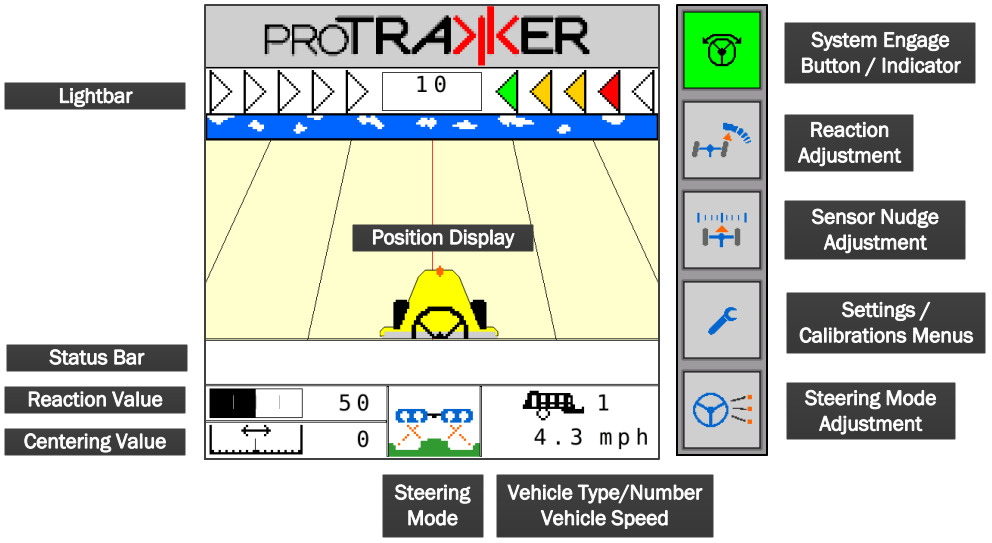
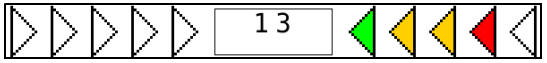
SonicTrakk VT Quick Reference Guide – Main Screen Functions

Main Screen Layout



Main Indicators

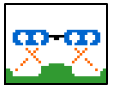


Lightbar – The top bar on the main display has a light bar which represents distance from the center reading of the sensor. These are represented by the filled triangles and a numerical value in the center. For row guidance, this value is in sensor increments rather than a specific distance. If there is a sensor offset or calibration, often this number will be non-zero even while tracking straight down a row.

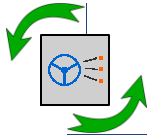
System Not Engaged - Tap button on screen or Joystick Top Button to engage

System Engaged - Tap button on screen or Joystick Top Button to disengage

Error or Safety Cutout is preventing engagement



Sonic Mode Guidance by Sonic Sensors

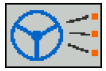


Tap the Steering Mode button or Joystick Trigger to toggle between modes

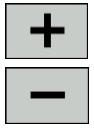
Manual Mode Used for implement control in headlands

Return to Center Function
If the system is engaged in Sonic Mode, then switched to Manual mode (Joystick Trigger is tapped momentarily), the hitch will automatically return to a centered position if the system has speed.

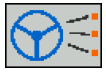
Steering Modes - Sonic



Hold the steering mode button until flashing

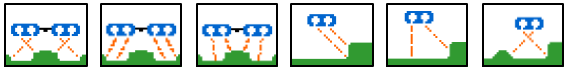


Use the +/- buttons to select different Sonic steering input modes (patterns), In this case, select the applicable Sonic Sensor Mode.



Tap the steering mode button to set the mode

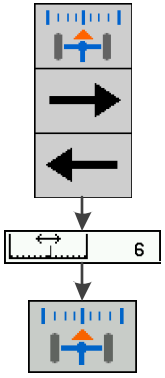
Several Sonic Steering Modes (Patterns) are available.



For certain steering modes, tap the nudge button to switch sides or change mode type. Refer to the main operator's manual for details on the different modes.

Sensor Nudge

The system can be nudged left or right relative to the current direction of travel. This will shift the sensor input to move the machine/implement left or right respective to the direction of travel. This is a fine tune adjustment after the machine/implement has been calibrated and Sonic Sensors are properly mounted.



Hold the sensor nudge button. It will begin flashing.

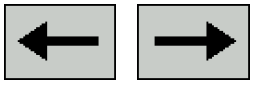
Use the </> buttons to change the center value of the sensor

Positive = Right
Negative = Left

Tap the sensor nudge button to set the value

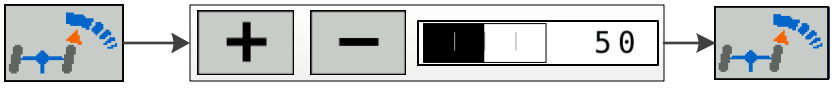
Manual Hitch Control

When the system is engaged in manual mode, holding the Joystick Trigger and moving the Joystick X-Axis will move the hitch. Also, the left and right arrow keys on the main screen can be held to move the hitch to a desired position.



Note: The speed of which the hitch moves in manual mode is based on the reaction setting for Manual steering mode. Joystick X-Axis can be inverted via system settings.

Adjusting Reaction (Sensitivity)



Press and hold the reaction button until flashing

Use the +/- buttons to adjust reaction

100 = High Reaction, 0 = Low Reaction

Tap the reaction button to set the value

Note: Sonic and Manual Steering Modes have independent reaction values.

Applicable for PSR Software Version 2.164 - P/N 560837 - Version 1.01 – 01/07/16 - CDB

SonicTrakk VT Quick Reference Guide – Settings and Diagnostics

PROTRAKKER GUIDANCE SYSTEMS

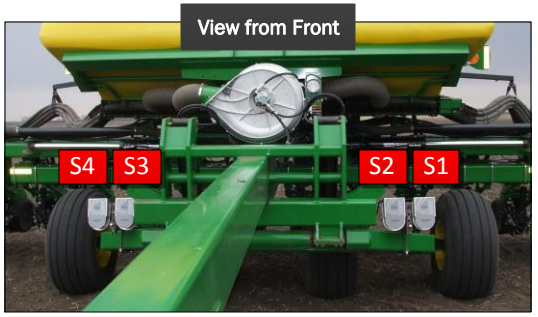
Sonic Configuration Menu

When in a Sonic Steering Mode, tap the wrench button to enter the Sonic configuration menu

The Sonic Configuration Menu provides readings for up to all 4 sonic sensors when used as well as settings for configuring the sensors. More details are listed below.

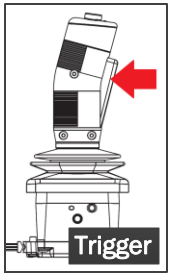
To save changes made in the configuration menu, press the OK button. The system will beep twice when saved.

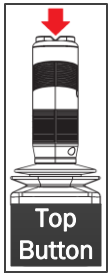
Sonic Sensor Orientation

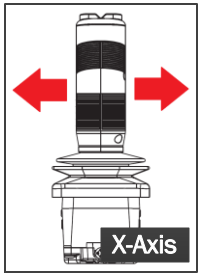


Joystick Function

A joystick is included with the SonicTrakk system for system engagement, switching between manual and sensor guidance and nudging the system.

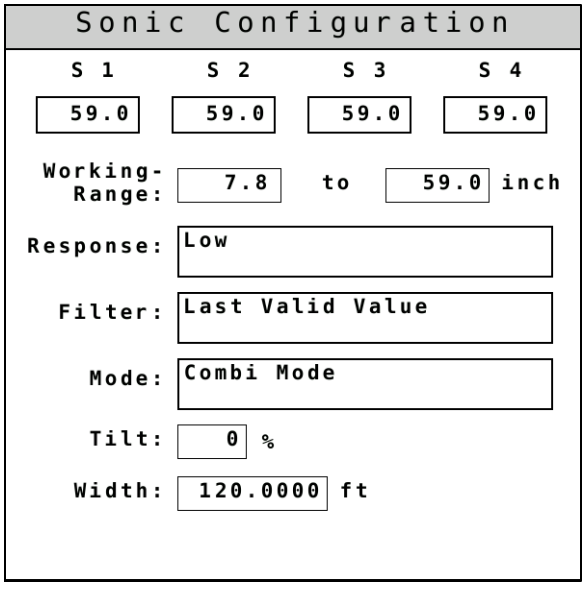






The Joystick has 3 main inputs shown

Sonic Configuration Menu Layout



S1-S4 display current sensor readings for diagnostics. Values will only be used/displayed when readings are within set working range.

Working Range (min/max values) can be adjusted based on conditions.

Response adjusts how quickly the system responds to measured deviation by the sensors.

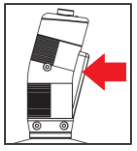
Filter determines how the system responds when sensors are out of range. The system can ignore the sensor input entirely or use the last valid value seen.

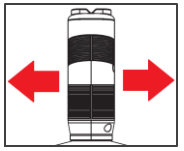
Mode can be changed from Standard to Combi to enable combination GPS and Sonic, which allows GPS guidance between passes based on an entered working width.

Tilt value from 0 to 100 can be entered to support roll-angle compensation to the sonic guidance. This requires a properly installed and calibrated Reichhardt tilt sensor. The higher the value, the higher the tilt response.

Joystick Nudge Function – Sonic Sensors

When the system is engaged in Sonic Steering mode, it can be nudged by holding the Joystick Trigger and moving the Joystick X-Axis. Once a desired nudge is reflected in the hitch position, release the trigger. This nudge will remain stored in the background of the system and will reset whenever switching to/from manual steering mode.





Note: There is some filtering in the nudge setting, so it may work best to release the trigger just prior to reaching the desired position. Joystick X-Axis can be inverted via system settings.

Sonic Sensor Mounting Adjustments

Sonic Sensor Minimum Distance is 10"
Sonic Sensor Maximum Distance is 59"
(usually less based on surface and angle).

Ideal sensor operation range is 20-28".

The angle to the surface is also critical for proper signal reflection and measurement. The 3rd or 4th rotation notch from center in the mounting shown is common.

Refer to the main operator's manual for ideal Sonic Sensor mountings for various Sonic Steering modes.

Sonic Sensor Error Troubleshooting

ERROR 1400-1414: Related to Sonic Sensors – Verify connections to sensors and no damage to sensors or harnesses. It is required that a resistor harness/box is tied into the harness solution for the Sonic sensors to function properly.

Errors 1400, 1401, 1402 and 1403 are related to open wire connection(s) for sensors S1, S2, S3 and S4, respectively. If all 4 sensors are not detected, there will be an error 1404.

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