

# Setting up the CFX-750™ Display with the EZ-Pilot™ Steering System

## Quick Reference Card

### RUN SCREEN LAYOUT

When the EZ-Pilot™ steering system has been activated on the CFX-750™ display, the Run screen appears as shown.



The CFX-750 display has built-in, context-sensitive Help that lets you quickly find information you need about the current screen. To access the Help from any configuration screen, tap . When you are finished with the screen, tap .

When you have installed the EZ-Pilot hardware, the EZ-Pilot Wizard appears when you turn on the CFX-750 display for the first time. Use the wizard for basic setup and calibration.

Tap	To ...	Tap	To ...
	Advance to the next screen.		Close the wizard.
	Return to the previous screen.		Return to the Run screen when the wizard has been completed.

After you have completed the wizard, you can change the following settings:

- To change the EZ-Pilot settings, select / / Auto Steer / EZ-Pilot Setup.
- To change the vehicle settings, select / / Vehicle Setup.
- To calibrate the EZ-Pilot system, select / / Auto Steer / EZ-Pilot Setup / EZ-Pilot Calibration Wizard.

## CONFIGURING THE EZ-PILOT SYSTEM ON THE CFX-750 DISPLAY

### Setting up the system

Enter the following information into the EZ-Pilot Wizard:

Setting	Description
Vehicle type	The type of vehicle the EZ-Pilot system will be steering
Wheelbase	The distance between the front and rear axles. On tracked vehicles, the wheelbase is exactly half the length of the track. On articulated 4WD tractors, the wheelbase is half the distance between the front and rear axles when the tractor is straight.
Antenna Height	The distance between the ground and the top of the GPS antenna.

### Calibrating T3 terrain compensation

The EZ-Pilot system contains sensors that use T3™ terrain compensation technology to provide roll compensation when the vehicle is on a slope or drives over a bump. You will need GPS connected.

1. In the *Controller Orientation* screen, select the location and orientation of the EZ-Pilot controller and then tap . The *T3 Roll Calibration: Step 1* screen appears.
2. Park the vehicle and mark the inside position of both sets of wheels. Tap and remain stationary for 20 seconds while the offset is read.
3. Turn the vehicle around and ensure that the wheels are over the positions marked in Step 2. Tap and remain stationary for 20 seconds while the offset is read.

### Calibrating the EZ-Pilot system

Calibrate the steering performance:

1. When prompted, set the A and B points:




2. Complete the Calibration Wizard.
3. Complete each step of the calibrating process – enter the following settings and then tap :

Setting	Description
Angle Per Turn	The angle that the wheels turn during one full rotation of the steering wheel. <ul style="list-style-type: none"> <li>• If the setting is too low, the system will turn the wheel too much and the vehicle will perform s-turns.</li> <li>• If the setting is too high, the system will turn the wheel too little and the vehicle will not hold the line.</li> </ul>
Approach Aggressiveness	How quickly the EZ-Pilot system steers the vehicle onto the current guidance line. <ul style="list-style-type: none"> <li>• A very high setting steers the vehicle quickly, but the steering correction may be too severe.</li> <li>• A very low setting steers the vehicle very slowly, but the vehicle may overshoot and travel too far down the swath before reaching the guidance line.</li> </ul>
Online Aggressiveness	How aggressively the EZ-Pilot system corrects deviations from the current guidance line. <ul style="list-style-type: none"> <li>• A very high setting will correct deviations quickly but the vehicle may steer erratically.</li> <li>• A very low setting will allow a smoother drive down the swath but the vehicle may go further offline before the deviation is corrected.</li> </ul>
Freeplay Offset	Adjust this setting if the vehicle drives consistently to one side of the line. <ul style="list-style-type: none"> <li>• If the vehicle is offline to the left, increase the Freeplay Offset to the right.</li> <li>• If the vehicle is offline to the right, increase the Freeplay Offset to the left.</li> </ul>
Override Sensitivity	The amount of force that is required to disengage the system. <ul style="list-style-type: none"> <li>• If the EZ-Pilot system is too easily disengaged, for instance when hitting a bump, decrease the setting in 5% increments.</li> <li>• If the system is too difficult to disengage when you manually turn the steering wheel, increase the setting in 5% increments.</li> </ul>


## ADVANCED SETTINGS

### Engage options

Option	Description
Minimum Speed	Minimum speed at which the system can engage. If the system is engaged and the speed drops below this limit, the system disengages.
Maximum Speed	Maximum speed at which the system can engage. If the system is engaged and the speed increases above this limit, the system disengages.
Maximum Angle	Maximum angle at which the system can engage. If the vehicle approaches the swath at an angle greater than this limit, it cannot be engaged.
Engage Offline	Maximum distance from the swath at which the system can engage. If the vehicle approaches the swath at a distance greater than this limit, it cannot be engaged.
Disengage Offline	Maximum distance from the swath at which the system can remain engaged. If the vehicle drives offline greater than this limit, the system disengages.
Override Sensitivity	Amount the steering wheel must be turned manually before the system disengages.
EZ-Pilot Operator Timeout	If the EZ-Pilot system is engaged and there has been no operator input to the CFX-750 display for longer than the operator timeout period, a message appears on the screen. If you tap  within 30 seconds after the warning appears, the system will not disengage.

## RUNNING THE EZ-PILOT SYSTEM

### Engaging the EZ-Pilot system


To engage the EZ-Pilot system, you must have an AB line defined and the vehicle must be within the engage limits configured in the *EZ-Pilot Setup/Engage Options* screen. To manually engage the system, tap  on the Run screen or on the optional remote control.

### Disengaging the system




The EZ-Pilot system automatically disengages when:

- The vehicle is outside the engage limits configured in the *EZ-Pilot Setup/Engage Options* screen.
- The system is paused.
- GPS positions are lost.
- The *Minimum Fix Quality* setting is set to a high accuracy correction method but the system receives low accuracy positions (for example, no corrections).

To manually disengage the system:

- Tap  on the Run screen or on the optional remote control.
- Turn the steering wheel.

### Engage status indicators

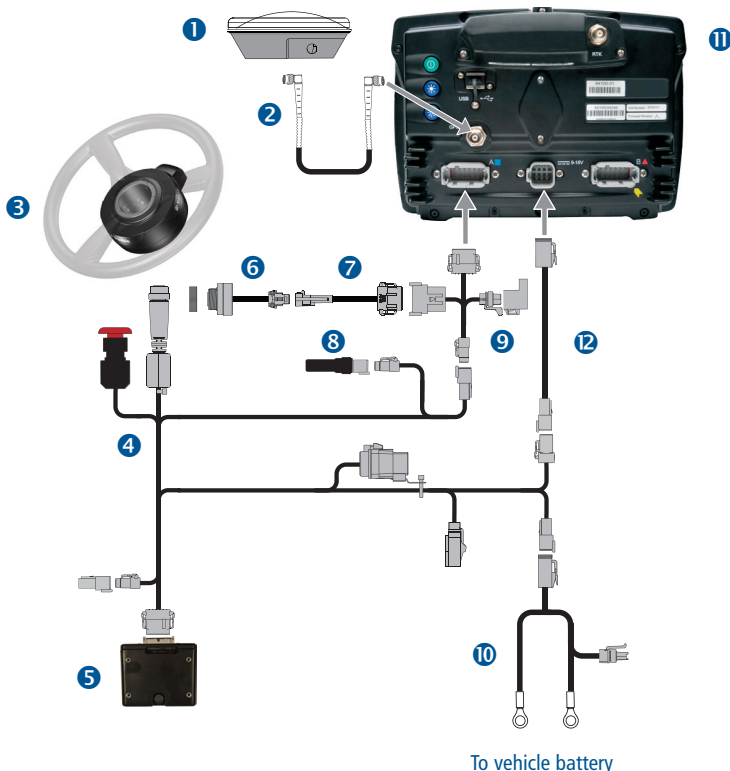
Engage status	Engage button color
Ready to engage	
Engaged	
Cannot engage	

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### CONNECTING THE SYSTEM

Once the EZ-Pilot steering system has been professionally installed, add the CFX-750 display as shown:



No	Description
1	Antenna (P/N 77038-00)
2	Antenna cable (P/N 50449)
3	SAM200 steering motor (P/N 83382-xx)
4	IMD600 - SAM200 to CAN power cable (P/N 76351)
5	IMD600 (P/N 83390-xx)
6	Sonalert (P/N 43104)
7	Display to Sonalert cable (P/N 84668)
8	CAN terminator (P/N 59783)
9	CFX-750 to Field-IQ™ cable (P/N 75834)
10	Basic power cable (P/N 67258)
11	CFX-750 display (P/N 94100-xx)
12	Basic power cable (P/N 77282)



P/N 94020-00-E01

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