

Ultrasonic Sensor Guide

Field of detection and behaviour of TinySurveyor Plotter Ultrasonic Sensors

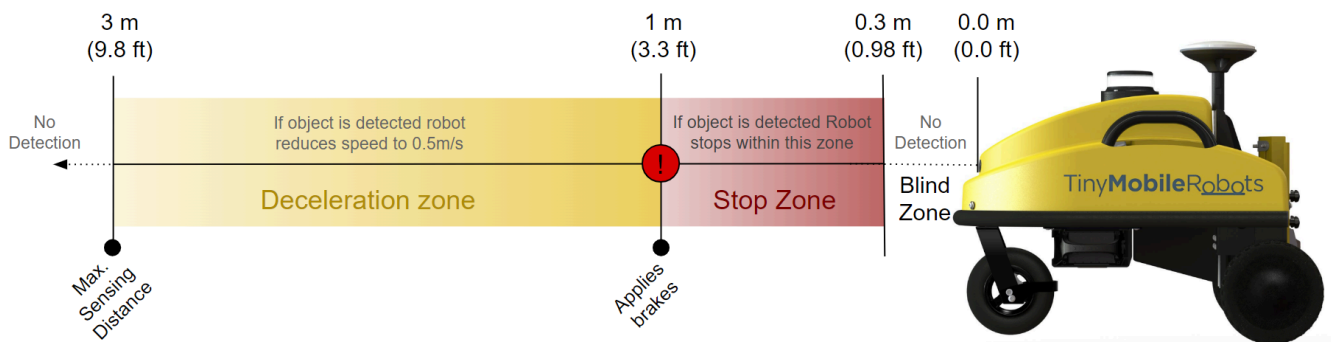
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Sensor and Robot behaviour

The TinySurveyor Plotter comes equipped with Ultrasonic Sensors designed to help avoid collisions with unexpected obstacles. This feature can be turned on/off in **Settings > Robot Behavior** (App v.9.7.0+)

DISCLAIMER: These sensors are a comfort feature and cannot be considered a fail-safe or safety device. The robot should be observed at all times by its operator.



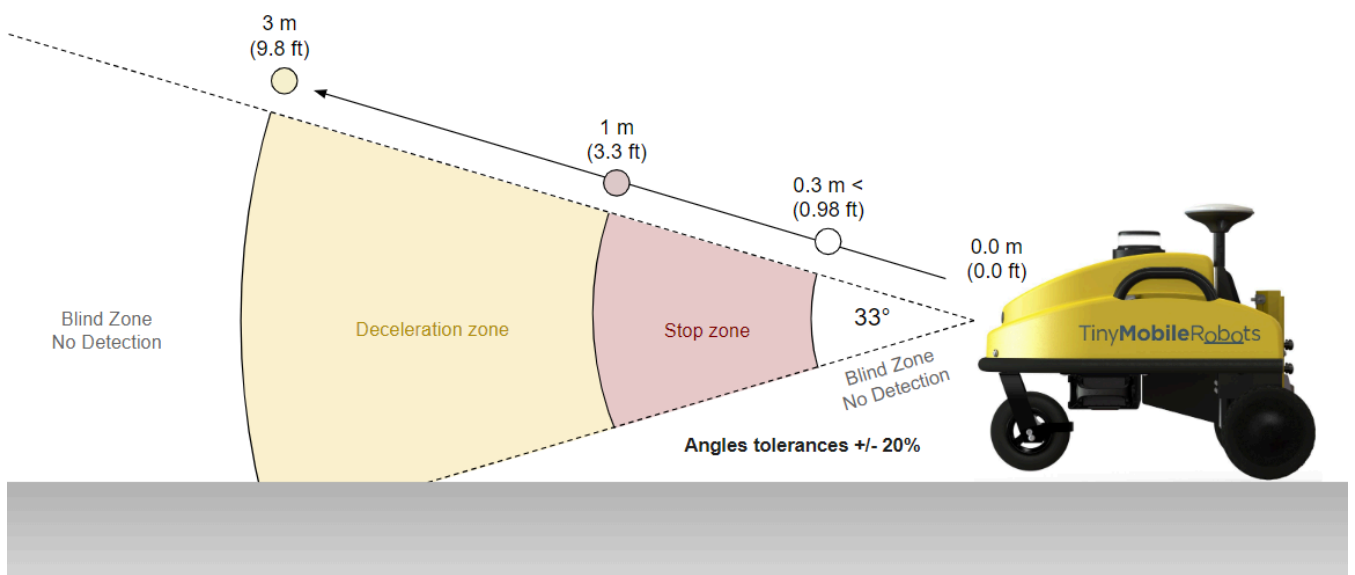
- **Deceleration Zone** - The Sensors have a maximum detection range of 3m (9.8 ft). If an obstruction is detected within a range of 1m-3m from the robot, it will decrease its speed to 0.5m/s as a precautionary measure. If the obstruction disappears before it reaches a range of 1m then the robot will return to normal operating speed.
- **Stop Zone** - Once an obstruction is within the range of 1m from the robot, the robot applies brakes and comes to a stop. The user will be alerted on the tablet.
 - If it's likely that an unexpected obstruction could suddenly appear within 1m from the robot (Stop Zone), then we recommend not to set your robot driving speed or painting speed above 0.5m/s.
- **Blind Zone** - Be aware that the robot can not detect anything in front of it within a range of 0.3m. It can also not detect anything above a range of 3m.

Field of Detection

The Ultrasonic Sensors have a detection range of 3m in front of the robot and a conical detection field at an angle of 33° on both X and Y axis.

The sensors have a blind zone within 0.3m in front of the robot and farther than 3m in front of the robot.

Side View



Birdseye View

