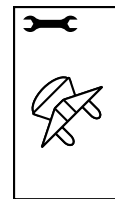


NOTES:


When first tuning FieldPilot 230, 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 COMPENSATION SETUP MODE

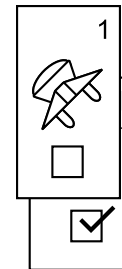



Tilt corrected GPS positions provide improved guidance performance in hilly terrain. To provide accurate tilt correction, the operator must calibrate the Steering Control Module (SCM). The CL230BP will detect if an SCM is connected. If connected, tilt calibration can be performed.





Press the Setup Mode  key until the initial Tilt Calibration Setup Mode screen is displayed.

Press the Enter  key to save the setting and advance the screen. Press the Escape  key to exit from Setup Mode without saving any changes. After 10 seconds of inactivity, Setup Screens will time out (changes will be saved). The CL230BP will return to Operation Mode.

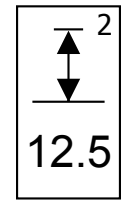
TILT ON/OFF





1 A Tilt Correction On/Off page will be displayed. If the page displays an empty checkbox, the Tilt Calibration screens will not be available. If the box is checked, the Tilt Calibration screens will be accessed. If the box is checked and a calibration has already been performed, press the Escape  key to avoid performing an additional calibration procedure.

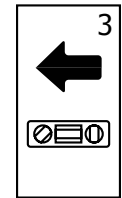
Check/Uncheck the box by using the Plus  or Minus  keys. The Plus  key selects (checks) the box. The Minus  key deselects (unchecks) the box. Press the Enter  key to accept the changes and advance to the Antenna Height setting.


ANTENNA HEIGHT



2 Measure the height of the antenna from the ground. Enter the antenna height (in feet and tenths of feet) (meters) on the antenna height page using the Plus  and Minus  keys. Press the Enter  key to accept the changes and advance to the Level One setting.


LEVEL ONE



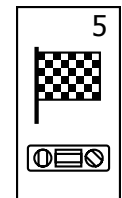
3 Position the vehicle on a level surface. Press the Enter  key to advance to the next Level screen.

LEVEL TWO




4 Turn the vehicle 180 degrees and reposition the vehicle at the same location. Press the Enter  key to record the level position.

FINAL TILT CALIBRATION SCREEN

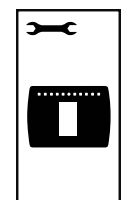




5 The Final Tilt Calibration Screen will be displayed. This will show that Tilt Calibration has been completed. After 5 seconds the screen will time out and return to the Operation screen.

DISPLAY SETUP MODE

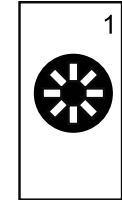
Press the Setup Mode  key until the initial Display Setup Mode screen appears.




DISPLAY SETUP SCREEN



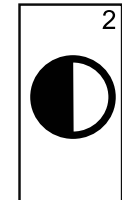
This is the initial Display Setup Screen. Setup screens will time out after 10 seconds of inactivity (changes will be saved). After time out, the screen will go back to Operation Mode. Pressing the Escape  key will also exit the user from Setup Mode without saving any changes. Press the Enter  key to advance to the Display Brightness setting.




DISPLAY BRIGHTNESS



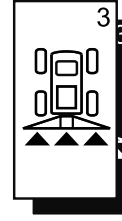
1 The Plus  and Minus  keys can be used to change the brightness levels of the display screen. Press the keys until the desired brightness is established. Press the Enter  key to advance to the Display Contrast setting.




DISPLAY CONTRAST



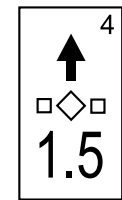
2 The Plus  and Minus  keys can be used to change the contrast levels of the display's background. Press the Enter  key to advance to the Display Background setting.




DISPLAY BACKGROUND



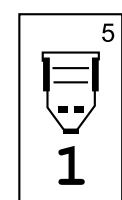
3 The Plus  and Minus  keys toggle between light and dark backgrounds. Press the keys until the desired background is established. Press the Enter  key to accept the changes.




LED SPACING



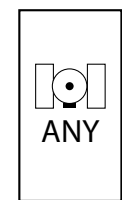
4 The distance illustrated by the illuminated LEDs can be customized. The default setting is 1.5 feet (.46 meters). Use the Plus  and Minus  keys to adjust the spacing as required for individual preference. Press the Enter  key to accept the changes.




COM PORT SETUP





5 The COM Port can be customized to send DGPS data out or accept external DGPS. "0" means the console is accepting external DGPS data. "1" means the console is using internal DGPS and is transmitting out. Use the Plus  and Minus  keys to toggle the COM Port number. Press the Enter  key to accept the changes. Power must be cycled to the console if this setting is changed.

GPS SETUP



GPS Setup can be customized to accept "ANY" available source transmission (either uncorrected or differential), "GPS" source transmissions (only uncorrected signals), or "DGPS" source transmissions (only differentially corrected signals). Use the Plus  key to select "ANY," "GPS," or "DGPS" and the Minus  key to revert backward. Press the Enter  key to accept the changes. Power must be cycled to the console if this setting is changed.

Once the final setting has been entered, the screen will return to the initial Display Setup Mode screen. If no additional changes are required, press the Escape  key and exit to Operation Mode or press the Setup Mode  key again to enter into CL230BP Setup Mode.

FieldPilot 230

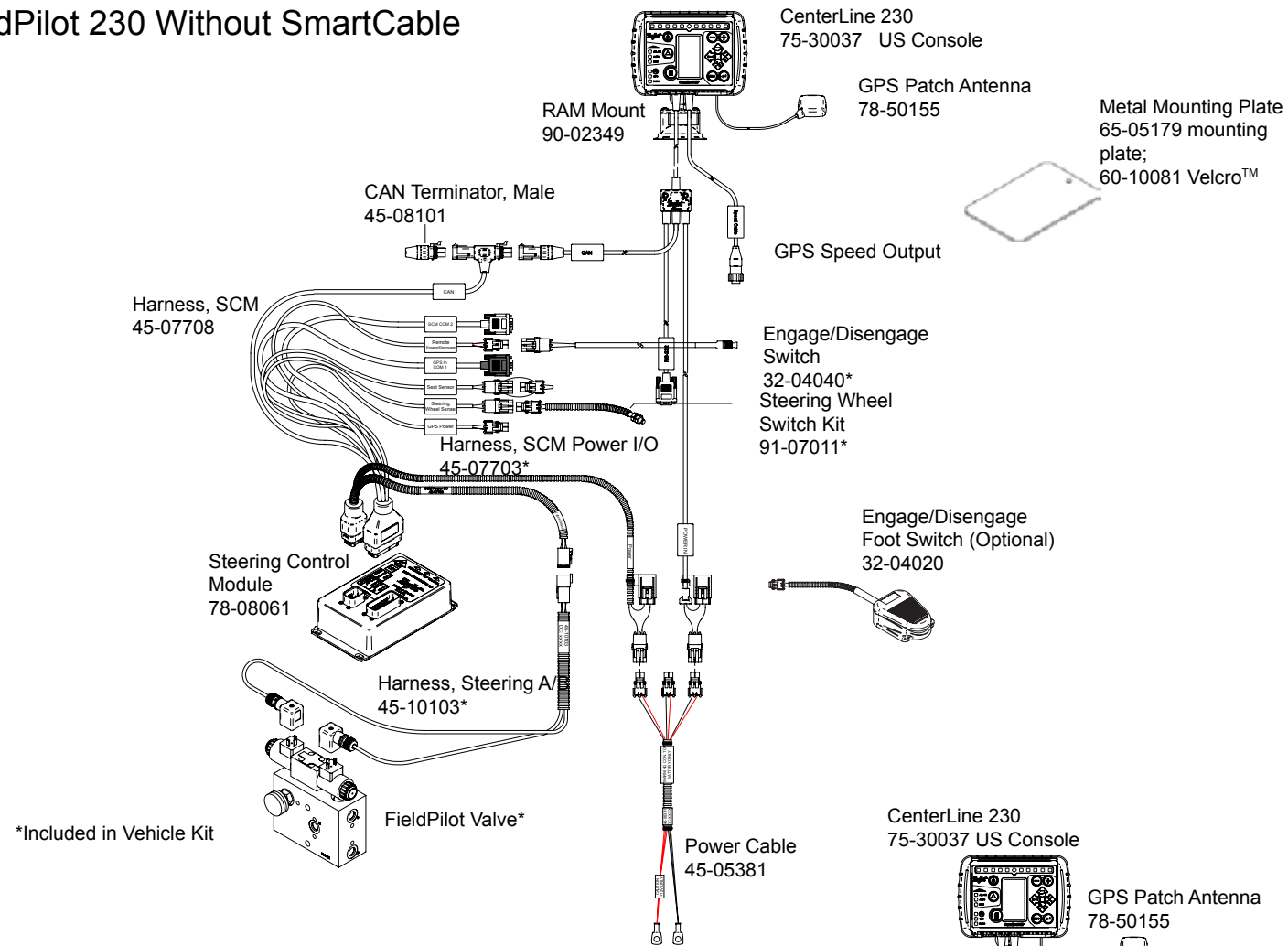
TeeJet
TECHNOLOGIES

1801 Business Park Drive
Springfield, Illinois 62703 USA
(217) 753-8424
www.teejet.com



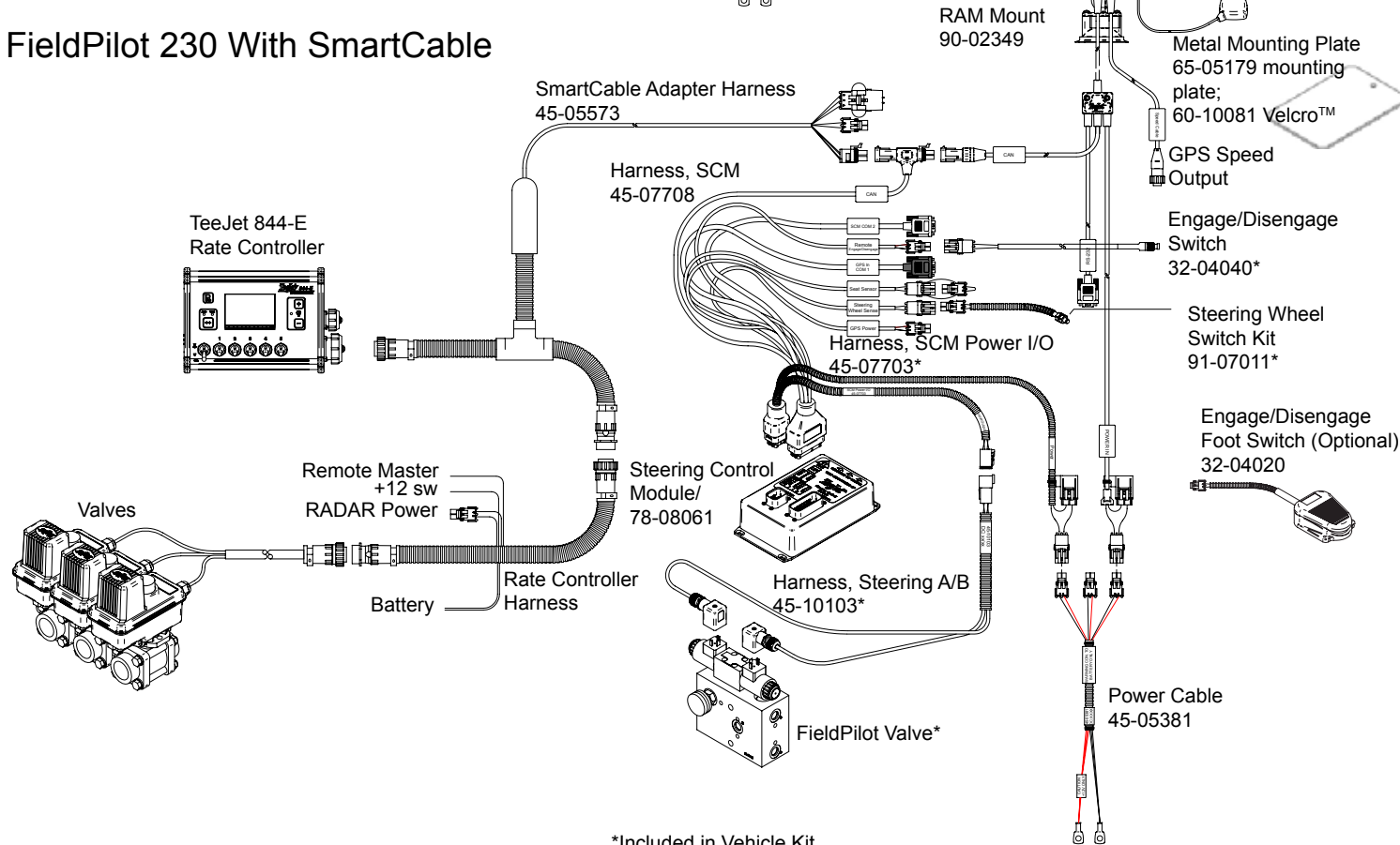
TeeJet
TECHNOLOGIES

FieldPilot 230 Without SmartCable

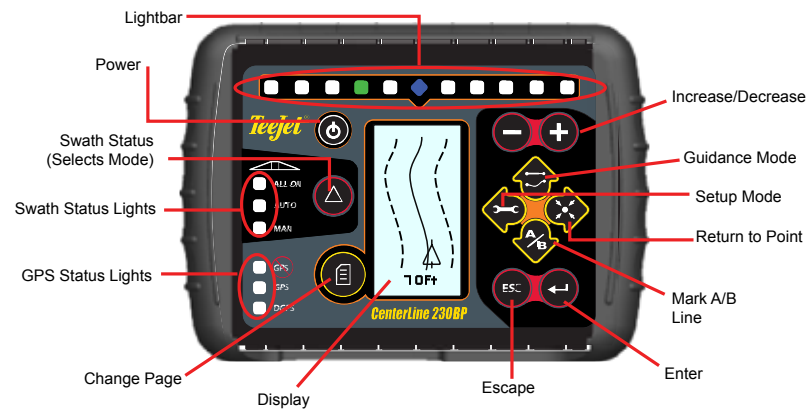


*Included in Vehicle Kit

FieldPilot 230 With SmartCable



*Included in Vehicle Kit



Power up the system by pressing the Power button. Power down the system by pressing and holding the Power button for approximately four (4) seconds.

ASSISTED STEERING SETUP MODE

NOTE: If a Steering Control Module (SCM) is not connected to the system, Assisted Steering Setup Mode will not be displayed. Proceed to the next section.

Press the Setup Mode key until the initial Assisted Steering Setup Mode screen is displayed.

Press the Enter key to save the setting and advance the screen. Press the Escape key to exit from Setup Mode without saving any changes. After 10 seconds of inactivity, Setup Screens will time out (changes will be saved). The CL230BP will return to Operation Mode.

NOTE: If an SCM is connected to the CL230BP after it is powered on, the connection will not be detected. Power must be cycled.

STEERING

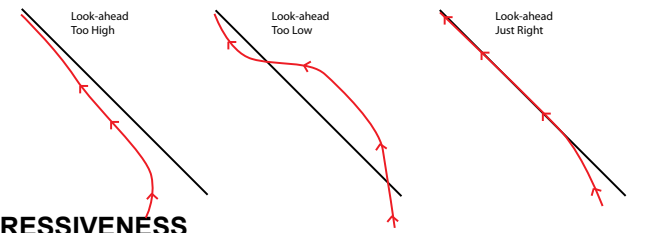
Steering allows the Assisted Steer function to be turned on and off. Use the Plus or Minus keys to toggle the setting to "On" or "Off". Press the Enter key to accept the changes and advance to the Look Ahead setting.

A checked box activates the Steering Control System.

LOOK AHEAD

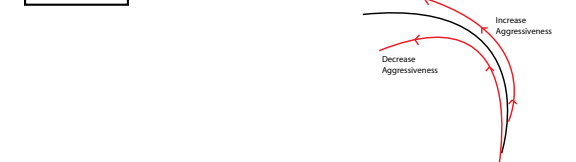
In STRAIGHT mode, fine tune the Look Ahead by conducting several approaches to the guideline. If the vehicle is overshooting the guideline when approaching, increase the value. If the vehicle does not overshoot the guideline but instead takes too long to get to the guideline, decrease the Look Ahead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

Use the Plus or Minus keys to adjust the value range of 0.0 to 10.0 (default is 4.0 seconds). Press the Enter key to accept the changes and advance to the Aggressiveness setting.



AGGRESSIVENESS

Typically, adjust this value while in CURVED GUIDANCE mode. If the vehicle is cutting corners, decrease this value in increments of one. If the vehicle is driving outside of corners, increase this value. Use the Plus or Minus keys to increase or decrease the value - range is 1 to 100 (default is 25). Press the Enter key to accept the changes and advance to the Valve Gain setting.



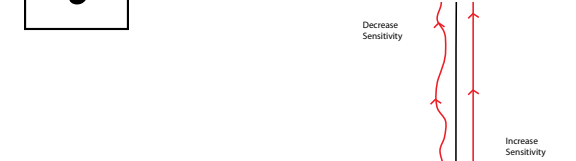
VALVE GAIN

If the vehicle is drifting away from the line or not approaching it fast enough, increase the Valve Gain setting in increments of one. Decrease the value if the vehicle is oscillating rapidly or overshooting the guideline. Use the Plus or Minus keys to increase or decrease the value - range is 1 to 100 (default is 25). Press the Enter key to accept the changes and advance to the Sensitivity setting.



SENSITIVITY

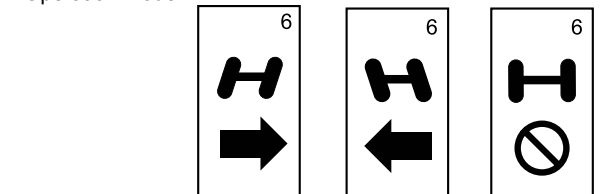
Decrease this value if the steering is too choppy or too responsive. Increase the value if the vehicle remains consistently off the guideline. As the value is decreased, stability will increase but so will a steady state error. Use the Plus or Minus keys to increase or decrease the value - range is 0 to 9 (default is 9). Press the Setup Mode key to accept the changes and advance to the Valve Test setting.



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. Use the Plus or Minus keys to select the left, right, and off response from the FieldPilot valve. The Plus key turns to the right, the Minus key turns to the left, and pressing either one again will stop the turn.

Press the Enter key to return to the initial CL230BP Assisted Steering Mode Screen. If no additional changes are required, press the Escape key to exit to Operation Mode.



WARNING: PINCH POINT HAZARD! To prevent serious injury or death, avoid unsafe practice while manually operating hydraulic steering circuits. Keep others away and stay clear of mechanical steering linkages.