



# **Installing the Control Box**

## **Orientation Matters!**

# Control Box Orientation & Tilt Compensation

*Proper Mounting for Accurate Tilt Compensation | Revision 1.0*

## Overview

Fill Sight uses an integrated tilt sensor in the control box to compensate for sprayer tilt when operating on uneven ground. For this compensation to work accurately, the control box must be mounted in the correct orientation relative to your tank's sump (the lowest point where liquid collects).

This is especially important when the pressure sensor is not plumbed exactly in the center of the tank bottom. In off-center installations, the amount of liquid "felt" by the sensor changes with tilt, and proper orientation allows Fill Sight to correct for it.

## Why Orientation Matters

Most spray tanks have a tapered bottom (sump) that runs along the length of the tank. When the sprayer tilts side-to-side or front-to-back, the liquid level at the sensor changes depending on the direction of the tilt relative to the sump.

By aligning the control box correctly, the tilt sensor can properly interpret these changes and apply accurate compensation to the reported tank volume.

## Control Box Mounting Requirements

- Mount the control box **FLAT** with the label facing **UP**.
- Choose a protected location (inside the sprayer cab is ideal).
- Orient the indicator lights either **PARALLEL** or **PERPENDICULAR** to the tank sump orientation.

### ⚠ IMPORTANT

- Mount the control box **FLAT** with the label facing **UP**.
- Proper orientation is required for the tilt compensation feature to function correctly.
- If you mount the control box on its side, you can still use Fill Sight, just disable the use of the tilt sensor.

## Tilt Settings Options

In the Tilt Settings screen of the RemoteXY app, you can select one of the following options based on how your control box is mounted:

### Lights Tip Left and Right

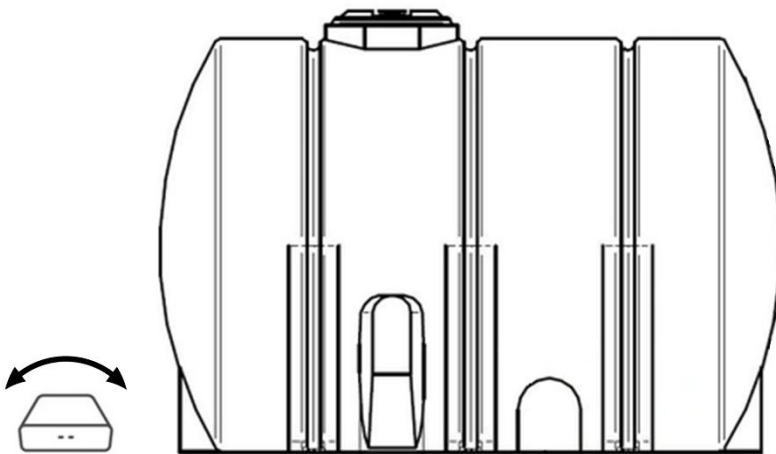
Choose this option when the control box is mounted so that the indicator lights tilt left/right when the tank tilts along its long axis (parallel to the sump). This is one of the two recommended orientations.

### Lights Tip Up and Down

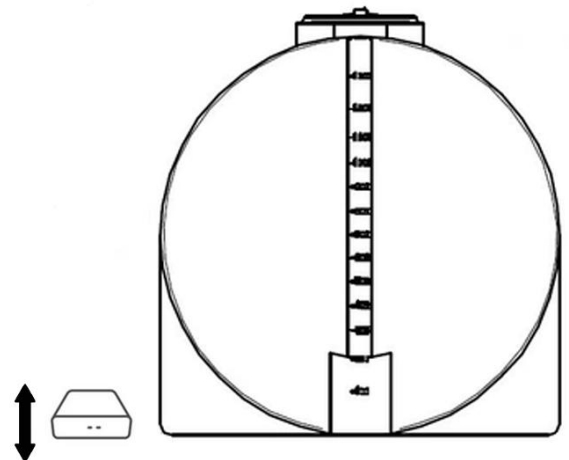
Choose this option when the control box is mounted so that the indicator lights tilt up/down when the tank tilts along its long axis (perpendicular to the sump). This is the other recommended orientation.

### Disabled – Do Not Factor In Tilt

Select this option only if you cannot mount the control box in one of the two recommended orientations, or if you prefer not to use tilt compensation. When disabled, Fill Sight will not adjust volume readings for tilt. Accuracy may be reduced when operating on uneven ground.



Lights Tip Left and Right



Lights Tip Up and Down

## How to Configure Tilt Settings

- Open the RemoteXY app and connect to your Fill Sight unit.
- Navigate to Settings → Sensor Settings (or the Sensor section).
- Select the option that matches your control box orientation relative to the tank sump.
- Perform the one-time “Zero Tilt Sensor” procedure on a level surface for best results.

### IMPORTANT NOTES

- Always mount the control box flat with the label facing up for accurate tilt sensing.
- If you choose an orientation other than the two recommended options, tilt compensation will not work correctly. Use “Disabled” in that case.
- After changing the orientation setting, re-zero the tilt sensor on a level surface.
- This document is an addendum to the Fill Sight Operations Manual. Refer to the Control Box Orientation and Tilt Settings sections in the main manual for diagrams and additional details.

*Correct control box orientation is one of the most important steps for getting accurate tilt-compensated volume readings from your Fill Sight system.*