



DYNANAV

CALIBRATION OF THE GATE CONTROLLER USER GUIDE

OVERVIEW

This User Guide explains the steps to calibrate the gate controller using the DynaNav controller.

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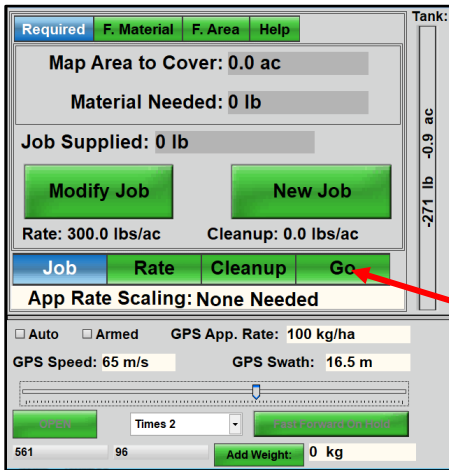
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Latest Version

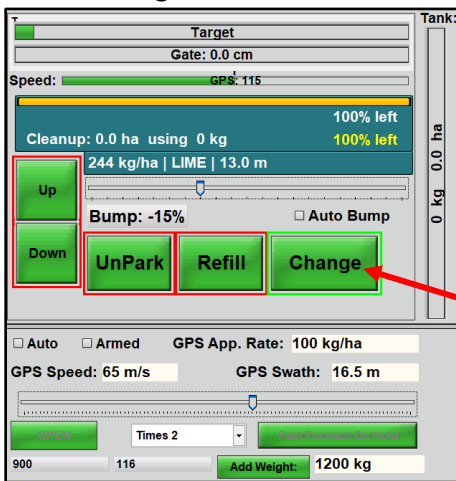
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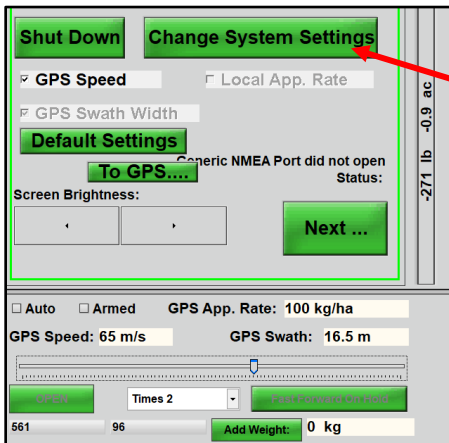
1. When the default screen appears, select “Go.”



2. Select “Change.”

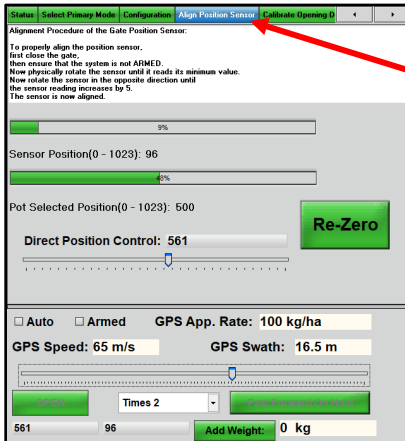


3. Select “Change System Settings.”

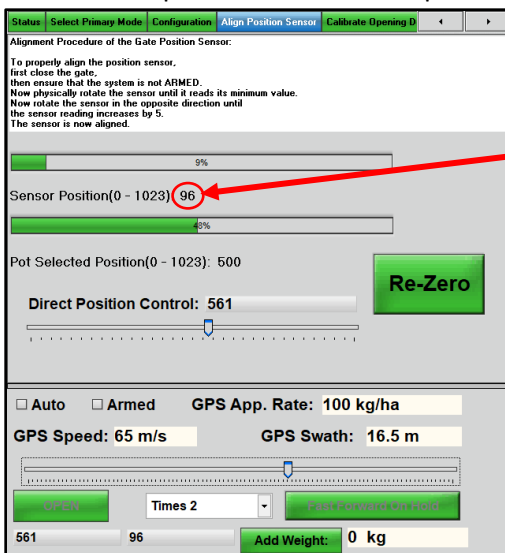


Sensor Alignment

4. Select “Align Position Sensor.”



5. Close the gate to the locked or wet-seal position to properly align the position sensor.
6. Ensure the system is not ARMED.
7. Physically rotate the sensor until it reads its minimum value.
8. Rotate the sensor in the opposite direction until the sensor reading increases to 130-145.
9. The sensor is now aligned.
10. Place the door in the locked or wet-seal position for the min value. Record the min sensor value in the locked position and the full open.

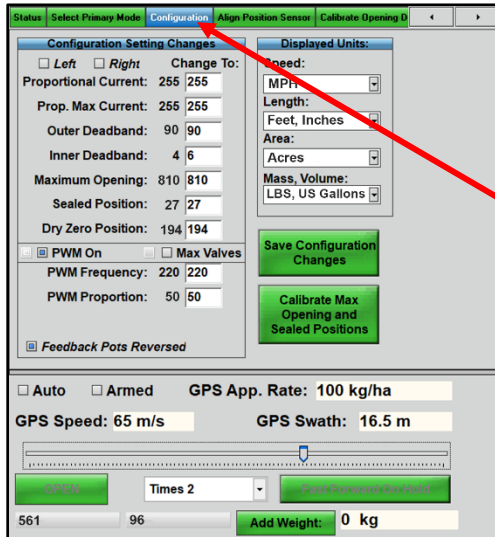


The typical range for the min value is 130-145. If the value is not in that range or will not go that low, adjust the position sensor by turning to the lowest point. Then, go up 20 points.

- Open the door all the way up so that it states the max value. Record the max sensor value with the door all the way open.
- For the dry seal location, set the door with approximately 1/16" gap and record the position sensor value.

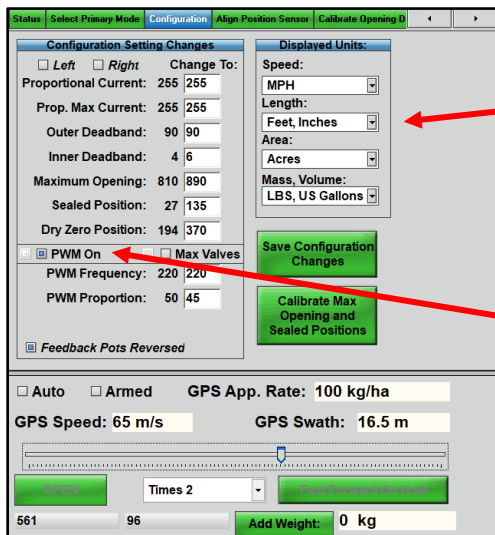
Setup/Configuration

- On the Transland Controller, select "Configuration."



TIP: A USB KEYBOARD CAN BE CONNECTED TO THE CONTROLLER AND USED TO ENTER THE NUMERICAL VALUES.

- Enter the configuration values as shown below, including your system's min and max position values. The last two are default values.

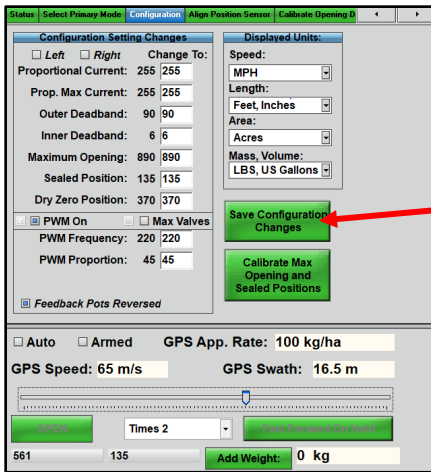


Verify what "Display Units" you want.

Ag Gate - select the "PWM" box

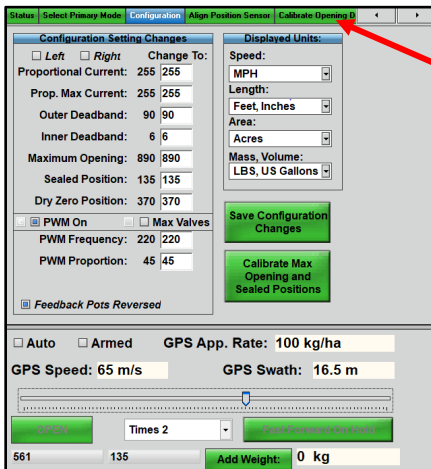
Bombay or FAST System - select the "Max Valves" box

15. Click “Save Configuration Changes.”



Calibration

16. Select “Calibrate Opening Distance.”



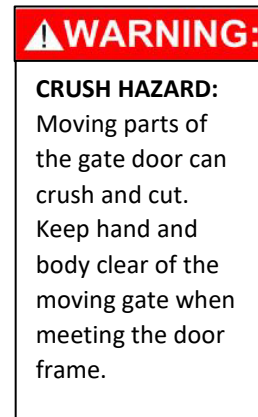
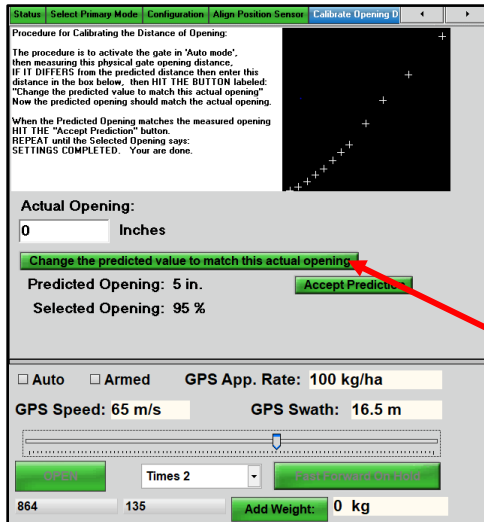
Status **Select Primary Mode** **Configuration** **Align Position Sensor** **Calibrate Opening D**

Procedure for Calibrating the Distance of Opening:

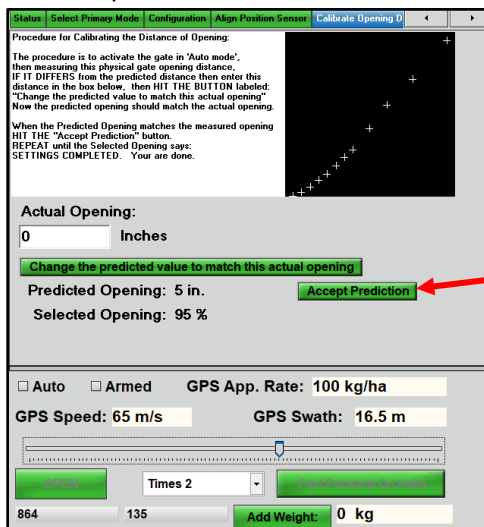
The procedure is to activate the gate in 'Auto mode', then measuring this physical gate opening distance, IF IT DIFFERS from the predicted distance then enter this distance in the box below, then HIT THE BUTTON labeled: "Change the predicted value to match this actual opening" Now the predicted opening should match the actual opening.

When the Predicted Opening matches the measured opening HIT THE "Accept Prediction" button. REPEAT until the Selected Opening says: SETTINGS COMPLETED. Your are done.

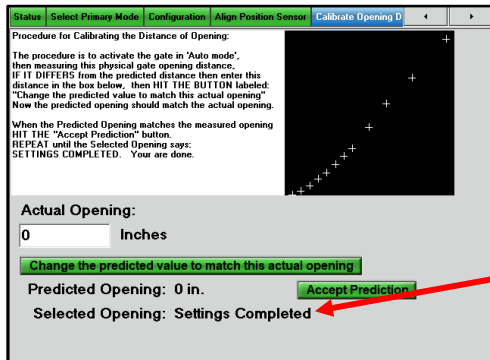
18. With the gate in auto mode, arm the gate and hold the pilot switch. The gate will automatically open to the first point.
19. Measure the actual opening of the gate with a tape measure. Be sure to measure to the nearest 1/32" and that all measurements use the same point for each opening measured. After measuring, enter the actual gate opening. The value can be entered as a fraction or decimal.
20. Select **"Change the predicted value to match this actual opening."**



21. Select **"Accept Prediction."** After the "Accept Prediction" is selected, it will automatically go to the next point.

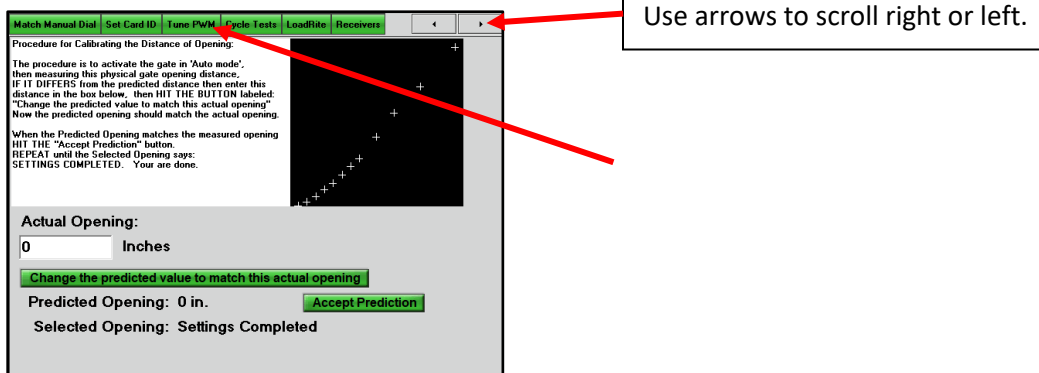


22. These steps will be done eight times. It will say “Settings Completed” once it is done.

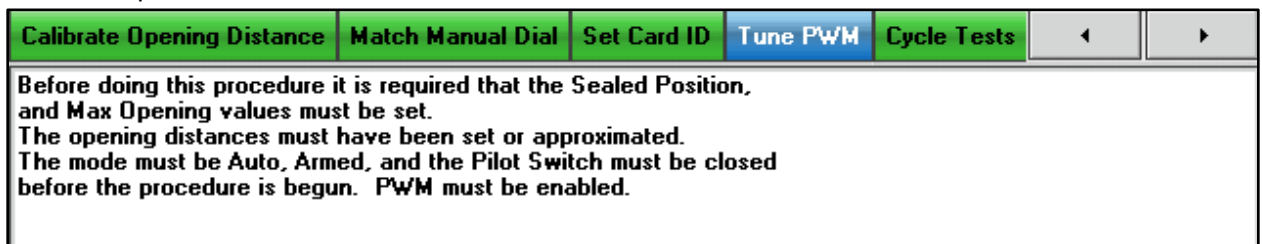


Tuning

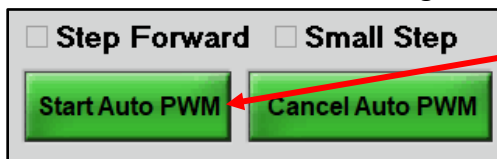
23. On the Transland Controller, scroll right until the “Tune PWM” tab appears and then “Tune PWM.”



24. Follow the procedure on the screen.



25. Click “Start Auto PWM.” This begins the gate to tune itself.



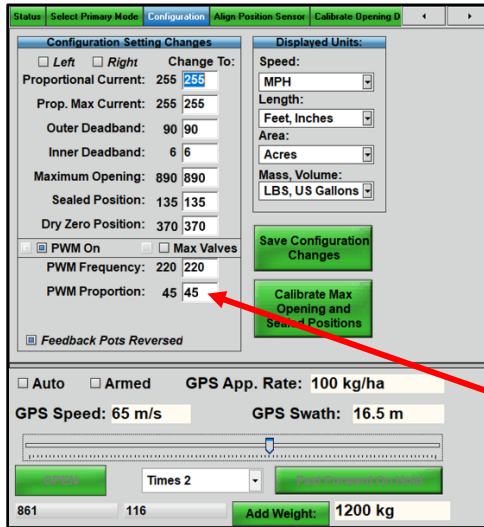
26. When this is finished, look for the fastest time with the least overshoot by scrolling through the proportions that are on the screen.



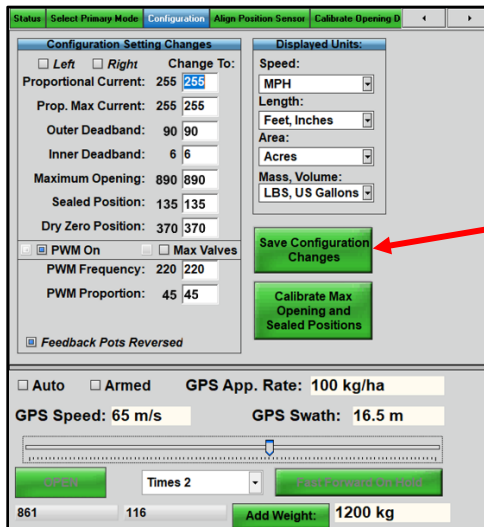
27. Record proportion that has the fastest time with the least overshoot.

28. Click on the “Configuration” tab. (Scroll back left).

29. Enter the recorded proportion in the “PWM Proportion” box.



30. Click “Save Configuration Changes.”



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