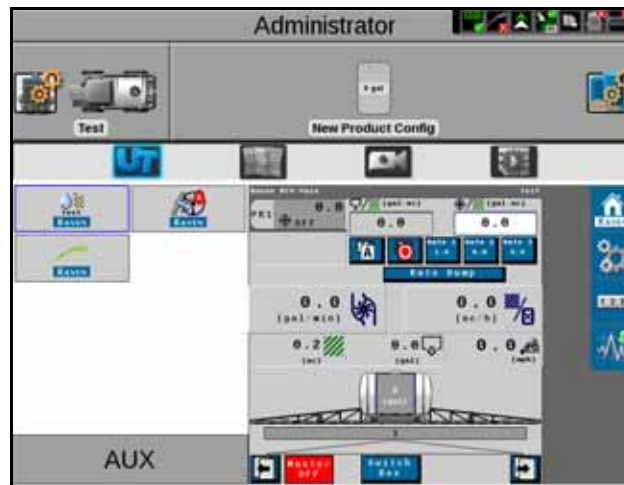


## RS1/SC1 DEMO STAND CALIBRATION GUIDE

Start by verifying the software is up to date.

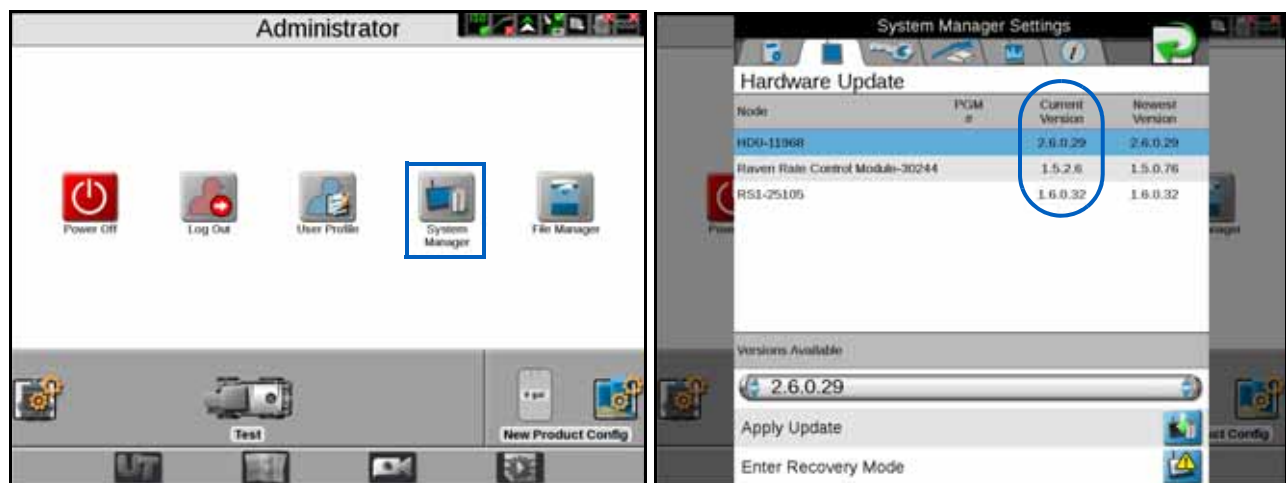
1. Touch on the upper right corner.

FIGURE 1. Home Screen



2. Select System Manager.
3. Touch on the second tab from the left, titled "Hardware Updates." The node labeled "HDU" should be version 2.60.29. The node labeled "Raven Rate Control Module" should be version 1.5.2.6. The node labeled RS1 should be version 1.6.0.32. If older software is installed, updates are required. See the *Raven RS1™ Calibration and Operation Manual* (P/N 016-4010-001) for more information about updating the RS1.

FIGURE 2. Verify Software Version



NOTE: Steering and Cellular unlocks are not required to run in demo mode.

4. Exit the system manager screen.

5. Touch the "UT" button. 



6. Touch the steering widget.



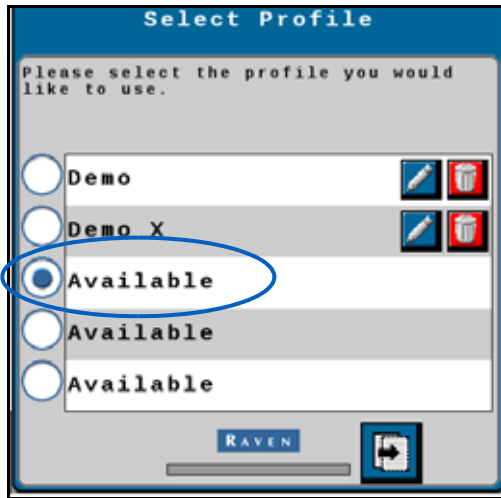
7. Select the first available profile and touch the "next" button.



8. Select Machine Type: Demo.

9. Select Machine Make: Generic and touch the "next" button.

FIGURE 3. Select First Available Profile, Machine Type, and Machine Make



10. SmarTrax HD-PWM should auto-fill. Touch the "next" button.

FIGURE 4. Steering Configuration Screen



11. Enter the machine dimensions that were set up on the Viper™ 4 and touch the “next” button.

FIGURE 5. Setup Screens



12. Select SBAS in the "Differential Source" drop-down and touch the "next" button.

FIGURE 6. Differential Configuration Screen



13. Wait until converged and tap the "next" button.

FIGURE 7. GPS Status Information Screen



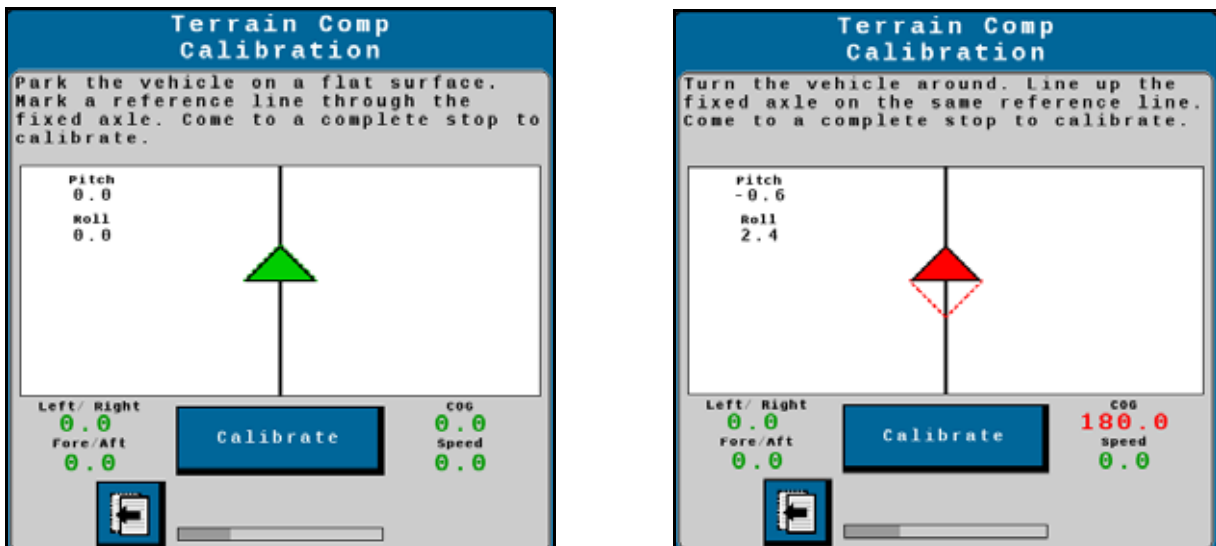
14. Turn the speed dial up to get above 32.8ft [9.9974m].

FIGURE 8. Terrain Comp Calibration Screen



15. Make sure the speed dial is "off" for 0 speed and touch the "Calibrate" button.

FIGURE 9. Terrain Comp Calibration Screens



16. After the terrain compensation is complete, touch the "next" button.



17. Toggle the "Resume Switch" and the icon will turn from red to green. Touch the "next" button.

FIGURE 10. Verify Resume Switch Screen



18. Turn the steering wheel at a typical rate and touch the "next" button.

FIGURE 11. Disengage Calibration Screen



19. Change the disengage threshold to 10 Hz and touch the “next” button.

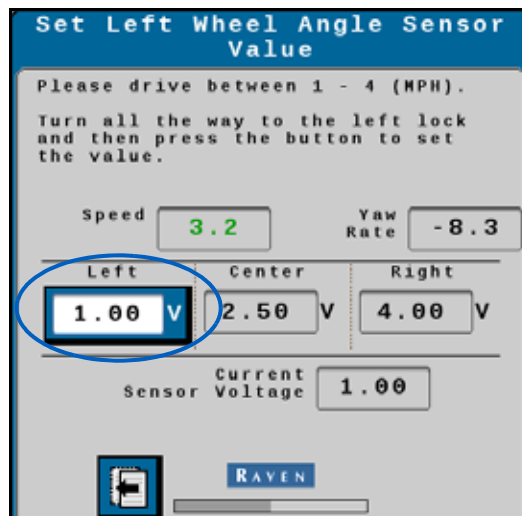
FIGURE 12. Disengage Threshold Screen



20. Turn the steering wheel to the left until a current sensor voltage of 1.00V is achieved. If too far, turn the opposite direction.

21. Tap on the “Left” input value highlighted in blue.

FIGURE 13. Set Left Wheel Angle Sensor Value



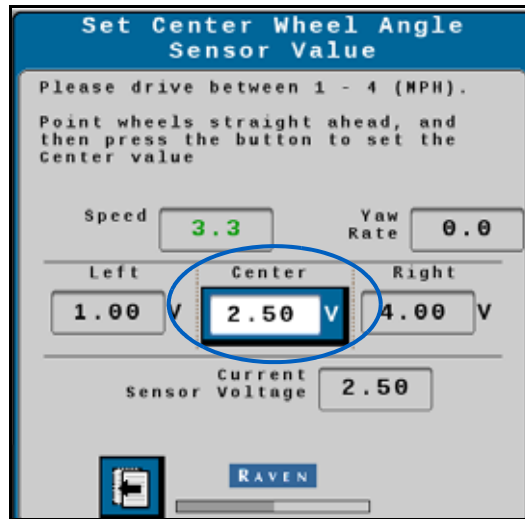
22. Turn the steering wheel to the right until the current sensor voltage reads 2.50V.



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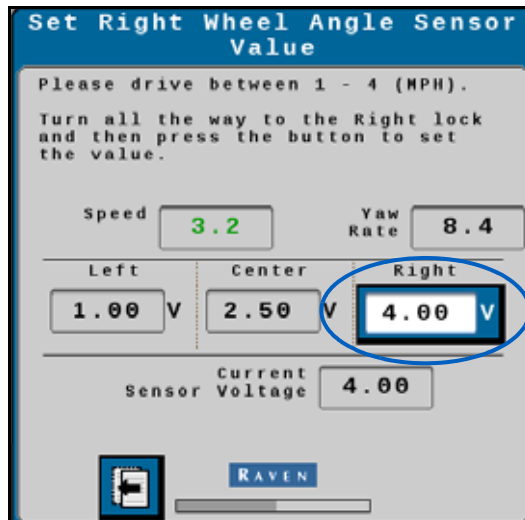
23. Tap on the "Center" input highlighted in blue.

FIGURE 14. Set Center Wheel Angle Sensor Value



24. Turn the steering wheel further to the right until the current sensor voltage reads 4.00V and tap the "Right" input highlighted in blue.

FIGURE 15. Set Right Wheel Angle Sensor Value



25. Tap the next button.



26. Review the summary screen. Verify that the summary matches the screen as seen below in Figure 16.

FIGURE 16. Calibration Wizard Summary



# SYSTEM DIAGRAM

