

EZ-Steer™ Assisted Steering System Quick Reference Card

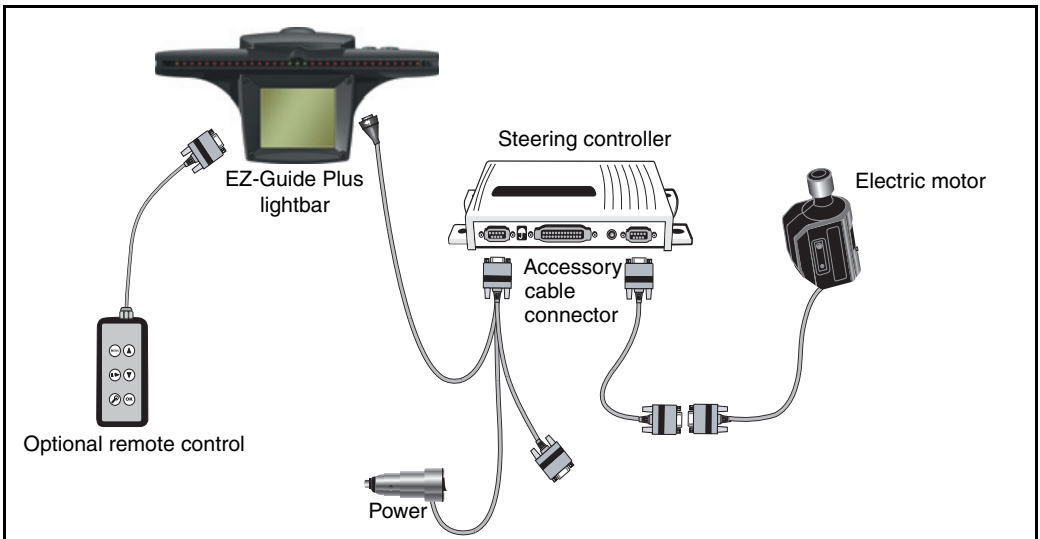
GETTING STARTED

To add the EZ-Steer™ assisted steering system to your vehicle:

1. Check that the vehicle is approved for use with the EZ-Steer system at www.ez-steer.com.
2. Use the installation instructions to install the platform kit on the vehicle. Go to www.ez-steer.com to check for vehicle- or platform-specific Support Notes.
3. Copy the vehicle configuration settings from www.ez-steer.com. Enter these settings into the lightbar.
4. To set up and calibrate your vehicle, refer to the *EZ-Steer System Reference Guide*.
5. For further assistance, refer to the Troubleshooting chapter of the *EZ-Steer System Reference Guide*.

CONNECTING

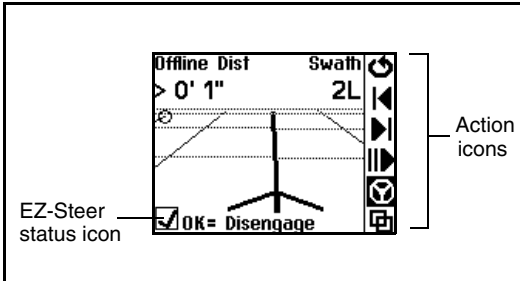
This figure shows how to connect the EZ-Steer system components.



Warning: Before you install the EZ-Steer assisted steering system, read the safety information on the back page of this card.

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MAIN MAP VIEW



To select an action icon, press ▲ or ▼, and then **OK**.

Action icon	Function
◀	Nudge left
▶	Nudge right
⊙	Engage / disengage
⚙	Aggressiveness

These tables describe the EZ-Steer system status icons and the EZ-Steer system engage codes.

Status icon	Description
✘	Cannot engage. See Table of “Engage codes”
—	Can engage
✓	Currently engaged
!	Fault with EZ-Steer. For more information, refer to <i>EZ-Steer / EZ-Steer Faults</i> .

Engage code	Description
D	Too far offline
B	On outside headland or AB Line
A	Heading error too great
F	Speed outside allowed range
S	
G	No GPS
O	Operator not present

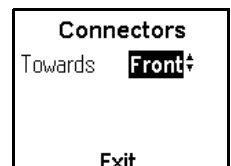
TERRAIN COMPENSATION

Terrain compensation requires an EZ-Steer controller with T2™ terrain compensation technology.

Install the EZ-Steer controller on the floor with the connectors pointing forward or backward, or on the rear wall with the connectors pointing toward the floor. Ensure that the controller is aligned with the vehicle axes.

To configure the controller, go to the *Terrain Compensation* menu and then do the following:


1. Select *Orientation* and then select the direction that the connectors point.
2. Select *Antenna Height* and then enter the antenna height.
3. Select *Calibration* and then perform the terrain compensation calibration.






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
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ENGAGING

To engage the EZ-Steer system, you must first define an AB Line, and the vehicle must be within the engage limits configured in the *Engage Options* screen. When the system is ready to engage, the status icon displays  and one LED on each end of the lightbar is illuminated.

To manually engage the EZ-Steer system, do one of the following:




- Select  on the main map screen and then press .
- Press  on the optional remote control.

While the system is engaged, the status icon displays  and two LEDs on each end of the lightbar are illuminated.

DISENGAGING

The EZ-Steer system automatically disengages when the vehicle is outside the engage limits configured in the *Engage Options* screen, when paused, or when GPS positions are lost. If *Warnings / Low Accuracy Warning* is set to High Accuracy Only, the system disengages if it receives low accuracy positions (for example, no corrections).

To manually disengage the system, do one of the following:

- Select  on the main map screen and then press .
- Turn the steering wheel to override the electric motor until the offline limit is exceeded.
- Press  on the optional remote control.

When the system is disengaged, three LEDs at each end of the lightbar flash and the optional remote control emits an audible warning.

When the system is not in use, use the motor lock pin to tilt the motor away from the steering wheel.

LED ENGAGE STATES

The outermost lightbar LEDs display the engage status of the EZ-Steer system.

LED state	Engage status
1 solid LED at each end	Ready to engage
2 solid LEDs at each end	Currently engaged
3 flashing LEDs at each end (for 10 seconds)	Currently disengaged

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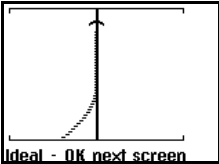
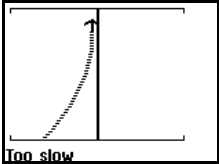
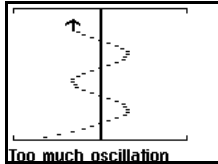
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EZ-CALIBRATION WIZARD

The EZ-Calibration wizard makes calibration easier by guiding you through the setting of:

- Freeplay
- Angle/turn
- Motor Speed
- Aggressiveness
- Freeplay Offset

Each step displays the offline view (the offline error over the last 10 seconds). Use the up/down arrows at each step, adjusting the parameters to minimize the size of oscillations (the offline distance) before going on to the next step. The following screens show ideal and poor performance.

 <p>Ideal - OK next screen</p>	 <p>Too slow</p>	 <p>Too much oscillation</p>
Ideal performance	Poor performance - slow to get online	Poor performance - too much oscillation

Before you start the EZ-Calibration wizard, ensure that you have mapped a straight AB Line, that the vehicle is lined up on the line in an open field, and that the correct vehicle type, steering wheel diameter, and wheel base are entered in the *Vehicle Setup* screen. To obtain these values, go to www.ez-steer.com.

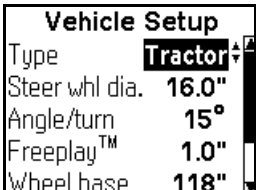
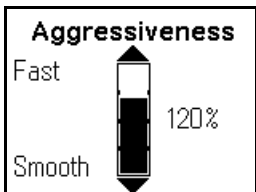
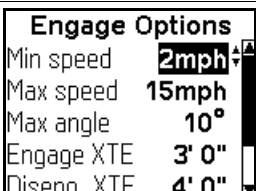
To run the EZ-Calibration wizard, select *EZ-Steer / EZ-Calibration*.

Step	Description	This action minimizes ...
1	Read and acknowledge all warnings and information screens.	
2	Calibrate the Freeplay. Perform while stationary.	
3	Calibrate the Angle/Turn. Perform while engaged and driving at operational speed.	Oscillations
4	Calibrate the Aggressiveness. Perform while engaged and driving at operational speed.	Oscillations
5	Calibrate the Freeplay offset. Perform while engaged and driving at operational speed.	Offline error
6	Motor speed. Perform while engaged and driving at operational speed.	Oscillations and steering wheel movement
7	Review calibration settings. Either accept these settings or re-run the calibration to improve the settings.	

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CONFIGURATION OPTIONS

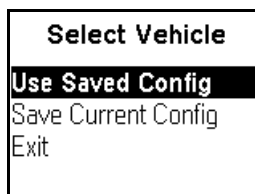
EZ-Steer menu option	Description	Defaults
Use/Save Config	Use or save a vehicle configuration.	
	Configure vehicle setup parameters.	Type: Tractor Steer whl dia.: depends on vehicle type Angle/turn: depends on vehicle type Freeplay™: depends on vehicle type Wheel base: 118"
EZ-Calibration	Perform EZ-Calibration.	
	Manually adjust aggressiveness.	Depends on vehicle type
	Configure the engage options.	Min speed: 2 mph Max speed: 15 mph Max angle: 15 degrees Engage XTE: 6' 0" Diseng. XTE: 10' 0" O'ride Sensitivity: 20% Motor Speed: depends on vehicle type Engage on AB: Off
Operator Timeout	Configure the operator timeout alert.	10 min
Seat Switch	Enable or disable the seat switch.	Disabled
Diagnostics	View EZ-Steer system diagnostics.	
Faults	View EZ-Steer system faults.	

USING AND SAVING VEHICLE CONFIGURATIONS

The EZ-Steer system can save up to three vehicle configurations. Each vehicle configuration records the Engage Options, the Aggressiveness value, and the Vehicle Setup settings.

To save a vehicle configuration, select *Use/Save Config* then select *Save Current Config*.

To use a vehicle configuration, select *Use/Save Config* and then select *Use Saved Config*.





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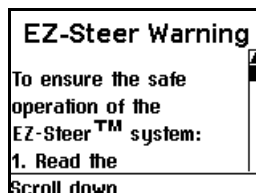
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SAFETY NOTICES

THE EZ-STEER ASSISTED STEERING SYSTEM IS SOLELY INTENDED FOR AGRICULTURAL USE IN AN OPEN FIELD ENVIRONMENT WITH AGRICULTURAL VEHICLES APPROVED BY TRIMBLE FOR USE WITH THE EZ-STEER SYSTEM, AND SHOULD NOT BE USED WITH ANY OTHER TYPE OF VEHICLE OR FOR ANY OTHER PURPOSE.

Before using the system:

- Put the vehicle seat and steering wheel in the normal operating position and check that the EZ-Steer motor does not interfere with any controls, for example, throttle, gears, or wipers.
If it does interfere with any controls, tilt the steering wheel or orient the motor at a different angle on the steering wheel. For example, shift from the 3 o'clock to the 12 o'clock position to avoid the interference.
- The operator must read and acknowledge safety warnings whenever the system is powered on:
 - Press  to scroll through the text.
 - At the end of the text, press  to acknowledge the warnings.



While using the system:

- Keep alert for obstacles in the path of the vehicle. The EZ-Steer system cannot identify or avoid these.
- Remain in the vehicle while the EZ-Steer system is engaged.
- Use the EZ-Steer system only in an open field. Do not engage on any type of road.

After using the system:

- Turn off the EZ-Steer system power switch or remove the power plug before exiting the vehicle.
- If the EZ-Steer system is not being used, pivot the motor away from the steering wheel.

ADDITIONAL INFORMATION

For more information on how to use the EZ-Guide Plus lightbar and other guidance features, refer to the *EZ-Guide Plus Quick Reference Card* and *Getting Started Guide*.

For additional information on the EZ-Steer system, go to www.ez-steer.com or contact your local EZ-Steer system reseller.

To purchase any of the following accessories, contact your local EZ-Steer system reseller:

- optional remote control
- optional seat switch and sonalert cable
- spare foam wheels
- terrain compensation upgrade

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