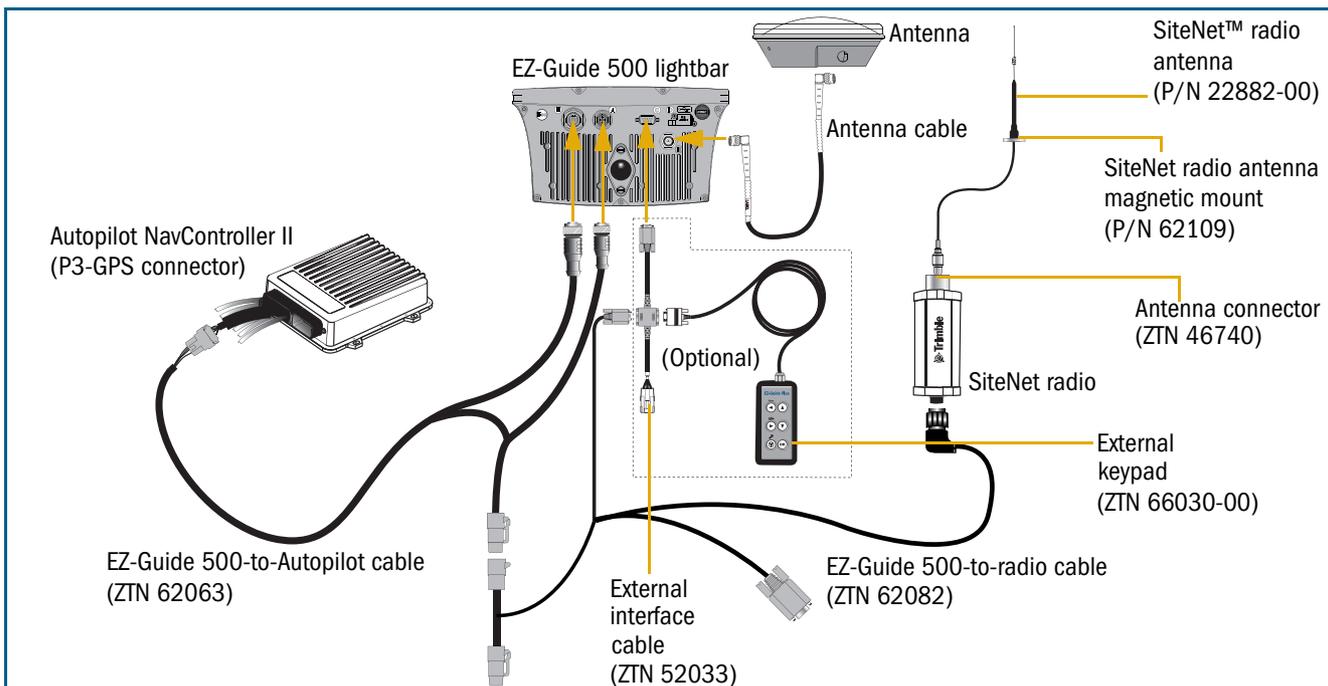


EZ-Guide® 500 Lightbar with the AgGPS® Autopilot™ System Quick Reference Card

CONNECTING THE SYSTEM

When the AgGPS® Autopilot™ system has been professionally installed, add the EZ-Guide® 500 lightbar guidance system as shown:



LIGHTBAR LAYOUT

Function buttons

These buttons perform the functions indicated by the icons.

Swath lines

The current swath is red. Adjacent swaths are blue. Swath numbers are displayed at the bottom of the screen.

Tip bar

Provides information on how to use the system.

Offline guidance LEDs

When the vehicle is online, the center three green LEDs are lit. When it is offline, the lit LEDs move to the side.



ESC button (back of unit)

Cancels changes and moves up one menu level.

Buttons: OK, Up, Down

The arrow key highlights an icon and the **OK** button selects it.

Coverage logging and overlap

Coverage is displayed when a spray switch is on, when the coverage function button is enabled, or when the Autopilot system is engaged.

Vehicle icon

Shows the vehicle position and heading relative to the current swath.

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CONFIGURATION

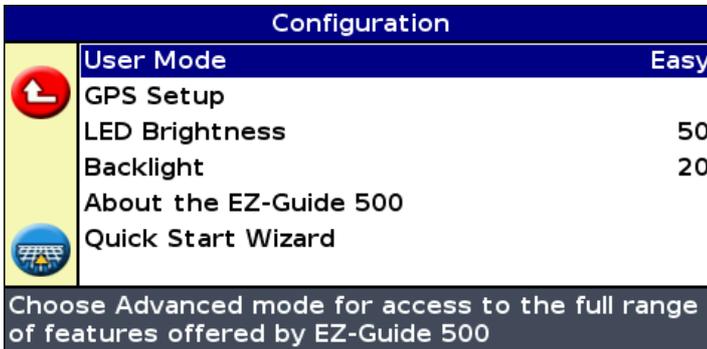
Vehicle configuration

To configure the vehicle for use with the AgGPS Autopilot system, connect a laptop that is running the AgGPS Autopilot Toolbox II software to the Laptop connector on the NavController II. For more information, refer to the *AgGPS Autopilot Toolbox II Software User Guide*.

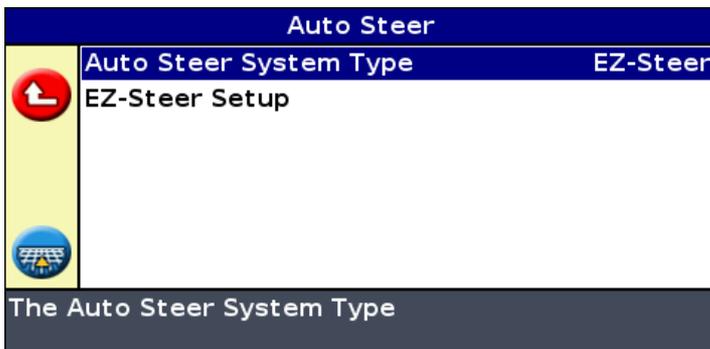
Lightbar configuration

1. Change the lightbar to Advanced mode:

- a. From the main guidance screen, press  one or more times until you select the  icon and then press . The *Configuration* screen appears:



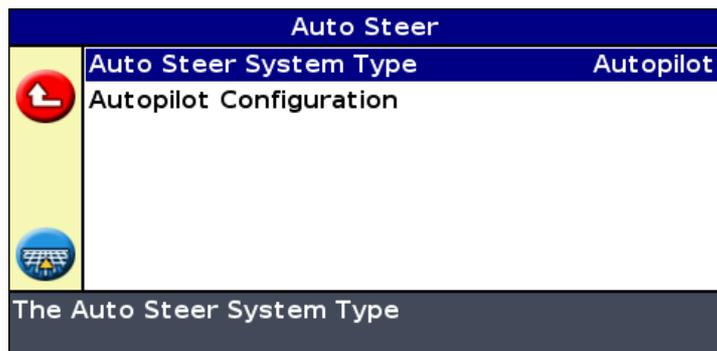
- b. Select User Mode and then press . The *User Mode* screen appears.
 - c. Select Advanced and then press .
2. Select *Configuration / Auto Steer*. A warning message appears.
3. Press . The *Auto Steer* screen appears:



4. Set the *Auto Steer System Type* option to Autopilot.

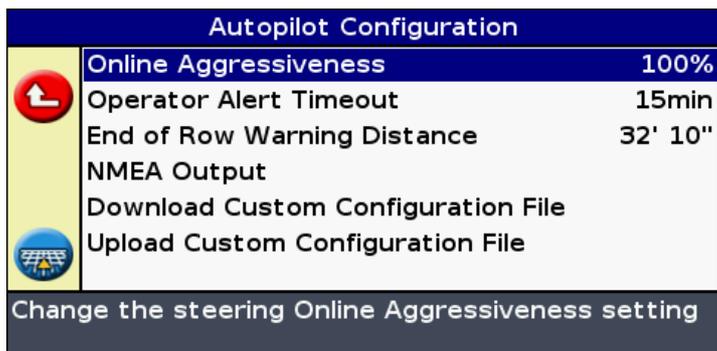
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Once you set the Nav Controller Type, the *Auto Steer* screen re-appears. The EZ-Steer Setup menu changes to the Autopilot Configuration menu.



After you enable the Autopilot system, configure the Autopilot system settings.

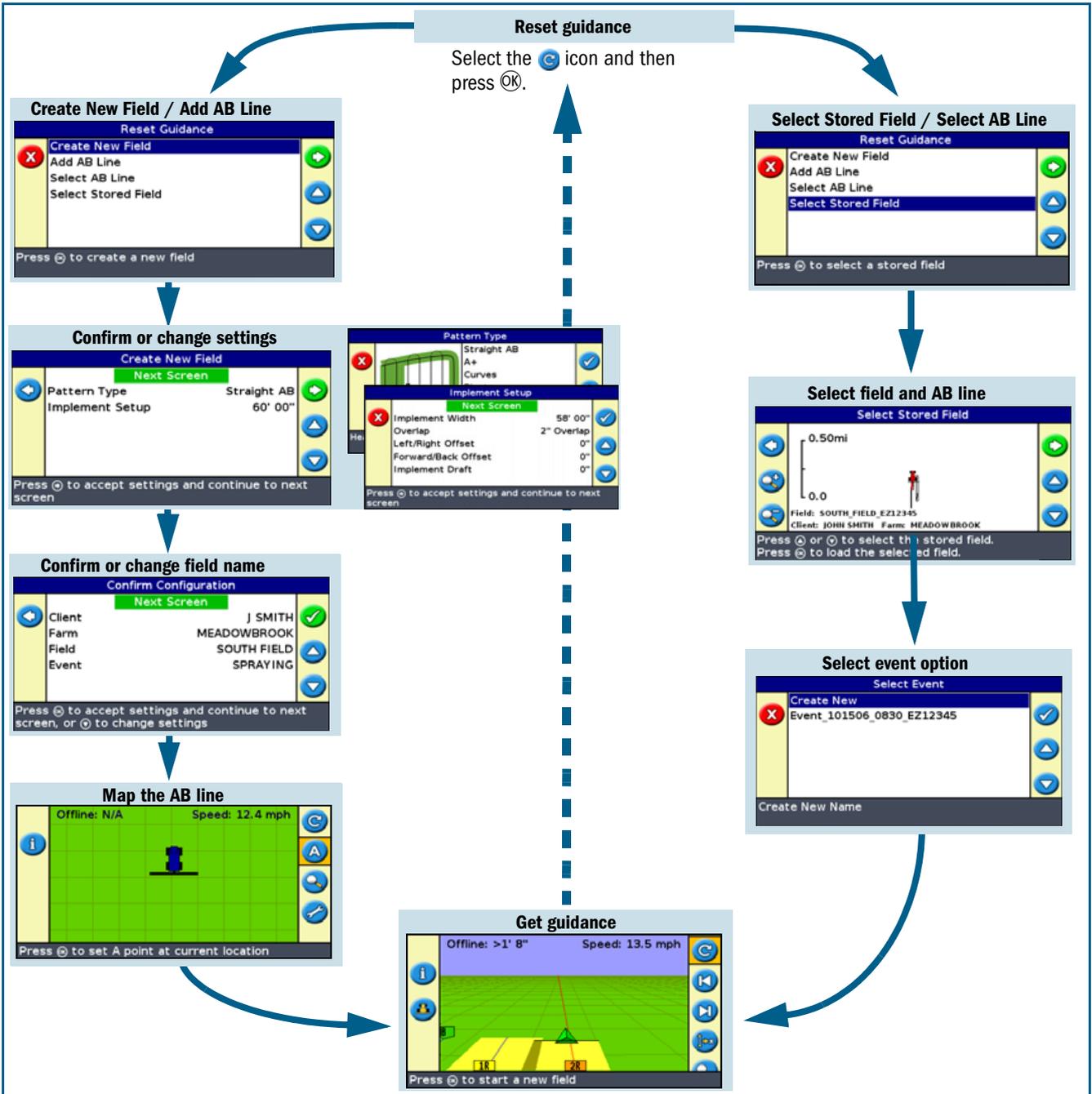
AgGPS Autopilot system settings



Item	Description
Online Aggressiveness	This setting controls how aggressively the vehicle steers to remain on the guidance line.
Operator Alert Timeout	To verify the presence of the operator, a warning appears periodically. The warning requires you to acknowledge it to remain in normal automatic mode. This setting controls the frequency of the warning. The Operator Alert Timeout cannot be disabled.
End of Row Warning Distance	This warning appears when you are at the specified distance from the end of the current row. To make the warning appear earlier, increase the End of Row distance. This can be helpful if the operator is likely to be distracted (for example, by monitoring other equipment during operation).
NMEA Output	You can enable or disable NMEA message output from the Autopilot controller laptop port. If NMEA messages are enabled, you can configure which formats are output and the baud rate. <i>Note – Ensure that the baud rate you select is the same as that of the device that is receiving the messages.</i>
Download / Upload Custom Configuration File	You can save or restore a custom system configuration file from the Autopilot controller. To download a file, you are required to enter a name for the file.

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ADVANCED MODE APPLICATION USE



EZ-Guide[®] 500 Lightbar with the AgGPS[®] Autopilot[™] System Quick Reference Card

ENGAGING

To engage the EZ-Guide 500 system with the AgGPS Autopilot system, you must have a line defined and the vehicle must be within the engage limits of the system.

Do one of the following:

- Press the engage button  on the main guidance screen.
- Press the engage button  on the optional remote control.
- Press the optional remote engage foot pedal.

DISENGAGING

The system automatically disengages when:

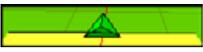
- The vehicle is outside the engage limits
- GPS positions are lost
- The *Minimum Fix Quality* setting is set to a high accuracy correction method (for the AgGPS Autopilot system, this is usually RTK Fixed) and the system receives low accuracy positions (for example, no corrections). This setting is accessed at *Configuration / System / GPS / GPS Limits / Minimum Fix Quality*.

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

- Press the engage button  on the main guidance screen.
- Press the engage button  on the optional remote control.
- Turn the steering wheel.

GPS Limits	
	Minimum Elevation 8°
	Minimum SNR 38.0
	Minimum Satellites 5
	Maximum HDOP 3.0
	Minimum Fix Quality RTK Fixed
Set the minimum elevation angle at which GPS satellites will be used	

Engage status indicators

Engage status	Engage button color	Vehicle icon color	LED indication
Ready to engage			1 solid LED at each end 
Engaged			2 solid LEDs at each end 
Cannot engage			No end LEDs illuminated 

When the system disengages, the three LEDs at each end of the lightbar flash for 10 seconds.

EZ-Guide[®] 500 Lightbar with the AgGPS[®] Autopilot[™] System Quick Reference Card

ADDITIONAL INFORMATION

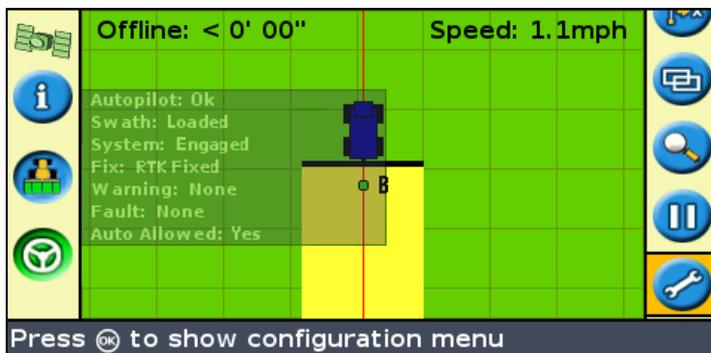
Status screens

When you enable the AgGPS Autopilot system, the status screens that are available change:

This EZ-Steer [®] menu ...	Becomes ...
Terrain Compensation Status	None (menu disappears)
EZ-Steer Status	Autopilot Status
Fault History / EZ-Steer Fault History	Fault History / Autopilot Fault History

Information tab

When the Autopilot system is enabled, an additional *Information* tab is available. It shows the current status of the Autopilot system.



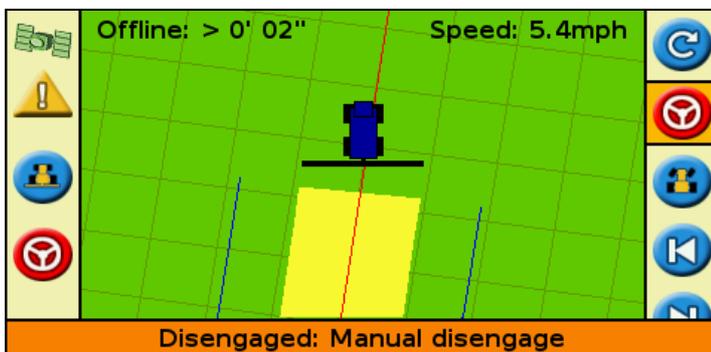
System warnings

Warning messages appear on the lightbar screen when the following conditions occur:

- the Automated system limits are reached
- a fault has occurred

There are two types of warning, full-screen and message bar:

- To clear a full-screen warning, press the [OK] button.
- To clear a message bar warning, press the top function button (to the left of the screen).



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