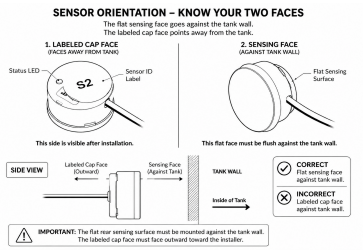
RiVot™ TankMaster Quick Start Guide

Before You Begin

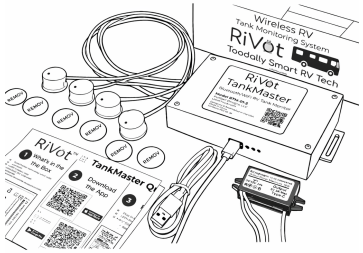
Gather the following before you start:

- Tape (masking or painter's tape)
- Small flat screwdriver (to remove sensor caps for calibration)
- Power source — either: locate your 12V power leads for hardwiring, or have a USB power pack ready
- Isopropyl alcohol (for cleaning tank surface before permanent mount)
- Phone or tablet with the TankMaster app downloaded (see Step 2)
- **Tank must be 25–50% full** — calibration requires moving each sensor between a wet section of the wall and a dry section above the liquid line. Too empty = no wet zone. Too full = no dry zone.
- Know your tank's capacity in gallons (you'll enter it in Step 10)



What's in the Box

- TankMaster sending unit with 4 sensors
- USB-C power cable
- 12V-to-5V DC USB power converter
- Adhesive mounting pads



Download the App

Scan to install the TankMaster app:

- Apple App Store (QR)
- Google Play (QR)

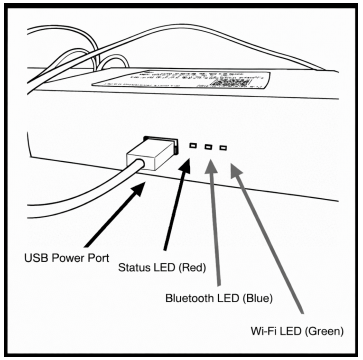
Download on the App Store

GET IT ON Google Play

Power Up

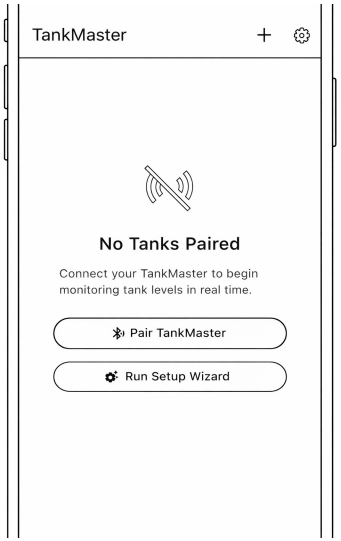
Plug in the USB power cable. The LEDs flash as follows:

- Red — Running
- Blue — Bluetooth
- Green — Wi-Fi



Pair with the App

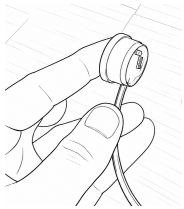
1. Open the app
2. Run the Setup Wizard
3. Follow the on-screen instructions to finish pairing



Position the Sensors (Temporary)

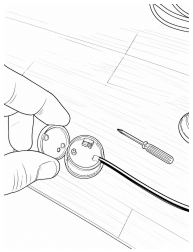
You'll calibrate the sensors before mounting them for good. For now, hold them in place with tape only.

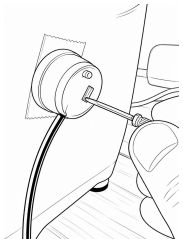
1. Remove the labeled cap from each sensor by inserting a small flat screwdriver into the seam at the cap's edge and levering it off. Set the caps aside — you'll snap them back on after calibration.
2. Clean a flat, dry area on the outside tank wall.
3. Clean the sensor face
4. Apply an adhesive pad to the sensing face of each sensor. Leave the protective film on the exposed side — this prevents permanent bonding during calibration. Use tape over the pad to hold each sensor in place against the tank wall.
5. Mount the sensors in a vertical line, evenly spaced, with the **sensing face against the wall** and the labeled cap facing outward (see Sensor Orientation diagram):
   - S1 — near bottom ~10%
   - S2 — about 25%
   - S3 — 50–75%
   - S4 — near top ~90%
4. Make sure each sensor sits flat against the wall with no lifted edges or air gap.



Testing Sensor with finger, red LED should turn on.

Labeled cap removed to reveal calibration screw





Calibrating
- Clockwise to reduce sensitivity
- Counter-clockwise to increase sensitivity

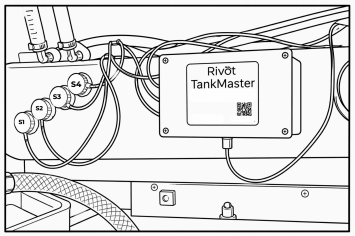
Calibrate the Sensors

The app guides you through calibration one sensor at a time (S1 → S4). For each sensor, the app tells you where to hold it and what to watch for — follow the on-screen prompts until all four sensors show a green checkmark.

Before you begin: tank must be 25–50% full.

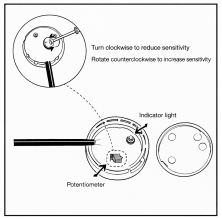
Need to calibrate without the app? See the manual procedure on the back.

Calibration Wizard does not physically adjust sensor sensitivity"



Install the TankMaster Unit

1. Mount the unit to the tank or a nearby wall using the adhesive pads, in a dry, protected location.
2. **Important:** the TankMaster enclosure is not waterproof. Keep it out of direct water and spray. Seal the enclosure if it may be exposed to moisture.



Mount the Sensors Permanently

Now that the sensors are calibrated, mount them for good — one at a time so you don't lose your positions.

1. Disconnect power.
2. For each sensor, working one at a time:
   - Peel it off the tape.
   - Clean the tank surface
   - Remove the protective film on the adhesive pad before mounting.
   - Press the sensor firmly against the wall, sensing facing first, for 30–60 seconds, with no lifted edges.
3. Reconnect power.
4. **Re-verify calibration.** The adhesive pad can slightly change a sensor's reading versus tape. Confirm each sensor still reads correctly in the app and fine-tune with the screw if needed.

Configure in the App

Open your tank's Settings and:

- Set the tank capacity
- Adjust sensor thresholds (S1 < S2 < S3 < S4)
- Enable alerts
- Configure Wi-Fi for extended range

https://ugottoad.com/tankmaster-user-guide/

Visit: UGotToad.com/support
Email: support@ugottoad.com
Puffball Designs LLC
Surprise AZ 85387

Method A - Standard 1/4” Walls

Use this procedure if calibrating outside the Setup Wizard, or re-calibrating an installed sensor.

Before you start: tank must be 25–50% full. You need a wet zone and a dry zone on the tank wall — the procedure moves the sensor between the two.

Calibrate one sensor completely before moving to the next (S1 → S4).

Step 1 · Remove the labeled cap The cap is cosmetic — remove it to access the adjustment screw. Insert a small flat screwdriver into the seam at the edge of the labeled cap and lever it off. It pops straight off and snaps back on the same way. The sensor is fully sealed underneath — you can't damage it. Inside you'll see the blue adjustment screw and the red LED.

For sensor orientation, see the Sensor Orientation diagram.

Step 2 · Start wet Hold the sensor against the tank wall (sensing face against the wall) where you know liquid is behind it, below the liquid line. The red LED should turn ON.

- If it doesn't, turn the screw **CCW** ¼ turn at a time until the LED turns ON.

Step 3 · Find the detection edge Turn the screw **CW** ¼ turn at a time. Stop the moment the LED switches to OFF. You've found the detection edge.

Step 4 · Add margin Turn the screw **CCW** ¼–½ turn. The LED should turn back ON. This margin prevents false readings from residue or a damp wall.

Step 5 · Confirm dry Move the sensor to the tank wall **above the liquid line** — the wall should be dry with no recent submersion. The LED should go solidly OFF.

- If it flickers or stays ON, the sensor is too sensitive. Turn the screw **CW** slightly, then repeat Steps 4 and 5.

Step 6 · Confirm wet Return the sensor to the wet location (below the liquid line). The LED should turn ON.

- If it doesn't, you've gone too far CW. Repeat from Step 4.

Step 7 · Replace the cap Snap the cap back on. Repeat Steps 2–7 for each remaining sensor.

Tip: Thicker or ribbed tank walls absorb more signal. If a sensor won't detect through a thick spot even at maximum CCW, move it 1–2 inches sideways at the same height.

Method B — Thick or Unknown Walls

Use this when you don't know your wall thickness, or if Method A's Step 2 fails to trigger the LED.

Note: from the factory, the screw is set approximately 4–5 turns CW from maximum sensitivity — a good starting point for standard 1/8"–1/4" poly tanks. Method B ignores that starting point and finds the correct setting for your specific wall.

Step 1 · Desensitize the sensor Hold the sensor by its sides — do not touch the sensing face yet. With your other hand, press one finger firmly against the sensing face and turn the screw **CW** until the LED goes OFF and won't come back on. You've fully desensitized the sensor.

Step 2 · Find the detection edge Place the sensor against the tank wall (sensing face against the wall) where liquid is behind it, below the liquid line. Turn the screw **CCW** ¼ turn at a time until the LED turns ON. You've found the detection edge.

Step 3 · Add margin Turn the screw **CW** ¼–½ turn. The LED should stay ON.

Step 4 · Confirm dry Move the sensor to the tank wall above the liquid line — the wall should be dry. The LED should go solidly OFF.

- If it flickers or stays ON, turn the screw **CW** slightly and recheck.

Step 5 · Confirm wet Return the sensor to the wet location. The LED should turn ON.

- If it doesn't, you've gone too far CW. Repeat from Step 3.

Step 6 · Replace the cap Snap the cap back on. Repeat Steps 1–6 for each remaining sensor.

Sensor Placement Tips

For Reliable Readings

- Mount sensors on a flat section of the tank wall.
- Avoid seams, ribs, supports, brackets, or molded irregularities.
- Do not install directly over labels, thick graphics, or insulation.
- Sensors should be vertically aligned with the expected liquid levels.

Sensor Sensitivity Adjustment

This is probably the single most important troubleshooting item.

If a sensor stays ON when the tank is empty:

1. Remove the sensor cap.
2. Turn the adjustment screw clockwise until the red LED turns OFF.
3. Continue one additional full turn clockwise.
4. Recheck operation.

If a sensor does not detect liquid when the tank fills:

- Turn the adjustment screw counterclockwise slightly.

Important:

The Calibration Wizard does not physically adjust sensor sensitivity. The adjustment screw must be turned manually.

App Shows Incorrect Tank Level

Common Causes

- Tank residue or buildup
- Sensor mounted over tank ribs or irregular surfaces
- Sensitivity set too high
- Sensor not firmly attached to tank wall

Wi-Fi Troubleshooting

TankMaster won’t connect to Wi-Fi

- Supports 2.4 GHz Wi-Fi only.
- Verify network name and password.
- Move TankMaster closer to the router during setup.
- Some mesh systems require enabling compatibility mode for IoT devices.

Cannot find TankMaster after Wi-Fi setup

- Confirm green Wi-Fi LED is solid.
- Check your router’s client list for the assigned IP address or via the app under the WiFI status
- Verify your phone is connected to the same network.

Remote Access

This question comes up frequently.

Accessing TankMaster Away From Home

TankMaster is designed for secure local-network operation.

For remote access, we recommend:

- VPN access to your home network
- A travel router or VPN gateway

Examples:

- TP-Link VPN routers
- GL.iNet travel routers

Avoid exposing TankMaster directly to the Internet using port forwarding.

LED	Meaning
Red Status	Flashing - operating normally
Blue Bluetooth	Flashing = waiting for connection Solid = connected to App
Green Wi-Fi	Flashing = connecting to WiFi access point Solid = connected to WiFi access point

Need Help?

Seriously. If you need help, please don’t hesitate to contact us.

Whether you’re installing TankMaster for the first time, calibrating sensors, connecting to Wi-Fi, or troubleshooting a tank reading, we’re happy to help.

We’re RVers too, and we stand behind every TankMaster we sell.

Support: support@ugottoad.com
Videos & Documentation: UGotToad.com