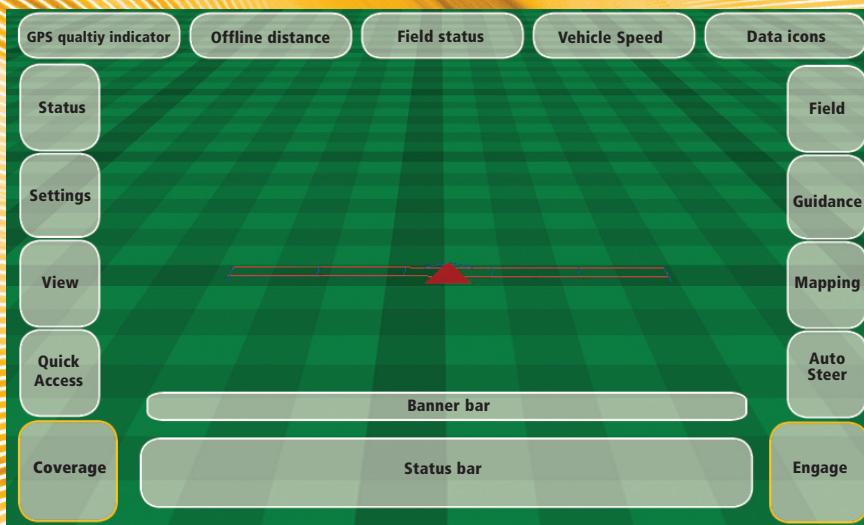


# CFX-750™ Display with the EZ-Steer® Assisted Steering System

## Quick Reference Card

### RUN SCREEN

The CFX-750™ display is a touchscreen display that is configured and run by tapping the icons that appear on the display screen. The icons on the screen will vary depending on the applications you are running. The image below shows the areas where each main function can be found on the screen when running in the field.



### QUICK START WIZARD

By default, the Quick Start Wizard appears every time you turn on the CFX-750 display. It enables you to easily confirm or change important system settings before you begin working.

### SETUP AND CONFIGURATION

Features can be set up or configured manually from the Run screen by tapping the  button.

### HELP

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

**Note** - For more information on how to use this product, refer to the **CFX-750 Display CD**.

## SETTING UP THE EZ-STEER SYSTEM

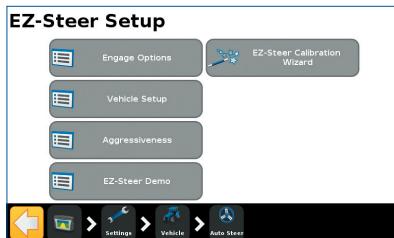
The EZ-Steer® assisted steering system works with the CFX-750 display's internal GPS receiver to provide vehicle guidance. Complete the GPS setup before you calibrate, set up, or run the EZ-Steer system.

**Note** - For more information on system calibration and settings, refer to the EZ-Steer documentation.

### Setup

To view and adjust the settings for the EZ-Steer system:

1. In the guidance screen, tap  and then tap **Vehicle**.
2. Tap **Auto Steer** and then tap **EZ-Steer Setup**:



**Note** - If the EZ-Steer Setup button does not appear, tap Auto Steer System Type and then select EZ-Steer for your controller.

The EZ-Steer Setup screen contains the following options:

- Engage Options
- Vehicle Setup
- Aggressiveness
- EZ-Steer Demo
- EZ-Steer Calibration Wizard

The following sections describe each option.

### Engage options

Use this option to view and adjust the following settings:

Setting	Notes
Minimum/ Maximum speed	The minimum and maximum speeds at which the EZ-Steer system will disengage: <ul style="list-style-type: none"> <li>• Minimum: between 1.0 and 15.9 mph (1.6 and 25.5 kph).</li> <li>• Maximum: between 1.0 and 18.0 mph (1.6 and 28.8 kph).</li> </ul>

Setting	Notes
Maximum Angle	The EZ-Steer system will not engage when the vehicle is heading toward the guidance line at an angle greater than the Maximum Angle. Enter an angle between 5 and 45 degrees.
Engage/Disengage Offline	<ul style="list-style-type: none"> <li>• Engage offline: The system will not engage when the vehicle is offline further than the Engage Offline distance. Enter a distance between 0' 5" and 27' 0" (0.2 and 8.2 m).</li> <li>• Disengage offline: The system will automatically disengage when the vehicle is offline further than the Disengage Offline distance. Enter a distance between 0' 6" and 27' 00" (0.2 m and 8.2 m).</li> </ul>
Override sensitivity	Control how much force is required to disengage the system. Enter an increment between 1-100%
EZ-Steer external switch	Enable or disable additional safety features.
EZ-Steer operator timeout	Enter a time between 1-60 minutes.

### Vehicle Setup

Setting	Notes
Vehicle type	Enter the type of vehicle on which the EZ-Steer system will be installed.
Wheelbase	See <b>Entering vehicle measurements</b> .
Antenna height	See <b>Entering vehicle measurements</b> .
Antenna to axle offset	See <b>Entering vehicle measurements</b> .
Angle per turn	Adjust the angle that the wheels turn during one full rotation of the steering wheel. Enter an angle between 2-149 degrees.
Freeplay left/right	Adjust this setting if the vehicle is consistently off to the right or left of the guidance line. Enter a measurement of 0-12" (0-30.48 cm).
Motor speed	Control the speed of the EZ-Steer drive wheel motor.

Setting	Notes
Motor direction is reversed	Select yes or no.
Sprayer steering delay	Account for time lags with vehicle steering. Enter a value between 0.1-1.5.
Swather steering delay	Account for time lags with vehicle steering. Enter a value between 0.1-1.5.

## Aggressiveness

Setting	Notes
Online aggressiveness	Control how aggressively the EZ-Steer system corrects deviations from the guidance line. Enter a value between 50-150%.
Approach aggressiveness	Control how fast the EZ-Steer system steers the vehicle onto the guidance line. Enter a value between 50-150%.

## CALIBRATING THE EZ-STEER SYSTEM

Before you begin to use the display you must calibrate the EZ-Steer system. To do this, complete the Quick Start Wizard that appears the first time that you use the display.

To view and adjust the settings for the EZ-Steer system:

1. In the guidance screen, tap  and then tap **Vehicle**.
2. Tap **Auto Steer** and then tap **EZ-Steer Setup**:



**Note** - If the EZ-Steer Setup button does not appear, tap Auto Steer System Type and then select EZ-Steer for your controller.

3. In the EZ-Steer Setup screen, tap **EZ-Steer Calibration Wizard**. The wizard guides you through the following processes:
  - Entering your vehicle measurements
  - T2 roll calibration
  - EZ-Steer calibration

**Note** - To complete the above processes, you must have GPS connected.

### Entering vehicle measurements

For optimum guidance, you must take accurate vehicle measurements and enter them into the display.

**Note** - Do not enter calibration numbers from EZ-Guide Plus or EZ-Steer T2 systems. This may cause very poor vehicle control, including swerves and/or large oscillations.

To streamline the calibration process, you may want to take the vehicle measurements and record them for entry later on.

The techniques for taking vehicle measurements are described below; to learn about implement measurements, see the *User Guide*.

Before you take the measurements, position your vehicle as follows:

- Park the vehicle on level ground.

- Make sure that the vehicle is straight, with the centerline of the body parallel to the wheels.

Take the vehicle measurements:

To measure	Measure from the ...
 <p>Wheelbase</p>	Center (the axle) of the front wheel to the center of the back wheel. Note that the wheelbase measurement for: <ul style="list-style-type: none"> <li>• Tracked vehicles, is exactly half of the length of the track</li> <li>• Articulated 4WD vehicles, is half of the distance between the center of the front and rear wheels.</li> </ul>
 <p>Antenna height</p>	Ground to the top of the GPS antenna.
 <p>Antenna to axle offset</p>	Center (the axle) of the front or rear wheel to the top of the GPS antenna. <b>Note</b> - Make sure that you take this measurement to within 7.6 cm (3 in.) as an incorrect distance may result in poor steering performance. Take the measurement from the antenna to the correct point of your vehicle, as follows: <ul style="list-style-type: none"> <li>• Rear axle: MFWD, Sprayer, Floater, Truck</li> <li>• Front axle: 4wd tractor, Combine</li> <li>• Track center: Tracked tractor</li> </ul> If the antenna is: <ul style="list-style-type: none"> <li>• in front of the axle, enter a Forward distance</li> <li>• behind the axle, enter a Behind distance</li> </ul>

## T2 roll calibration

Calibrating the T2 roll sensor enables the display to calibrate terrain compensation in the EZ-Steer controller. This step requires you to:

- Enter an accurate value for controller orientation.
- Park the vehicle and mark the inside of both sets of wheels.
- Remain stationary while the system calculates the roll offset. This takes approximately 20 seconds.

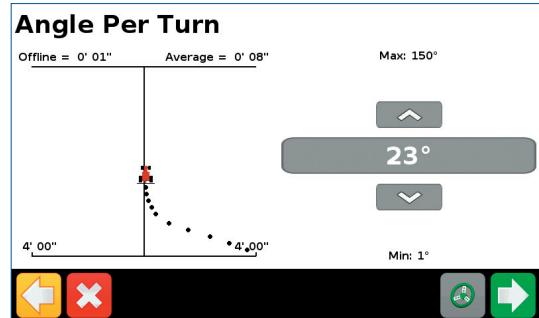
- Turn the vehicle around and ensure the wheels are over the positions marked in the previous step.
- Remain stationary while the system calculates the roll offset. This takes approximately 20 seconds.

## EZ-Steer calibration

In this step you must drive and engage on a straight AB line in a clear field:

1. Begin driving and tap **A**.
2. Drive 160 feet and then tap **B**.

A series of calibration screens will allow you to adjust any settings as necessary.



**Note** - This image represents an ideal offline distance.

**Angle per Turn:** Adjust the angle the wheels turn during one full rotation of the steering wheel.

**Approach Aggressiveness:** Control how fast the system steers the vehicle onto the current guidance line.

**Online Aggressiveness:** Control how aggressively the system corrects deviations from the current guidance line.

**Freeplay Offset:** Adjust the steering if the vehicle has a greater freeplay offset in one direction or the other.

**Override Sensitivity:** Control how much force is required to disengage the system.

## PERFORMANCE TIPS

### Curve Auto steering Accuracy in Headlands

It is possible to engage the EZ-Steer system on headlands with sharp corners at the edge of the field. However, the EZ-Steer system may be unable to drive around these sharp bends. Use one of the following methods to compensate:

- Manually steer the vehicle around the corner. Once you have rounded the corner, re-engage the EZ-Steer system.
- In the Engage Options screen, increase the Disengage Offline distance.

### Vehicle-specific performance

Before you use the EZ-Steer system, consider the following performance suggestions.

Vehicle type	Performance tip
2WD tractor	<p>With tractors that have SuperSteer (for example, New Holland TG), if the tractor has a SuperSteer front axle, for best performance:</p> <ul style="list-style-type: none"> <li>• Reduce the Online Aggressiveness value.</li> <li>• Line up close to the swath and make certain that the front wheels are straight before engaging the EZ-Steer system.</li> <li>• To get smoother performance when the vehicle is pulling an implement over tilled ground, enable the Diff-Lock. This prevents the machine from pulling sharply to the left or right. If you are calibrating on a hard surface, turn off Diff-Lock.</li> </ul>
4WD tractor	<p>The EZ-Steer system can be installed on Case IH STX tractors with Accusteer. For optimal performance, disable Accusteer using the switch in the cab (if possible).</p>

Vehicle type	Performance tip
Sprayer	<ul style="list-style-type: none"> <li>• It is common for these vehicles to have slow steering. To compensate for this, use high aggressiveness.</li> <li>• If you experience large, slow oscillations, increase the aggressiveness.</li> <li>• When you configure the system on a sprayer, the Sprayer steering delay setting is available on the Vehicle Setup screen.</li> <li>• Some sprayers have steering that is slow to react after you turn the steering wheel. The system uses the steering delay setting to compensate for this slowness and ensure that steering corrections occur at the correct point.</li> </ul>
Swather	<ul style="list-style-type: none"> <li>• When you configure the system on a swather, the Swather steering delay setting is available on the Vehicle Setup screen.</li> <li>• Some swathers have steering that is slow to react after the steering wheel is turned. The system uses the steering delay setting to compensate for this slowness and ensure that steering corrections occur at the correct point.</li> <li>• To improve the performance of your swather, adjust the Swather steering delay setting by a small amount (0.1 seconds) at a time. Test the result between each adjustment.</li> </ul>

### After using the EZ-Steer system

- Any time that you are not using the EZ-Steer system, pivot the EZ-Steer motor away from the steering wheel.
- Before you leave the vehicle turn off the EZ-Steer system power switch or remove the power plug.

# CFX-750™ Display with the EZ-Steer® Assisted Steering System

## Quick Reference Card

### OPERATION

Calibrate and set up the EZ-Steer system before operation.

#### Engaging the system

Before you can engage the EZ-Steer system, you must:

- open a field in the guidance screen
- define an AB line
- position the vehicle within the configured engage limits

To engage the system:

1. Point the nose of the vehicle toward the guidance line and drive at operational speed.
2. Do one of the following:
  - From the guidance screen, tap .
  - Press the optional remote engage foot pedal.

#### Disengaging the system

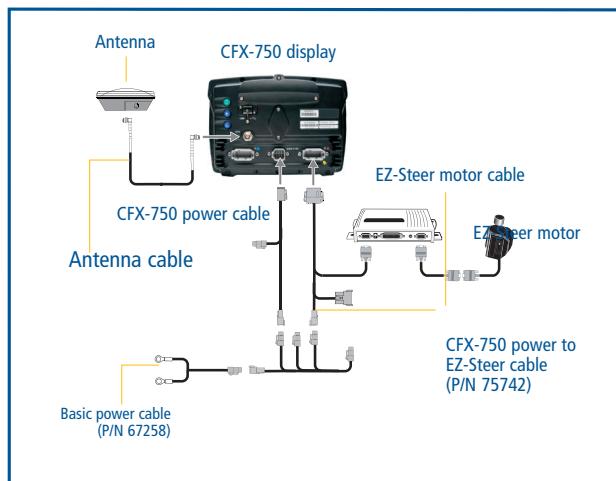
The EZ-Steer system automatically disengages when one of the following happens:

- The vehicle is outside the configured engage limits.
- You pause the system.
- GPS positions are lost.
- You tap the Engage button on the guidance screen.

You can manually disengage the EZ-Steer system by turning the steering wheel (this overrides the electric motor). Check this setting before you start using the system by engaging on a line and then turning the wheel until the system disengages. To adjust the amount of force required to disengage the system, change the Override Sensitivity in the Engage Options screen.

#### Engage status indicators

Engage status	Icon color
Ready to engage	
Engaged	
Cannot engage	



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