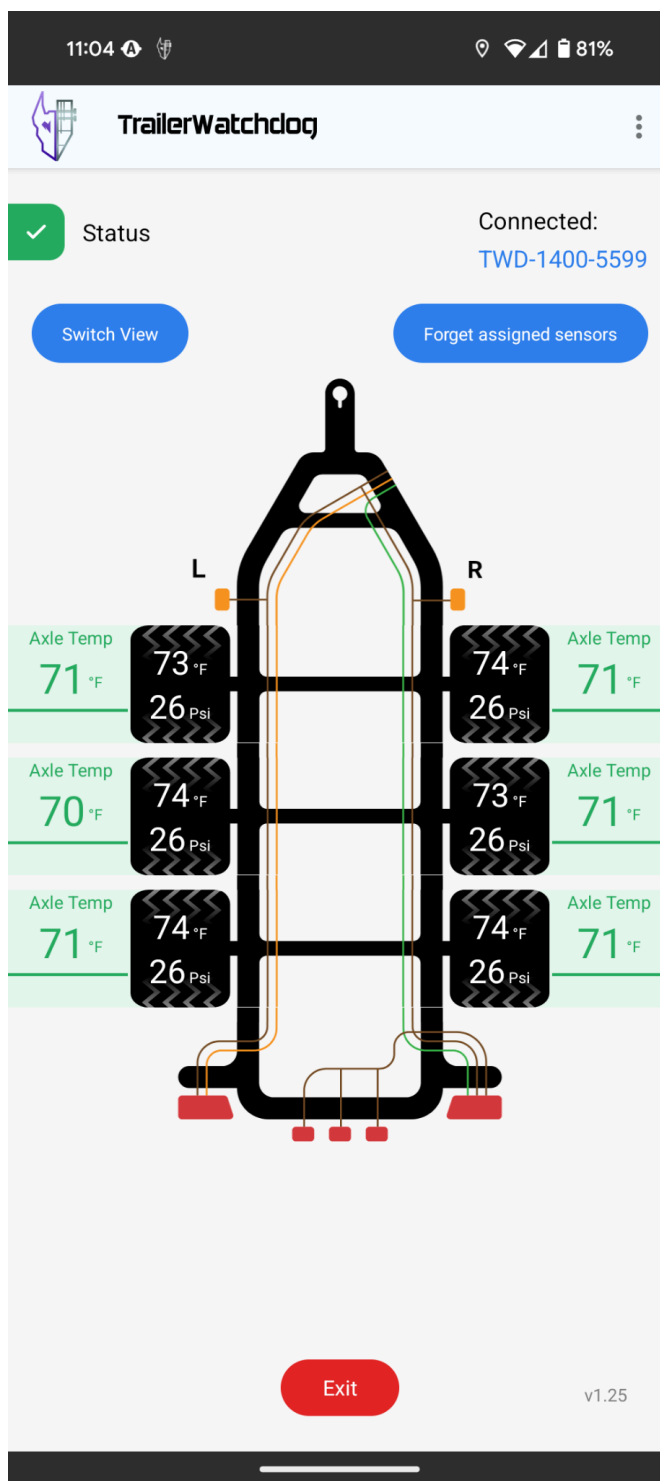
8. System Check & Alerts

Now that your TWD-1500 system is installed, powered, and connected, it’s time to verify that everything is functioning correctly and understand how your alerts work.

This step ensures your trailer is fully protected before hitting the road.

A. Perform a System Check

1. **Power On Your Trailer:**
 - o Turn on your running lights or ignition to activate the TWD-1500.
 - o Open the **TrailerWatchdog App** — your connected device should automatically appear as **TWD-1500-XXXX**.
2. **Confirm Module Connection:**
 - o The app dashboard should show all three modules (Master, Left Slave, Right Slave) as **connected and online**.
 - o Each axle temperature sensor should display a live temperature reading.
 - o Each TPMS sensor should display both **tire pressure** and **temperature**.
3. **Check for Accurate Data:**



- o Sensors will “wake up” automatically once movement or pressure changes are detected.
- o Readings may take up to 3 minutes to update once the trailer is in motion.



B. Understand Alert Notifications

The TrailerWatchdog App continuously monitors your trailer in real time. When it detects an abnormal condition, it instantly sends an alert to your phone.

Types of Alerts:

- **Tire Pressure Alerts:** Notifies you of rapid pressure loss or pressure outside your configured range.
- **Tire Temperature Alerts:** Warns if a tire overheats due to low pressure, dragging brakes, or bearing failure.
- **Axle Temperature Alerts:** Detects unusual heat buildup that could indicate bearing or hub issues.
- **Connection Alerts:** Informs you if any sensor or module temporarily disconnects.

All alerts can be customized in the app's settings to match your trailer type and driving style.

C. Customize Your Alert Settings

1. Open the **Settings** tab in the TrailerWatchdog App.
2. Adjust the following preferences to your liking:
 - **Pressure thresholds** (low/high)
 - **Temperature warning limits**
 - **Notification type** (sound, vibration, or pop-up)
3. Save your settings — they will automatically sync to your TWD-1500 system.

Default settings work well for most trailers, but fine-tuning them helps match your towing conditions perfectly.

D. Stay Up to Date

The TrailerWatchdog App will occasionally notify you of firmware or software updates.

- Install updates promptly to benefit from **enhanced features, improved accuracy, and the latest safety optimizations.**
- Updates can be applied wirelessly through the app — no tools required.

Final Check Before Use:

- All sensors display live data.
- No alerts are active.
- The app shows the TWD-1500 system as connected and operational.

Your trailer is now protected by real-time tire and axle monitoring — giving you peace of mind on every trip.



9. Need Help & Support

If you have any questions during installation or setup, or need assistance pairing sensors or troubleshooting your system, our support team is here to help.

We designed the TWD-1500 to be simple to install and easy to maintain — but you're never on your own.

A. Contact Support

✉ **Email:** support@trailerwatchdog.com

☎ **Phone Support (U.S.): (301) 447-0491** Available Monday–Friday, 9 AM–5 PM EST

When reaching out, please include:

- A brief description of the issue or question
- Photos (optional) of your setup if installation-related

Our team is staffed by U.S.-based trailer technology specialists who can walk you through installation, pairing, or troubleshooting step-by-step.

B. Quick Troubleshooting Tips

Before contacting support, try the following quick checks:

1. **Power:** Verify your trailer power source is active and connected to a 12–24V line.
2. **Connections:** Ensure all harness plugs are fully seated and secure.
3. **App Sync:** Close and reopen the TrailerWatchdog App to refresh connection data.
4. **Sensor Check:** TPMS sensors require at least 20 PSI to wake from deep sleep. Ensure tires are inflated to 20 PSI or more, then move the trailer — sensors will begin updating once in motion.

If issues persist, our support team can help diagnose and resolve them quickly.

C. Firmware & Maintenance

Keep your system up to date for the best performance:

- Check the **TrailerWatchdog App** periodically for firmware updates.
- Updates can include new features, sensor optimizations, and safety improvements.
- No tools required — updates install automatically via Bluetooth.

Staying current ensures your TWD-1500 continues delivering the most accurate, reliable monitoring possible.



D. Professional Installation (Optional)

While the TWD-1500 is designed for confident DIY installation, any trailer, RV, or fleet service center can install it quickly using standard tools.

Simply hand them your **TWD-1500 box and these instructions** — everything they need is included.

Most professional installs take less than one hour.

E. Ongoing Support and Resources

Visit **TrailerWatchdog.com/support** for:

- Video tutorials and installation demos
- Firmware update notes
- Frequently asked questions
- Tips from experienced TWD users

Your System Is 100% Ready to Roll!

You've successfully installed and set up your TWD-1500 — the only comprehensive, intelligent wheel-end and tire monitoring system built and engineered in the USA.

Designed, Engineered, and Built in Maryland — Trusted by Trailer Owners Everywhere.

Enjoy the confidence of knowing your trailer is protected, monitored, and ready for the road ahead.