

GENERAL NOTES



When first tuning FieldPilot 220, refer to the Vehicle Kit installation instructions for the starting oil flow setting and any console settings that may be recommended for the particular vehicle. If no console settings are recommended in the Vehicle Kit instructions, start with the default settings stated in this User Guide and proceed as follows.

1. Use the Valve Test instructions to ensure that the valve is being driven in the correct direction. If the vehicle steers in the reverse direction to the setting selected on the console, swap the A and B valve connectors on cable 45-10103 at the FieldPilot valve.
2. Adjust Valve Gain, Aggressiveness, and Sensitivity. Be aware that these settings are interdependent. A large change in one of these settings may require that adjustments are made in the other two settings.
3. Once Valve Gain, Aggressiveness, and Sensitivity have been properly adjusted, proceed to fine-tuning the Look-ahead setting.

TILT CALIBRATION

Tilt corrected GPS positions provided improved guidance performance in hilly terrain. To provide accurate tilt correction, the operator must calibrate the Steering Control Module (SCM).

The CenterLine 220 will detect if an SCM is connected. If detected, the operator will be able to perform the tilt calibration. The tilt calibration process must be started from a power up sequence.


1. Begin with the CenterLine 220 powered off.
2. Start the Tilt Calibration sequence by holding down the Power key  and the Swath Width key  at the same time until the Tilt Screen appears. Once the screen is displayed, release the keys.
3. A tilt calibration On/Off page will be displayed. If the page displays an empty check box, the rest of the tilt calibration screens will not be available and the calibration will end.

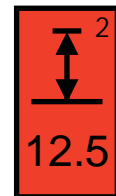
Check the box by using the Increase/Decrease keys.



  - Deselects
+ Selects



NOTE: This page will time out after 10 seconds if no keys are pressed.

- 3a. Press the Swath Width key  to advance to the next screen.
4. Measure the height of the antenna from the ground. Enter the antenna height (in feet and tenths of feet) (metres) on the antenna height page using the Increase and Decrease keys




NOTE: This page will time out after 10 seconds if no keys are pressed.

TILT CALIBRATION (CONTINUED)

5. Once the height is entered, press the Swath Width key  to proceed to the next Tilt Calibration page.
6. Level Page One is displayed. Position the vehicle on a level surface. Press the Swath Width key  to advance to the next level page.



7. Turn the vehicle 180 degrees and reposition the vehicle at the same location. Press the Swath Width key  again to record the level position.

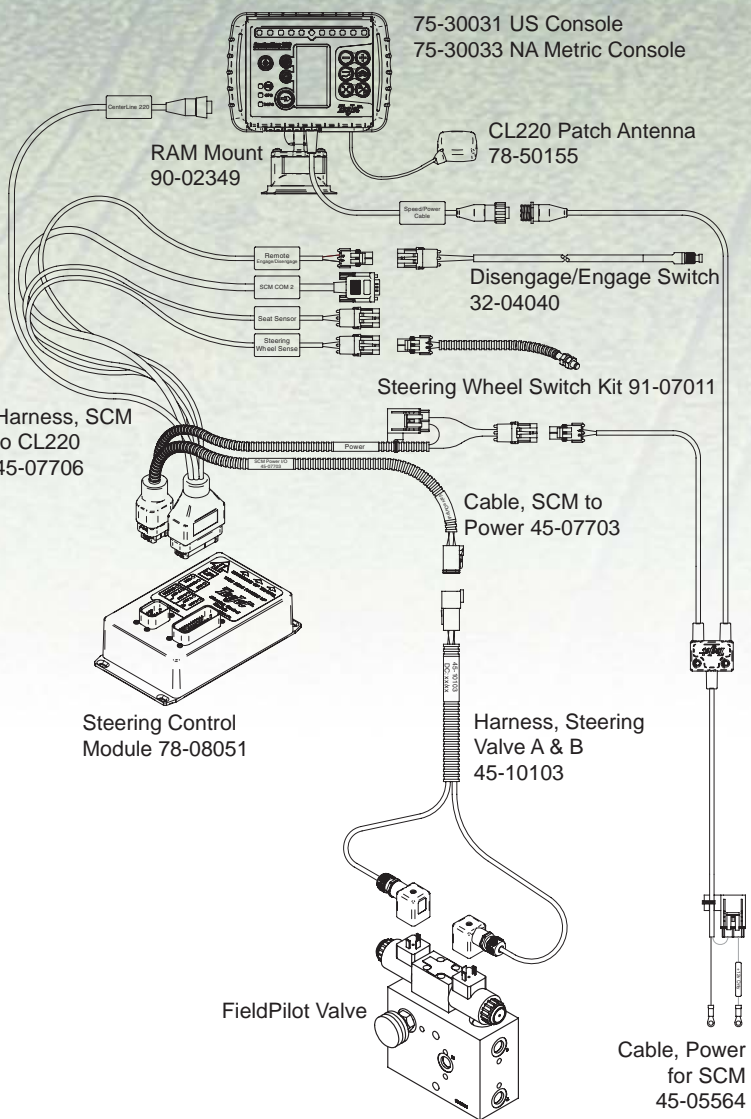


8. The final Tilt Calibration Screen will be displayed. This shows that Tilt Calibration has been completed. After 5 seconds, this screen will time out and the Main application page will appear.



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FIELDPILOT 220 SETUP



CENTERLINE 220 OVERVIEW



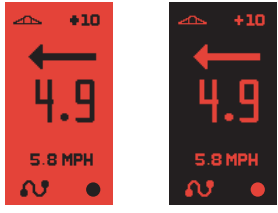
Power	Decrease	Increase
Brightness	Guidance Mode	Swath Width
Contrast	Return to Point	Mark A/B
Change Page		

POWER

Press the Power button to switch on the **CenterLine 220**. Press the Power button again to switch off. The CenterLine 220 startup screen will appear until a GPS signal is acquired.

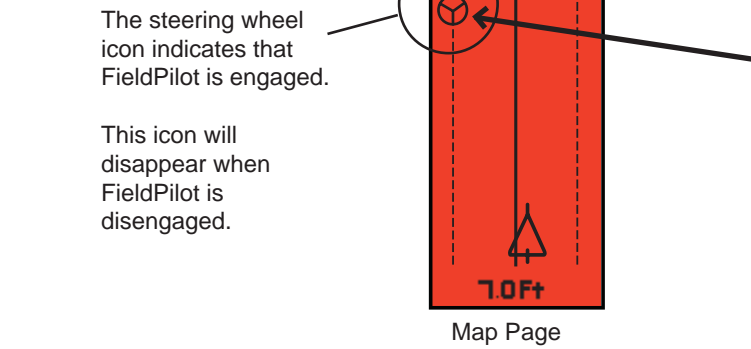
BRIGHTNESS/CONTRAST

Push the Brightness or Contrast button. Use the Increase and Decrease buttons to make adjustments. To invert the colors on the screen, press and hold the Contrast button for 3 seconds.



To engage FieldPilot Assisted Steering, press the Disengage/Engage Switch.

NOTE: The minimum speed for Assisted Steering to be engaged is 1 MPH (1.6 KPH). The maximum speed for Assisted Steering to be engaged is 22 MPH (35.4 KPH)



ASSISTED STEER SETUP

CenterLine 220 Systems equipped with software version 2.02 or later can provide assisted steering capabilities when connected to a TeeJet Steering Control Module. The CenterLine 220 will automatically detect if a Steering Control Module is connected to the CenterLine 220.

ONCE DETECTED, THE CENTERLINE 220 WILL ALLOW ASSISTED STEERING SETUP VIA THE SWATH WIDTH BUTTON . CONTINUE TO PRESS THE SWATH WIDTH BUTTON TO CYCLE THROUGH EACH OF THE FOLLOWING SETTINGS .

When the steering control module is not present, the Swath Width key only allows for swath width editing.

NOTE: If a Steering Control Module is connected to the CenterLine 220 after it is powered On, the connection will not be detected. Power must be cycled!

A page number is located in the top right corner of the display. This number allows the operator to be aware of where they are in the setup process. The steering wheel icon located in the top left corner of the window indicates that the operator is in the assisted steer setup process.

SWATH WIDTH
Adjusts Guidance Width

Adjusts value
 Proceed to next setup page

STEERING
Steering allows the operator to turn the assisted steer feature On and Off.

- Deselects
+ Selects
 Proceed to next setup page

LOOK AHEAD
In STRAIGHT mode, fine tune the look-ahead by conducting several approaches to the guideline. If the vehicle is overshooting the guideline when approaching, increase the value. If the vehicle does not overshoot the guideline but instead takes too long to get to the guideline, decrease look-ahead.

Adjust value, look ahead time range 0.0 to 10.0 (default is 4.0 seconds)
 Proceed to next setup page

ASSISTED STEER SETUP (CONT.)

AGGRESSIVENESS
Typically, adjust this value while in CURVED GUIDANCE. If the vehicle is cutting corners, decrease this value in increments of one. If the vehicle is driving outside of corners, increase this value.

Adjusts value, steering aggressiveness. Range 1-100 (default is 25)
 Proceed to next setup page

VALVE GAIN
If the vehicle is drifting away from the line or not approaching it fast enough, increase the value in increments of one. Decrease the value if the vehicle is oscillating rapidly or overshooting the guideline.

Adjusts Valve Gain value, Range 1 - 100 (default is 25)
 Proceed to next setup page

SENSITIVITY
Decrease this value if the steering is choppy or too responsive. Increase the value if the vehicle remains consistently off the guideline. As the value is decreased, stability will increase but so will a steady state error.

Adjusts sensitivity value, Range 0 - 9 (default is 9)
 Proceed to next setup page

VALVE TEST
Valve Test is used to verify steering is directed correctly and to determine the amount of time required to move the steering wheels from fully left to fully right.

Adjusts value left, right, and off.
 Proceed to next setup page
- Turns to the Left
+ Turns to the Right
Press either one to stop turning.