

# RELEASE NOTES

## **EZ-Guide® 500 Lightbar Guidance System Firmware Version 5.10**

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Version 5.10  
Revision A  
March 2010  
Part Number 66022-85-ENG



## Contact information

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This is the March 2010 release (Revision A) of the *EZ-Guide 500 Lightbar Guidance System Release Notes*, part number 66022-85-ENG. It applies to version 5.10 of the EZ-Guide firmware.

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- an explanation of the problem

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This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Responsible Party:

Trimble Navigation Limited

935 Stewart Drive

Sunnyvale CA 94085

Telephone: 1-408 481 8000

### Industry Canada Compliance Statement

This Class A digital apparatus meets the requirements of the Canadian Interference-Causing Equipment Regulations.

Avis de conformité à la réglementation d'Industrie Canada.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

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Trimble Europe BV  
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Meerheide 45  
5521 DZ Eersel, NL



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**Declaration of Conformity**

We, Trimble Navigation Limited,

935 Stewart Drive  
PO Box 3642  
Sunnyvale, CA 94088-3642  
United States  
+1-408-481-8000

declare under sole responsibility that the product:  
EZ-Guide 500 lightbar guidance system  
complies with Part 15 of FCC Rules.

Operation is subject to the following two conditions:  
(1) this device may not cause harmful interference, and  
(2) this device must accept any interference received,  
including interference that may cause undesired operation.

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## Introduction

These *Release Notes* describe changes and updates for the EZ-Guide® 500 lightbar guidance system. They apply to the EZ-Guide 500 lightbar guidance system firmware version 5.10.

*Note* – For on-screen instructions and term definitions, select .

## Changes

The following changes are provided in the EZ-Guide 500 lightbar guidance system firmware version 5.10:

- Field-IQ crop input control system support, see [page 5](#)
- Expanded variable rate controller support, see [page 30](#)
- Updated GPS status icon with bars, see [page 31](#)
- Liquid manure feature, see [page 32](#)
- EZ-Boom granular spreading, see [page 38](#)

## Field-IQ crop input control system

With the Field-IQ™ crop input control system, the EZ-Guide 500 lightbar guidance system can control planters, liquid strip-till tool-bars, and spinner spreaders. It can perform automatic section control using a Tru Count Air Clutch® system and/or control seed or liquid fertilizer rates using a prescription with Rawson™ drives.

Different functions of the solutions can be configured and controlled by the Field-IQ system.

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## Application main functions

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Planter	<ul style="list-style-type: none"><li>Seed Section Control of up to 48 individual rows (Field-IQ section control module(s) needed) using Tru Count air clutches.</li><li>Seed Rate Control using up to four Rawson drives to change seed population (Field-IQ Rawson Control Module(s) needed).</li><li>Liquid Fertilizer Control of up to 48 individual liquid nozzles (Field-IQ section control module(s) needed) using Tru Count LiquiBlock™ valves.</li></ul>
Strip-till (liquid)	<ul style="list-style-type: none"><li>Liquid Section Control of up to 48 individual spray nozzles (Field-IQ Section Control Module(s) needed) using Tru Count LiquiBlock valves.</li><li>Liquid Rate Control using up to 2 Rawson drives connected to <b>fixed displacement pumps</b>, such as CDS-John Blue piston pumps, to change liquid rate (Field-IQ Rawson Control Module(s) needed).</li></ul>
Spreading	<ul style="list-style-type: none"><li>Spreading Rate Control using a Rawson Drive (Field-IQ Rawson Control Module(s) needed).</li></ul>

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## Definition of terms

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Calibration constant	This represents the output of a granular applicator per revolution of the drive. Use this number to fine tune the Field-IQ system to match the actual output of the spreader.
Jump start	Use this function if you lose a GPS signal or you want to start applying before your implement is up to speed.
Prime the system	This fills the system with product in preparation for calibration.

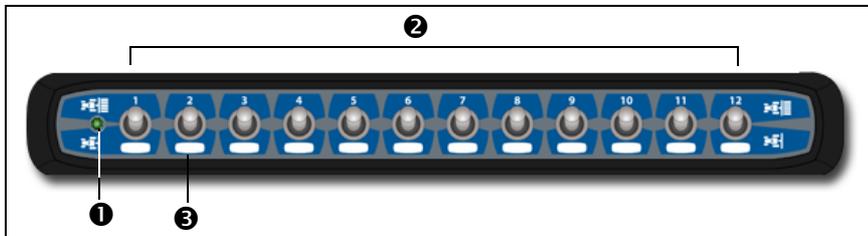
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## Field-IQ master switch box



	Item	Position
❶	Increment/decrement switch	
❷	Rate switch	Rate 1, Rate 2, Manual Rate
❸	LED indicator	
❹	Automatic/Manual section switch	You can switch from Automatic to Manual mode while traveling.
❺	Master switch	Off, On, Jump Start position. Use the jump start function if you lose a GPS signal or you want to start applying before your implement is up to speed.

## Field-IQ 12-section switch box (optional)

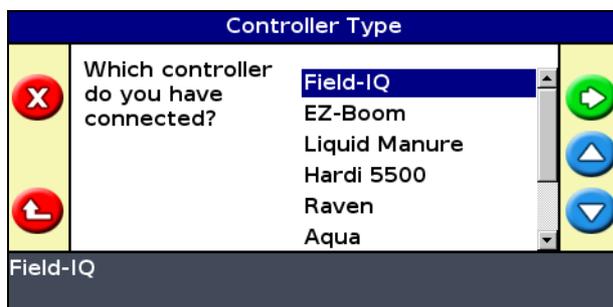


	Item
❶	LED indicator
❷	Section switches
❸	Space to write which row the switch controls.

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## Enabling the Field-IQ system

1. From the main guidance screen, select the  icon and then press . The *Configuration* screen appears.
2. Make sure that the user mode is set to Advanced.
3. Select *Application Control / Controller Settings / Field-IQ*:



4. Select an application controller mode. The options are:
  - Row Crop Planting, see [Setting up Field-IQ planting, page 8](#)
  - Liquid, see [Setting up Field-IQ liquid application, page 13](#)
  - Granular, see [Setting up Field-IQ granular application, page 19](#)
  - Spreading, see [Setting up Field-IQ spreading, page 24](#)

## Setting up Field-IQ planting

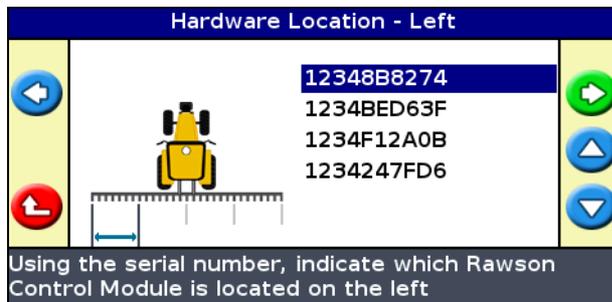
### Entering implement measurements

1. In the *Controller Type* screen, select *Field-IQ* and then select *Row Crop Planting*.
2. Complete the *Setup* wizard to enter the implement measurement values:
  - Number of Rows
  - Row Spacing
  - Implement Mount Type

- Hitched / 3pt
- Drawbar
- Forward/Back Offset
- Capacity

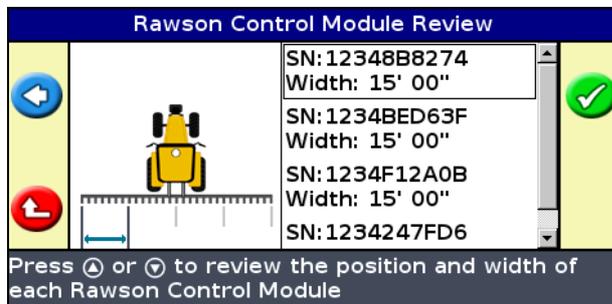
## Setting up the Rawson control modules

1. Use the module serial numbers to indicate where each module can be found on the planter:



2. Enter the width of each section.

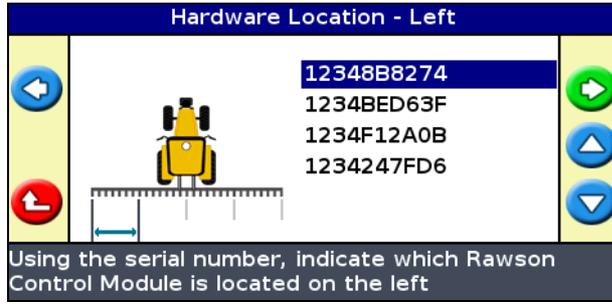
The *Rawson Control Module Review* screen is informational and shows the serial number and width of each module:



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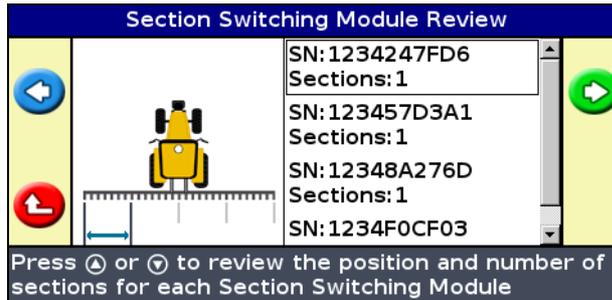
## Setting up the Field-IQ section control modules

1. Using the module serial numbers, indicate where each Field-IQ module can be found on the planter:



2. Enter the number of sections each controller module will control.
3. Select the boom switching mode:
  - Liquid Boom
  - Tru Count

The *Section Switching Module Review* screen is informational and shows the serial number and width of each module:



4. Enter the width of each section.

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## Performing the Field-IQ hydraulics test

1. Enter the target RPM.



**CAUTION** – When you turn the master switch on, parts of the implement will move.

---

2. Turn the master switch on. The hydraulics test begins:

Field-IQ Hydraulics Test			
	Master switch		On
	Target RPM		200
	SN: 12348B8274	Actual RPM	200
	SN: 1234BED63F	Actual RPM	200
	SN: 1234F12A0B	Actual RPM	200
	SN: 1234247FD6	Actual RPM	200
Set the master switch to ON to start. Set the master switch to OFF to complete the test.			

3. Turn the master switch off once the test is complete.

*Note* – If the motors did not achieve the desired RPM, you must alter the hydraulic setup. Refer to the Field-IQ Installation Instructions or Rawson Installation Instructions.

## Calibrating the Rawson control modules and rate controller

1. Enter the jump start speed. This setting controls the speed to be used when the Field-IQ master switch is put in the jump start position.
2. Enter the number of seeds per disk for your planter.
3. Do one of the following:
  - If you know the gear ratio for your implement, enter it into the *Calibrate Rate Controller* screen.
  - If you do not know the gear ratio for your implement, use the gear ratio calculator.

4. Enter the calibration constant. In the planting application, the calibration constant defaults to 1. When you have completed the seed drop test (Step 7 through Step 9), you may need to adjust this value.
5. Enter the target rate, target speed, and number of revolutions.

*Note – The higher the number of revolutions the more accurate the calibration; Trimble recommends 5 to 10 revolutions.*

6. To prime the system, select **Yes**.
7. To begin calibration, turn the master switch on.

The *Calibration Progress* screen is informational and indicates the status of the calibration:

Calibration Progress		
	Calibration status	100%
←	Master switch	On →
	Shaft RPM	0
?	Expected number of seeds	150
Set Master Switch to 'On' to start. Press ⏏ to cancel. When completed press ⏏ to continue		

8. Turn the master switch off.
9. Count the number of seeds dropped from one row unit and then enter the number.
10. If required, adjust the *Verify Rate* and *Speed Range*. The system automatically calculates the fastest and slowest speed that will allow you to successfully achieve these numbers.
11. The next two screens are informational and show the operating speed ranges for your target rates.

*Note – If speed limits are not within the required range, alter the gear ratio.*

- 
12. In the *Apply Calibration* screen, do one of the following:
    - Select **Yes** to apply the calibration data from the current rate controller to the remaining rate controllers.
    - Select **No** to calibrate each controller separately.

## **Setting up Field-IQ liquid application**

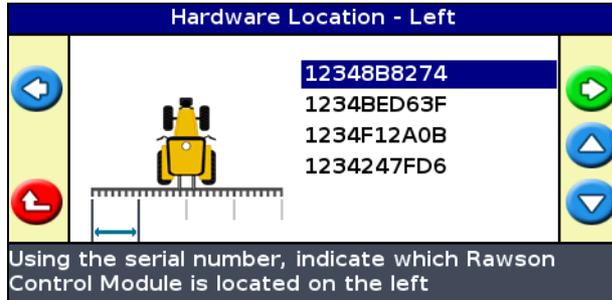
### **Entering implement measurements**

1. In the *Controller Type* screen, select *Field-IQ* and then select *Liquid*.
2. Complete the *Setup* wizard to enter the implement measurement values:
  - Number of rows
  - Row spacing
  - Implement Mount Type  
Hitched / 3pt  
Drawbar
  - Forward/Back Offset
  - Capacity

---

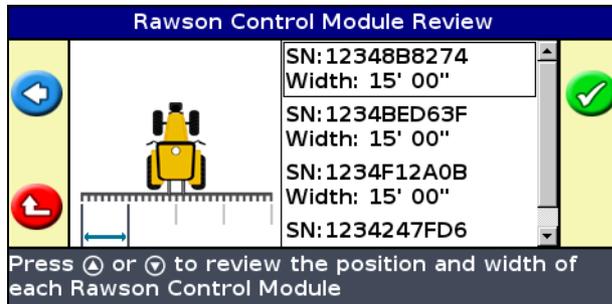
## Setting up the Rawson control modules

1. Use the module serial numbers to indicate where each module can be found on the planter:



2. Enter the width of each section.

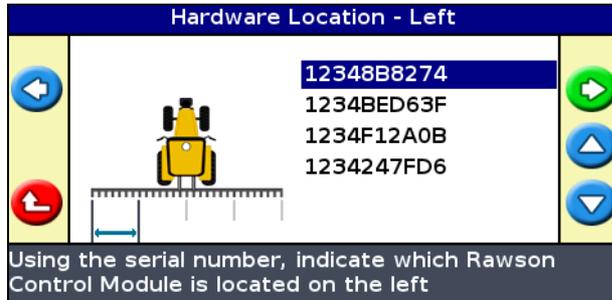
The *Rawson Control Module Review* screen is informational and shows the serial number and width of each module:



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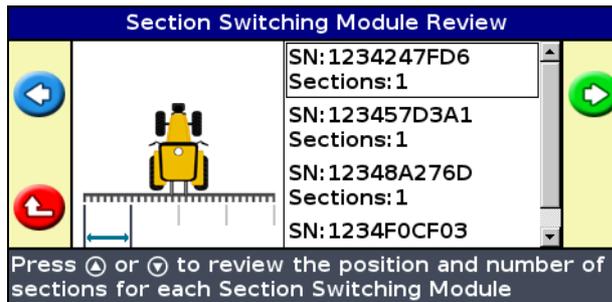
## Setting up the Field-IQ section control modules

1. Using the module serial numbers, indicate where each Field-IQ module can be found on the planter:



2. Enter the number of sections each controller module will control.
3. Select the boom switching mode:
  - Liquid Boom
  - Tru Count

The *Section Switching Module Review* screen is informational and shows the serial number and width of each module:



4. Enter the width of each section.

---

## Performing the Field-IQ hydraulics test

1. Enter the target RPM.



**CAUTION** – When you turn on the master switch, parts of the implement will move.

---

2. Turn on the master switch. The hydraulics test begins:

Field-IQ Hydraulics Test			
	Master switch		On
	Target RPM		200
	SN: 12348B8274	Actual RPM	200
	SN: 1234BED63F	Actual RPM	200
	SN: 1234F12A0B	Actual RPM	200
	SN: 1234247FD6	Actual RPM	200
Set the master switch to ON to start. Set the master switch to OFF to complete the test.			

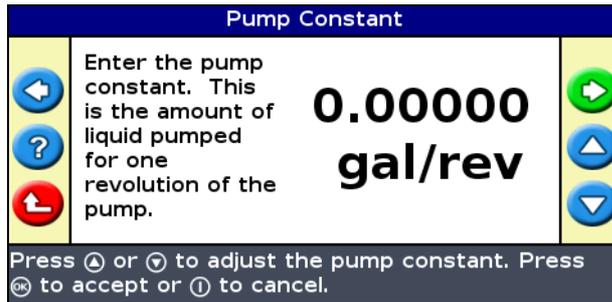
3. Turn off the master switch once the test is complete.

*Note* – If the motors did not achieve the desired RPM, you must alter the hydraulic setup. Refer to the *Field-IQ Installation Instructions* or *Rawson Installation Instructions*.

## Calibrating the Rawson control modules and rate controller

1. Enter the jump start speed. This setting controls the speed to be used when the Field-IQ master switch is put in the jump start position.
2. Do on of the following:
  - If you know the gear ratio for your implement, enter it into the *Calibrate Rate Controller* screen.
  - If you do not know the gear ratio for your implement, use the gear ratio calculator.

3. Enter the pump constant. This is the amount of liquid pumped in one revolution. See the pump manufacturer's instructions for this value:



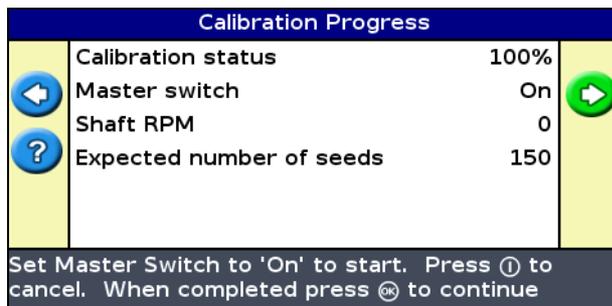
*Note* – Leaving the value at 0 prompts the system to auto calibrate.

4. Enter the target rate, target speed, and number of revolutions.

*Note* – The higher the number of revolutions the more accurate the calibration; Trimble recommends 5 to 10 revolutions.

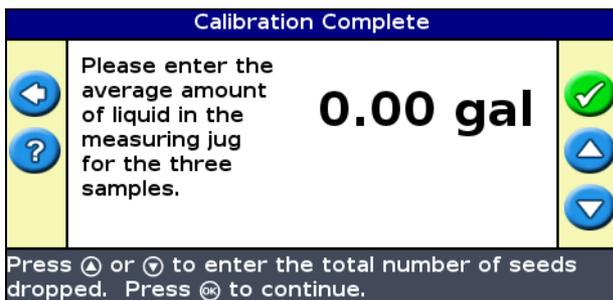
5. To prime the system, select **Yes**.
6. To begin calibration, turn the master switch on.

The *Calibration Progress* screen is informational and indicates the status of the calibration:



7. Turn the master switch off.

- 
8. Perform the calibration three (3) times. Enter the average amount of liquid dispensed for the three calibration tests:



9. In the *Calibration OK?* screen, do one of the following:
  - Select **Yes** to end the calibration.
  - Select **No** to return to the *Pump Constant* screen.
10. If required, adjust the *Verify Rate* and *Speed Range*. The system automatically calculates the fastest and slowest speed that will allow you to successfully achieve these numbers.
11. The next two screens are informational and show the operating speed ranges for your target rates.

*Note – If speed limits are not within the required range, alter the gear ratio.*

12. In the *Apply Calibration* screen, do one of the following:
  - Select **Yes** to apply the calibration data from the current rate controller to the remaining rate controllers.
  - Select **No** to calibrate each controller separately.

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## Setting up Field-IQ granular application

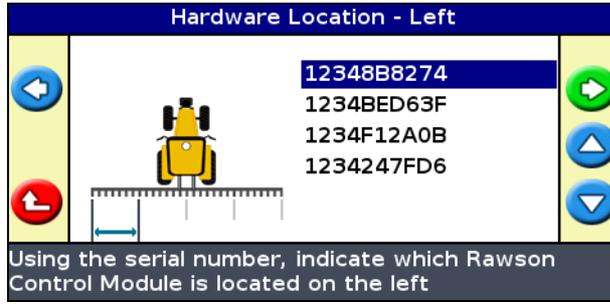
### Entering implement measurements

1. In the *Controller Type* screen, select *Field-IQ* and then select *Granular*.
2. Complete the *Setup* wizard to enter the implement measurement values:
  - Implement Width
  - Implement Mount Type  
Hitched / 3pt  
Drawbar
  - Forward/Back Offset
  - Capacity

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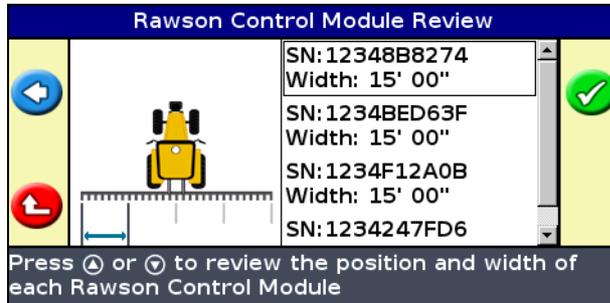
## Setting up the Rawson control modules

1. Use the module serial numbers to indicate where each module can be found on the planter:



2. Enter the width of each section.

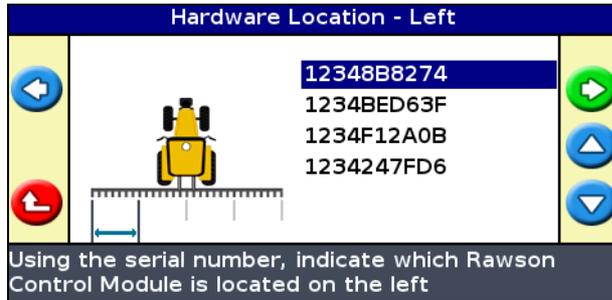
The *Rawson Control Module Review* screen is informational and shows the serial number and width of each module:



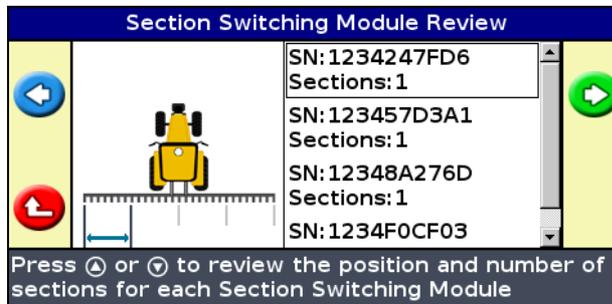
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## Setting up the Field-IQ section control modules

1. Using the module serial numbers, indicate where each Field-IQ module can be found on the planter:



2. Enter the number of sections each controller module will control.  
The *Section Switching Module Review* screen is informational and shows the serial number and width of each module:



3. Enter the width of each section.

---

## Performing the Field-IQ hydraulics test

1. Enter the target RPM.



**CAUTION** – When you turn on the master switch parts of the implement will move.

---

2. Turn on the master switch. The hydraulics test begins:

Field-IQ Hydraulics Test			
	Master switch		On
	Target RPM		200
	SN: 12348B8274	Actual RPM	200
	SN: 1234BED63F	Actual RPM	200
	SN: 1234F12A0B	Actual RPM	200
	SN: 1234247FD6	Actual RPM	200
Set the master switch to ON to start. Set the master switch to OFF to complete the test.			

3. Turn off the master switch once the test is complete.

*Note* – If the motors did not achieve the desired RPM, you must alter the hydraulic setup. Refer to the Field-IQ Installation Instructions or Rawson Installation Instructions.

## Calibrating the Rawson control modules and rate controller

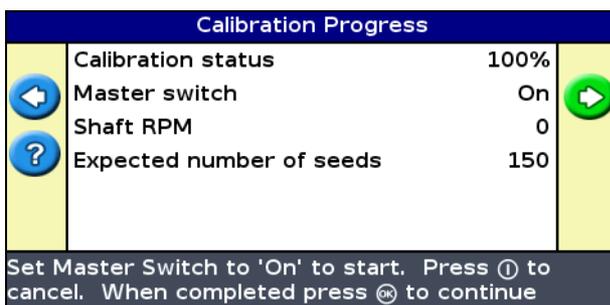
1. Enter the jump start speed. This setting controls the speed to be used when the Field-IQ master switch is put in the jump start position.
2. Enter the density of the material to apply.
3. Do one of the following:
  - If you know the gear ratio for your implement, enter it into the *Calibrate Rate Controller* screen.
  - If you do not know the gear ratio for your implement, use the gear ratio calculator.
4. Enter the calibration constant.
5. Enter the target rate, target speed, and number of revolutions.

---

**Note** – The higher the number of revolutions the more accurate the calibration; Trimble recommends 5 to 10 revolutions.

- To prime the system, select **Yes**.
- To begin calibration, turn the master switch on.

The *Calibration Progress* screen is informational and indicates the status of the calibration:



- Turn the master switch off.
- Enter the weight of the material that was dropped by the spreader.
- If required, adjust the *Verify Rate* and *Speed Range*. The system automatically calculates the fastest and slowest speed that will allow you to successfully achieve these numbers.
- The next two screens are informational and show the operating speed ranges for your target rates.

**Note** – If speed limits are not within the required range, alter the gear ratio.

- In the *Apply Calibration* screen, do one of the following:
  - Select **Yes** to apply the calibration data from the current rate controller to the remaining rate controllers.
  - Select **No** to calibrate each controller separately.

---

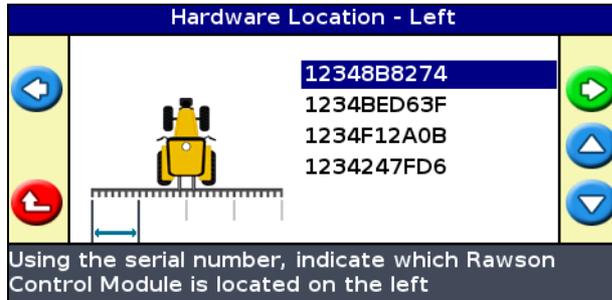
## Setting up Field-IQ spreading

### Entering implement measurements

1. In the *Controller Type* screen, select *Field-IQ* and then select *Spreading*.
2. Complete the *Setup* wizard to enter the implement measurement values:
  - Implement Width
  - Implement Mount Type  
Hitched / 3pt  
Drawbar
  - Forward/Back Offset
  - Capacity

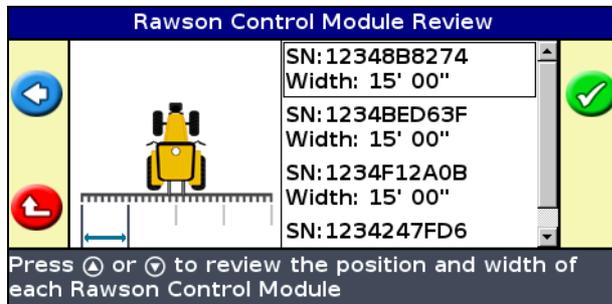
## Setting up the Rawson control modules

1. Use the module serial numbers to indicate where each module can be found on the planter:



2. Enter the width of each section.

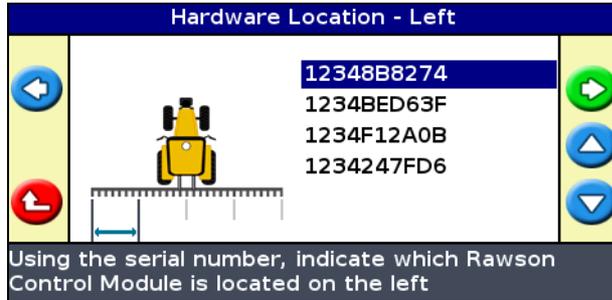
The *Rawson Control Module Review* screen is informational and shows the serial number and width of each module:



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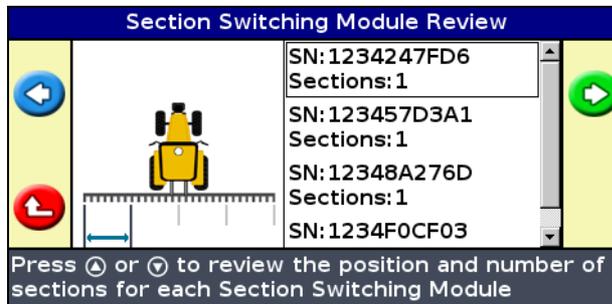
## Setting up the Field-IQ section control modules

1. Using the module serial numbers, indicate where each Field-IQ module can be found on the planter:



2. Enter the number of sections each controller module will control.

The *Section Switching Module Review* screen is informational and shows the serial number and width of each module:



3. Enter the width of each section.

---

## Performing the Field-IQ hydraulics test

1. Enter the target RPM.



**CAUTION** – When you turn on the master switch, parts of the implement will move.

---

2. Turn on the master switch. The hydraulics test begins:

Field-IQ Hydraulics Test			
	Master switch		On
	Target RPM		200
	SN: 12348B8274	Actual RPM	200
	SN: 1234BED63F	Actual RPM	200
	SN: 1234F12A0B	Actual RPM	200
	SN: 1234247FD6	Actual RPM	200
Set the master switch to ON to start. Set the master switch to OFF to complete the test.			

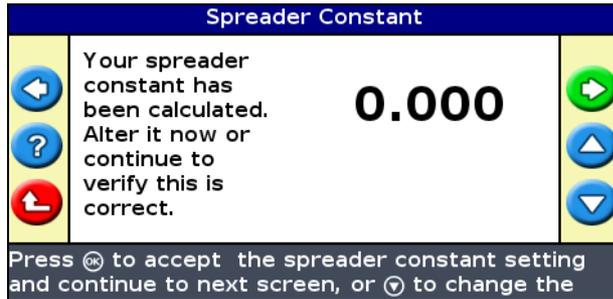
3. Turn the master switch off once the test is complete.

*Note* – If the motors did not achieve the desired RPM, you must alter the hydraulic setup. Refer to the Field-IQ Installation Instructions or Rawson Installation Instructions.

## Calibrating the Rawson control modules and rate controller

1. Enter the jump start speed. This setting controls the speed to be used when the Field-IQ master switch is put in the jump start position.
2. Enter the gate height, gate width and spreader belt length per revolution.
3. Enter the density of the material to apply.
4. Do on of the following:
  - If you know the gear ratio for your implement, enter it into the *Calibrate Rate Controller* screen.
  - If you do not know the gear ratio for your implement, use the gear ratio calculator.

The spreader constant calculates automatically. You can adjust the value if required—follow the on-screen instructions:

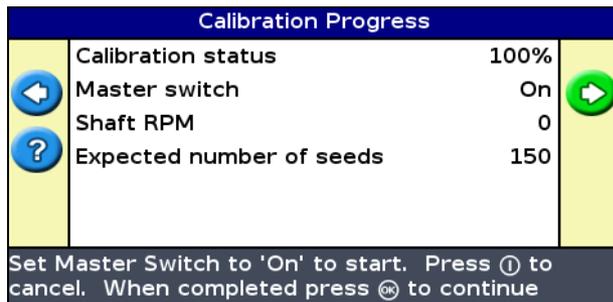


5. Enter the target rate, target speed, and number of revolutions.

*Note* – The higher the number of revolutions the more accurate the calibration; Trimble recommends 5 to 10 revolutions.

6. To prime the system, select **Yes**.
7. To begin calibration, turn the master switch on.

The *Calibration Progress* screen is informational and indicates the status of the calibration:



8. Turn the master switch off.
9. Enter the weight of the material that was dropped by the spreader.
10. If required, adjust the *Verify Rate* and *Speed Range*. The system automatically calculates the fastest and slowest speed that will allow you to successfully achieve these numbers.

- 
11. The next two screens are informational and show the operating speed ranges for your target rates.

*Note* – If speed limits are not within the required range, alter the gear ratio.

12. In the *Apply Calibration* screen, do one of the following:
  - Select **Yes** to apply the calibration data from the current rate controller to the remaining rate controllers.
  - Select **No** to calibrate each controller separately.

## Using the Field-IQ system

1. From the main guidance screen, select  and then create a new field or select an existing field.
2. Select the *Refill* icon to:
  - adjust the current bin volume
  - select the refill method
  - refill bin now
3. Select the *Refill* icon to adjust:
  - Swath Control Setup  
Select Liquid Boom when using Liquiblock valves, or select Tru Count no Inverter when using Tru Count clutches. (Use the following screens to configure the Boom Switching Mode.)
  - Boom Switching Mode  
Select Liquid Boom when using Liquiblock valves, or select Tru Count no inverter when using Tru Count clutches.
  - Boundary Switching Overlap
4. Select *Application Setup* to:
  - Turn rate control on or off.
  - Adjust target rate 1.
  - Adjust target rate 2.

- 
- Adjust the rate increment.
  - Turn rate snapping on or off.
  - Adjust the jump start speed.
5. Select *Boundaries* to select:
- Enabled
  - Disabled for This Field
  - Disabled for All Fields

## **Expanded third party variable rate controller compatibility**

The EZ-Guide 500 system now supports the following variable rate controllers:

- Amazone Amatron+
- LH Agro LH5000

Variable rate functionality can only be accessed when the user mode is set to *Advanced*. When a compatible rate controller is connected, the EZ-Guide 500 system uses a prescription map to send application rate commands to the controller. Once this happens, the controller changes to the appropriate rate, as instructed by the lightbar.

These variable rate controllers connect through the COM connection on the EZ-Guide 500 lightbar guidance system.

This function requires the variable rate unlock.

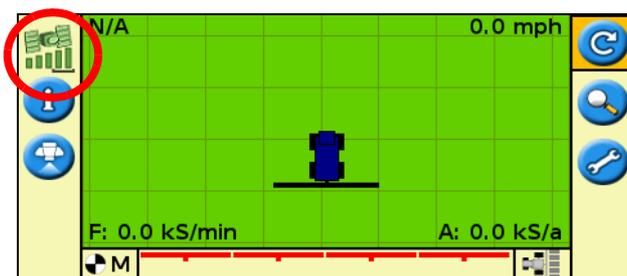
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## GPS position quality indicator

You can now select the level of GPS quality that you want the system to use. This gives you the option of extending your operating hours by running the system when GPS satellites are less available and possibly providing lower position quality. Alternatively, you can select the best level of quality in order to achieve the maximum accuracy for each correction type.

The bars on the GPS position quality indicator represent the overall quality of the position. The quality is determined by factoring satellite availability, health, and a calculated accuracy estimate. The more green bars shown, the higher the level of GPS position quality.

A black bracket under the GPS signal bars indicates the quality level you selected:



Bars	Option	Select ...
	Favor Accuracy	For operations that require the highest accuracy, such as row crop planting or strip-till applications. <b>Note</b> – Trimble recommends this option for the best pass-to-pass and year-to-year repeatability. This option is equivalent to the quality level of previous versions of the EZ-Guide firmware.

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Bars	Option	Select ...
	Balanced Quality	To trade potential accuracy for a slight increase in production time.
	Favor Availability	To extend production time further, with more potential for reduced accuracy.  <b>Note</b> – <i>This option sometimes trades some accuracy for more availability or runtime. This option may still achieve the highest level of accuracy that is applicable for your correction source. If you select this option when using RTK corrections, the system may use positions that are greater than 1" pass-to-pass accuracy.</i>

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To adjust the GPS position quality indicator, go to *Configuration / SBAS, OmniStar, or RTK*.

## Krohne Liquid manure flow meter support

The EZ-Guide 500 Lightbar Guidance System now supports the Krohne liquid/slurry electromagnetic flow meter for as-applied mapping of manure applications.

You need an EZ-Guide 500 to Krohne interface cable (P/N 78369) to connect the two devices.

## Liquid manure application, tracking, and reporting

The EZ-Guide 500 lightbar guidance system now allows you to generate liquid manure handling records to satisfy regulatory requirements. Use this option to easily track the location of the area covered, along with the volume per area and other important data points.

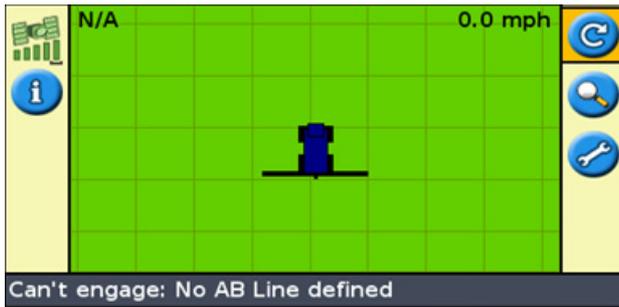
When this feature is enable and connected to a flow meter, the EZ-Guide system records the actual rate from the flow meter that is being applied for each field. These values will then appear as an as-applied coverage map in the

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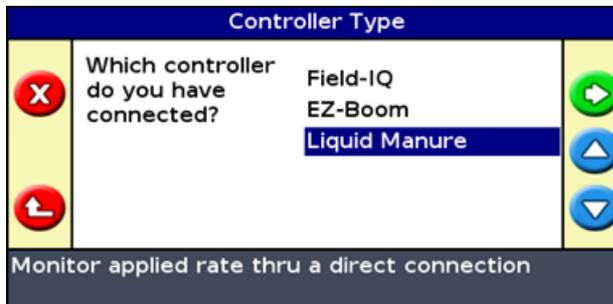
Summary Report for that field. When you are finished, you can transfer the Summary Report to a computer through a USB connection or import the field data into the EZ-Office® software.

## Setting up Krohne support

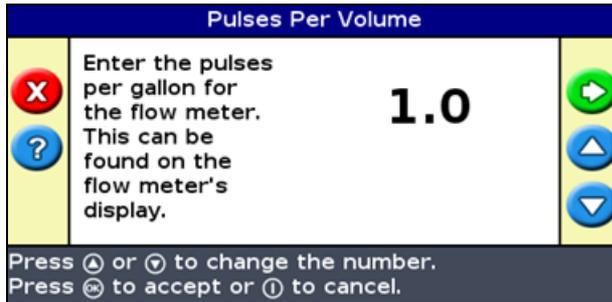
Before setup, the guidance screen appears as follows. Note that there is no application bar:



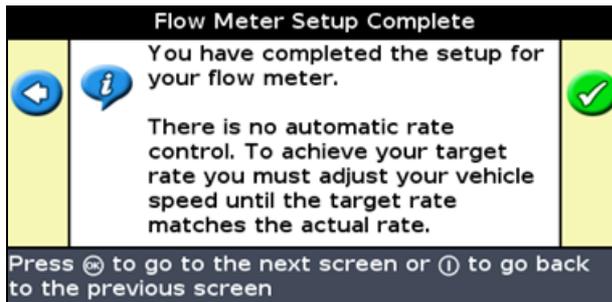
1. Make sure that *User Mode* is set to *Advanced*.
2. Go to the *Application Control* option and from the *Application Control* menu, select *Controller Settings*.
3. Select *Liquid Manure*:



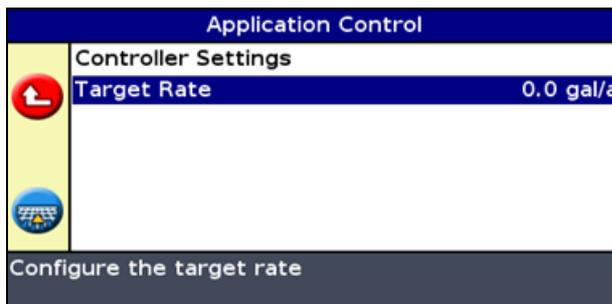
4. Enter the pulses per gallon that the flow meter outputs—for more information, refer to the flow meter's configuration display or the user documentation. A common measurement is one pulse per gallon:



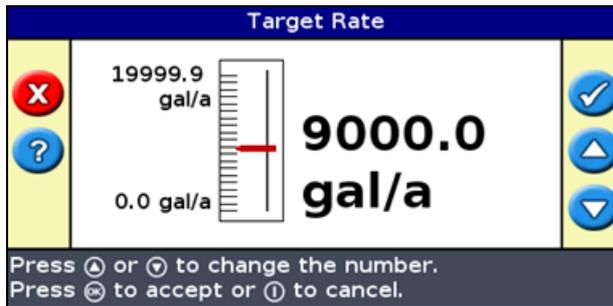
The system is now configured to read information from the flow meter. Read the information on this screen before continuing:



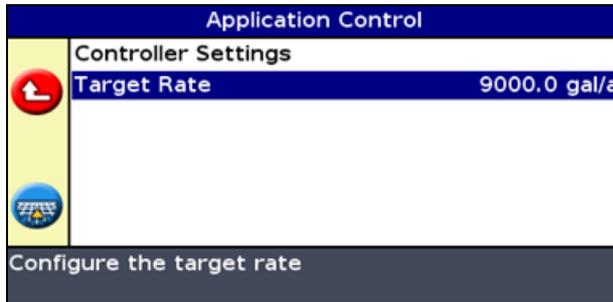
5. Select *Target Rate*. The target rate is the rate you want to achieve through varying the speed of the vehicle or through altering the pump pressure or volume:



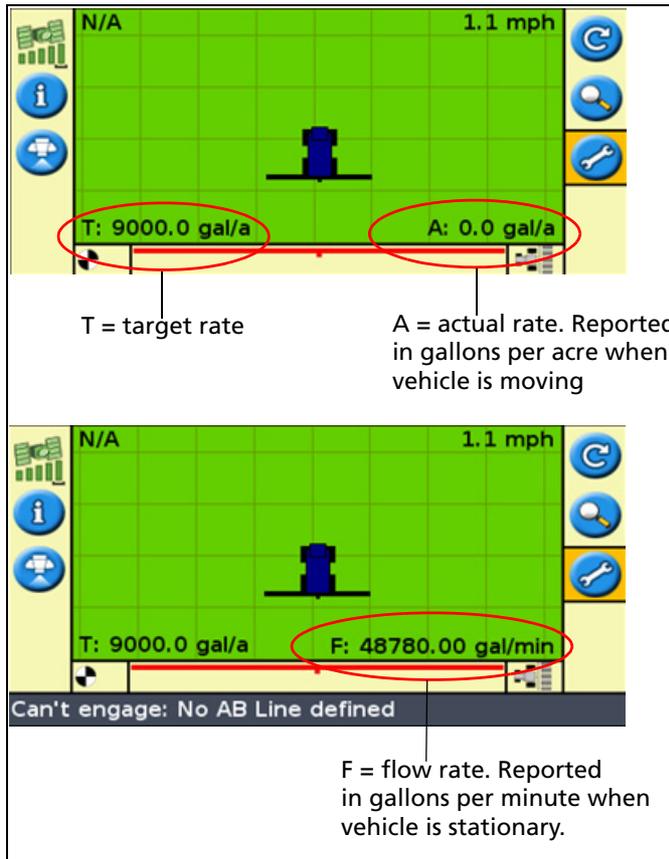
6. Scroll up or down to achieve the required rate and then select **OK**:



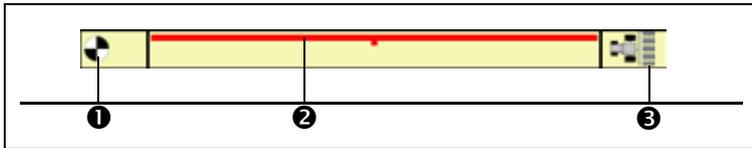
7. Confirm that the screen shows the correct rate. Press the **I** button twice to return to the guidance screen:



The guidance screen now shows the application bar at the bottom:



## Application bar



	Item	Description
❶	Flow/application indicator	The wheel spins when flow meter pulses are detected.
❷	Boom section status indicator	Change color to show the current state of each boom section: <ul style="list-style-type: none"> <li>• Green: The boom section is enabled and applying product.</li> <li>• Orange: The boom section is enabled but not currently applying.</li> <li>• Red: The section is off (no flowmeter pulses detected).</li> </ul>
❸	Auto/manual switching indicator	Shows which switching mode the controller is in. <ul style="list-style-type: none"> <li>• When the system is in manual switching mode, the indicator is gray.</li> <li>• When the system is in automatic switching mode, the indicator is in color.</li> </ul>

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## EZ-Boom granular fertilizer spreading

The EZ-Guide 500 lightbar guidance system now supports granular fertilizer application with the EZ-Boom system. Using a rate sensor and a Servo or PWM control valve, you can control a single product on a pull-type or self-propelled spreader.

The granular spreading feature allows you to select a jump start speed to compensate when operating under a low GPS signal.

This feature is available from *Controller Settings / EZ-Boom*.

## Upgrade procedure

### Installing additional language packs



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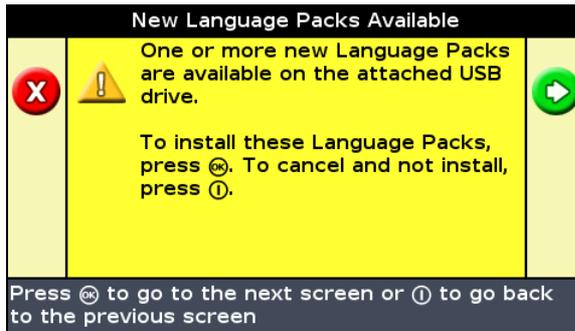
**CAUTION** – Do not add language packs to the lightbar when the internal memory is nearly full (less than 15 hours remaining). To free up internal memory, save all of the data to a USB drive and then copy the data on the drive to an office computer. Delete the field data from the internal memory. Install the language packs and then, if necessary, use the drive to replace the field data in the lightbar's internal memory.

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A number of language packs are available as a web release. Language packs are loaded onto the lightbar from a USB drive:

1. Transfer the required language pack (.lpf file) from [www.ez-guide.com](http://www.ez-guide.com) to an office computer.
2. Copy the language pack to a USB drive and then insert the USB drive into the USB port on the lightbar. Make sure the files are copied to the root of the USB drive, not to any folders on the USB drive.
3. Turn on the lightbar.

4. Select the main guidance screen and then wait for up to 1 minute. The language pack is automatically detected:



5. Press **[OK]** to load the language pack(s).  
Once the language pack is installed, the language selection screen appears.
6. Select the language you require:



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## Upgrading the firmware



**CAUTION** – Do not upgrade the lightbar’s firmware when the internal memory is nearly full (less than 15 hours remaining). If you do, the lightbar may lose your current settings. Before upgrading the firmware, save the lightbar’s settings and the data to a USB drive and then transfer all of the data on the drive to an office computer. If necessary, use the drive to replace the field data in the lightbar’s internal memory after the upgrade is complete.

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*Note* – Before upgrading to version 5.10 of the EZ-Guide 500 system, make sure that you are using the AgGPS Autopilot™ automated steering system version 4.52 or later.

Before you begin to update the firmware in the lightbar, check which firmware version is currently installed:

1. Select *Configuration / About the EZ-Guide*.
2. Check the *Version* number:

About the EZ-Guide	
	ID EZ-Guide 500
	Version 3.05.018.2[3.05]
	Version Date 07/09/2008
	Serial Number 0224012345
	Part Number 55555-01
	Monitor Version 0.00

This information may be helpful for support

This is the firmware version. If the number is 4.05.xxx.x, you have firmware version 4.05. If the number is 5.10.xxx.x, you already have firmware version 5.10.

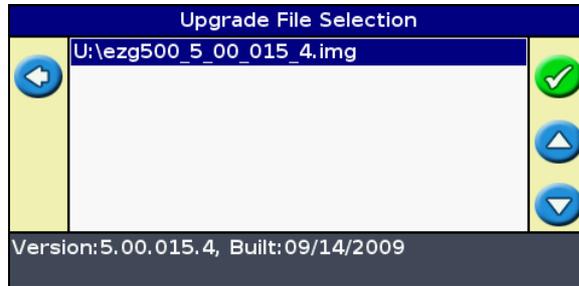
To upgrade the lightbar to version 5.10:

1. Download the firmware version 5.10 upgrade file from [www.EZ-Guide.com](http://www.EZ-Guide.com) to your office computer.
2. Extract the contents to the USB drive. Make sure the files are copied to the root of the USB drive, not to any folders on the USB drive.
3. Insert the USB drive in the lightbar.

- 
4. Turn on the lightbar.

When the USB drive is detected, the lightbar runs the upgrade wizard automatically.

If you currently have firmware version 4.05 or earlier, the firmware version 5.10 upgrade file appears:



**CAUTION** – Do not turn the lightbar off while the firmware is being updated. This could render the lightbar inoperable.

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5. Select the EZ-Guide firmware .img file and then press **OK**. The wizard installs the monitor file and the firmware version 5.10. When the firmware is installed, the lightbar restarts.

The lightbar firmware is upgraded to version 5.10.

*Note* – When upgrading to this new firmware, the previously set SNR and Elevation Mask GPS settings remain active until you next turn off and then turn on the lightbar.

