396-6562Y1

AgLeader InCommand 800 Sentinel Setup With Task Control

SurePoint
Ag Systems

NOTICE

Operator should read this manual before operating the system.

Table Of Contents

Software & Unlock Activation

A

Software & Un-
lock Activation

Sentinel Setup

B

Sentinel Setup

AgLeader L2 Controller

C

AgLeader
L2 Controller

AgLeader ISOBUS Controller

D

AgLeader ISO
Controller

General Description

Setup of the AgLeader InCommand 800 display.
These items **must be** done in the correct order. If not, the display will not program or function properly.
Check for Task Control unlock.
Check for Mulit-Product unlock if using more than one product.
Turn VT and Task Control on.
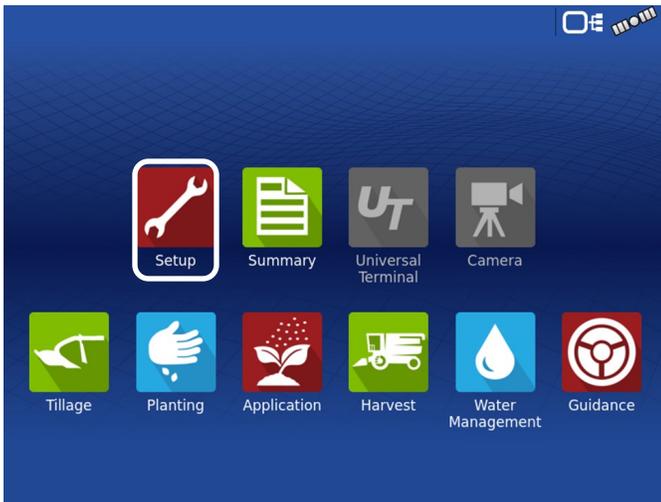Program Sentinel controller: Perform setups per **396-4035Y1 manual.**
Set Sentinel for RX to operate correctly in Application screen.
Perform all Setup steps.
Perform all Application steps.
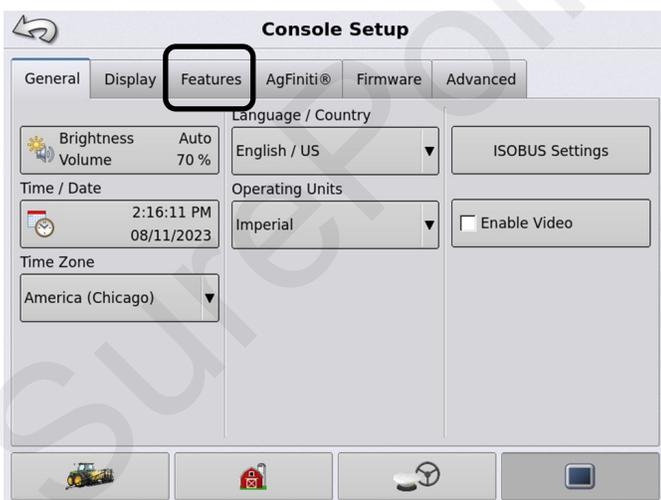Verify.

Check for Task control Unlock

STEP 1

Press the [Setup] tab.

Note – the [Universal Terminal] is greyed out.

This is an indication that the UT has not been Enabled.

Console Setup

STEP 3

Press the [Features] tab.

Configuration Setup Screen

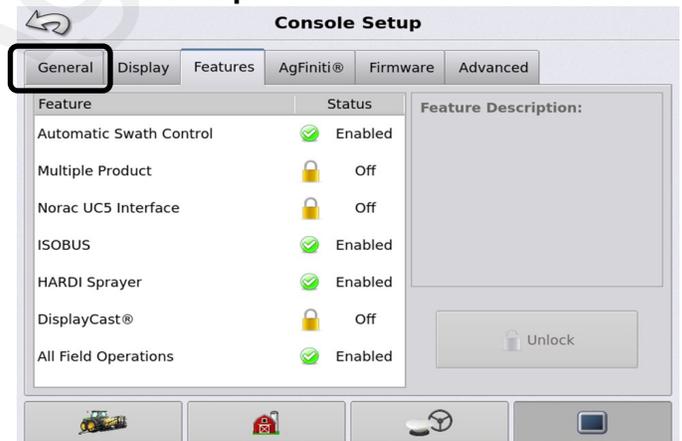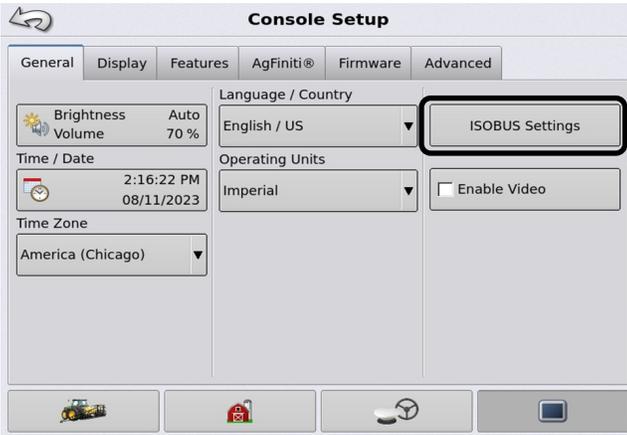**STEP 2**

Press the [ ] tab.

Console Setup

STEP 4

Ensure ISOBUS is Enabled.
Ensure Automatic Swath Control is Enabled.
If using more that one product, ensure Multiple Product is Enabled.
If these are not Enabled, contact your Ag Leader dealer and purchase the unlocks. These unlocks are **_NOT_** free and must be purchased and installed by your dealer.
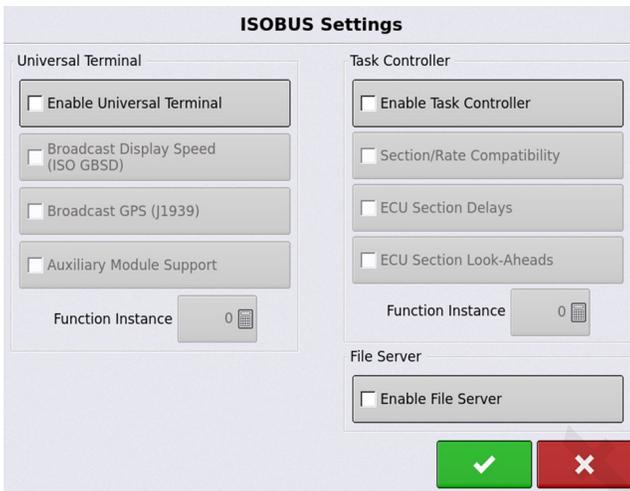
Press the [General] tab.

Console Setup+

Console Setup

| General | Display | Features | AgFiniti® | Firmware | Advanced |

Language / Country
English / US

ISOBUS Settings

Brightness Auto
Volume 70 %

Time / Date
2:16:22 PM
08/11/2023

Operating Units
Imperial

☐ Enable Video

Time Zone
America (Chicago)

Press the [ISOBUS Settings] tab.

A
Software & Un-
lock Activation

ISOBUS Settings

ISOBUS Settings

Universal Terminal
☐ Enable Universal Terminal
☐ Broadcast Display Speed (ISO GBSD)
☐ Broadcast GPS (J1939)
☐ Auxiliary Module Support
Function Instance   0

Task Controller
☐ Enable Task Controller
☐ Section/Rate Compatibility
☐ ECU Section Delays
☐ ECU Section Look-Aheads
Function Instance   0

File Server
☐ Enable File Server

✓   ✗

For Sentinel to function correctly check the appropriate boxes.
Enable Universal Terminal: This will allow the UT Screen to be visible.
Broadcast Display Speed : This will allow speed to be transmitter back to the Sentinel Controller.
Broadcast GPS: This will allow for the Sentinel to recognize GPS information.
Enable Task Controller: This will allow the Sentinel to communicate section control and rate control functions back to the display.
See below for explanation of each function copied from the AgLeader operation manual.

Broadcast Display Speed (ISO GBSD): Checking this box allows speed source currently being utilized by the display to be broadcast over the ISOBUS to the implement ECU.

Broadcast GPS (J1939)**:** Checking this box allows GPS data being supplied by the GPS receiver to be broadcast over the ISOBUS to the implement ECU.

Auxiliary Module Support: Checking this box allows the AgLeader Auxiliary Input Module or Smart Switchbox, to be used with ISOBUS ECUs that support AUX-N auxiliary functions.

Universal Terminal Functional Instance: Always set to 0 except when there are multiple UTs on the ISOBUS.

Section/Rate Compatibility: This setting determines how often the Display target rate message is sent to the ISOBUS ECU.
• When unchecked, the target rate message is only sent when it is changed on the display.
• When checked, the target rate message is sent at regular intervals. This is a non-standard ISOBUS setting. Leave this setting off unless ISOBUS ECU has an issue with the target rate resetting to zero on its own.

ECU Section Delays: Determines the manner in which mapping delays are handled with ISOBUS ECUs.
• When checked (default), mapping delays are determined by ISOBUS ECU and the "look-ahead" interval stored in the AgLeader display. Leave this checked when using DirectCommand Gen2 ISO Liquid.
• When unchecked, mapping delays are determined by the "look-ahead" interval stored in the AgLeader display.
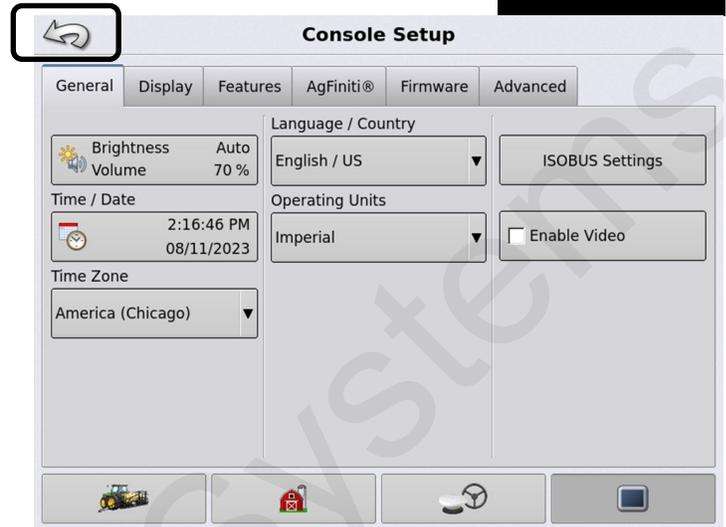
ISOBUS Settings
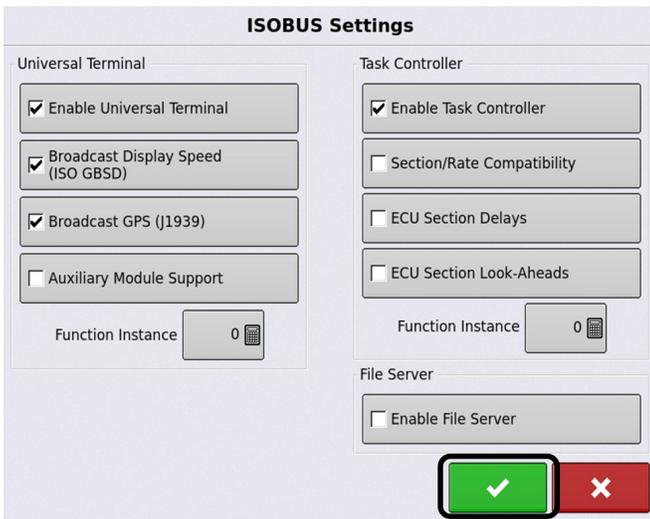
STEP 7

Press the ✔ to accept changes and proceed forward.

Console Setup

STEP 8
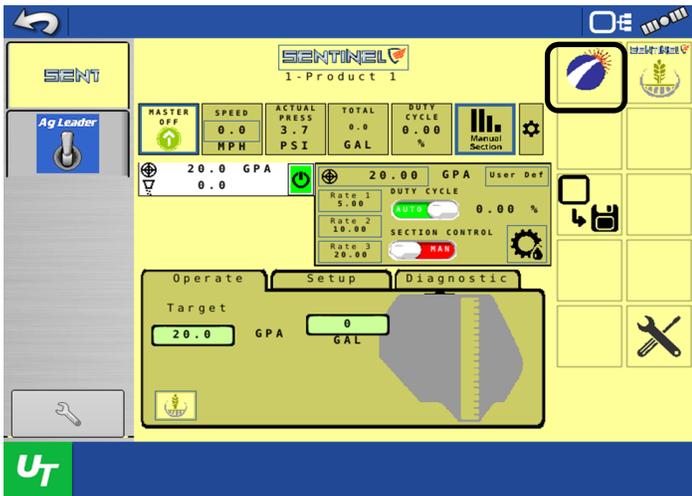
Press the ↩ to return the main Home Screen.

Home

STEP 9

Press 🔵 UT tab.

NOTE – After Enabling the UT, the UT *is now blue.* The UT can now be viewed and programmed.

UT Sentinel Screen

STEP 1

Locate the Starburst and select .

Sentinel ECU Version
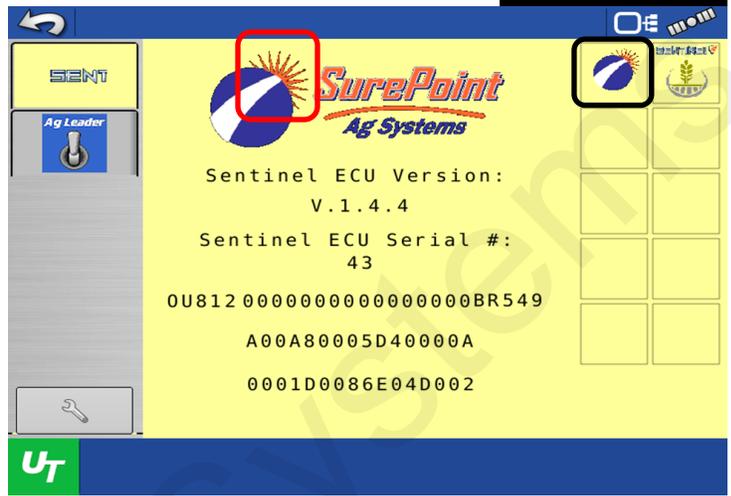
STEP 2

This screen shows the Sentinel ECU Software Version.
There is a hidden auxiliary screen function on this page.
Press the top right of the Starburst Logo to gain Access to the hidden Auxiliary screen.

Auxiliary Screen
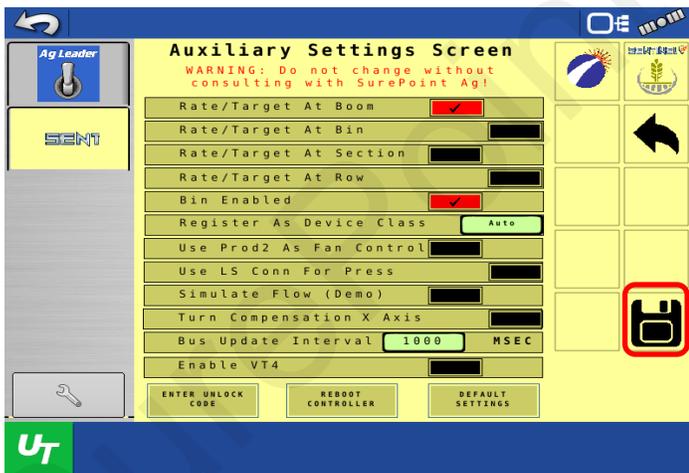
STEP 3

For the AgLeader InCommand 800 display to work correctly with the Sentinel controller, select all as indicated in this screenshot.

Select to save settings to Task Control.

Auxiliary Screen
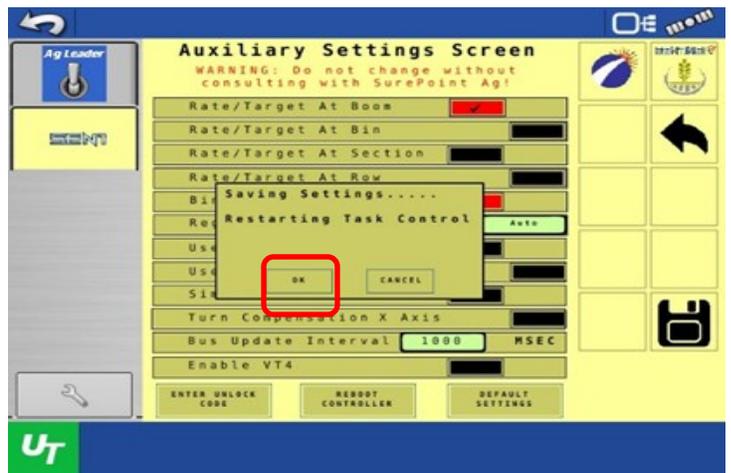
STEP 4

Press OK to reset the Sentinel Controller. The Controller will reboot

Set Up Sentinel Before Proceeding

See the Sentinel Manual, 396-4035Y1, provided with your system for harness layouts, system setup, module addressing and more about operating the Sentinel Rate Control system.

Scan or click the QR Code to go to the Sentinel Instructional Videos Playlist on YouTube.

SCAN ME

Sentinel Run

STEP 5

Refer to the **396-4035Y1** Sentinel user's manual to correctly setup the Sentinel for your application needs.

Press the ![wrench tool icon] tab to access the Installation Wizard for the Sentinel Controller. Follow all instructions, use a tape measure to get correct measurements of your implement and tractor. These measurements will be the same for the display setup on the forthcoming pages.
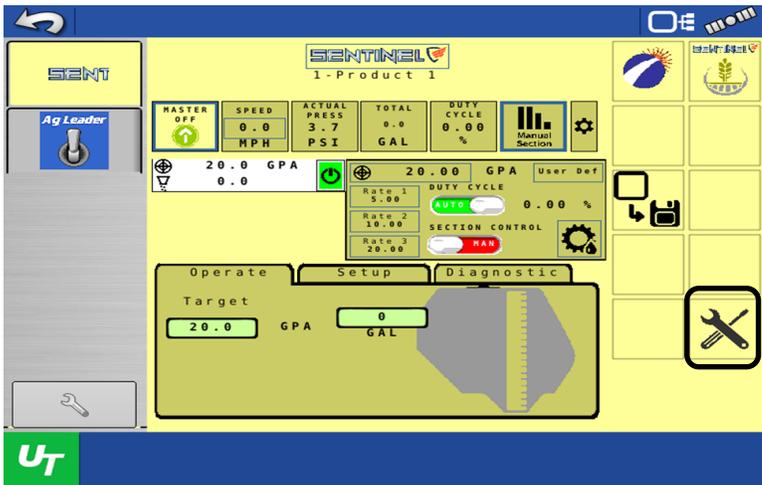
Use the 396-4035Y1 manual.

Home
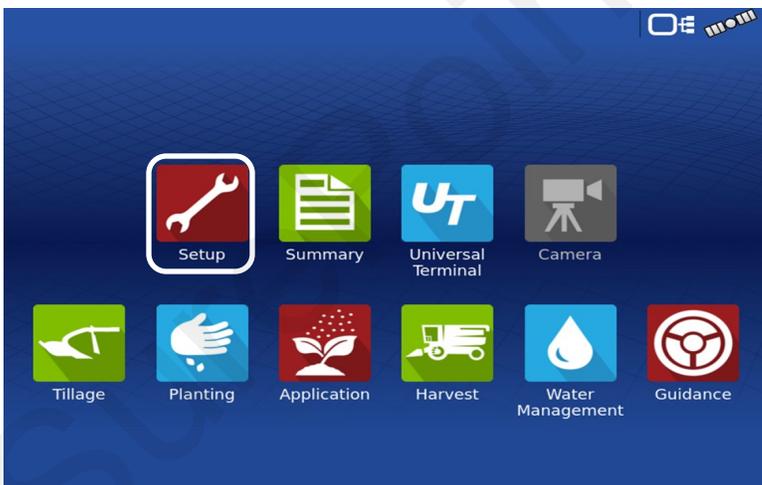
STEP 7

Press the ![Setup icon] Tab.
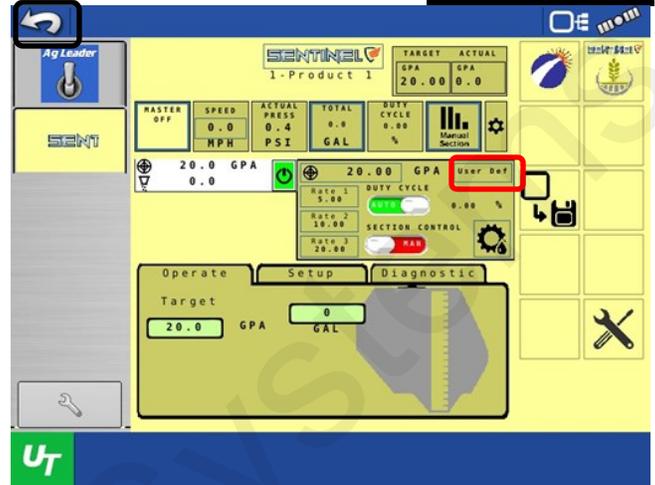
Sentinel Run

STEP 6

Change User Def to RX ![User Def icon].
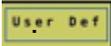
Press the return arrow to go back to the home screen. ![return arrow icon]

Do Not proceed until the Sentinel Controller is configured correctly.

Configuration Setup
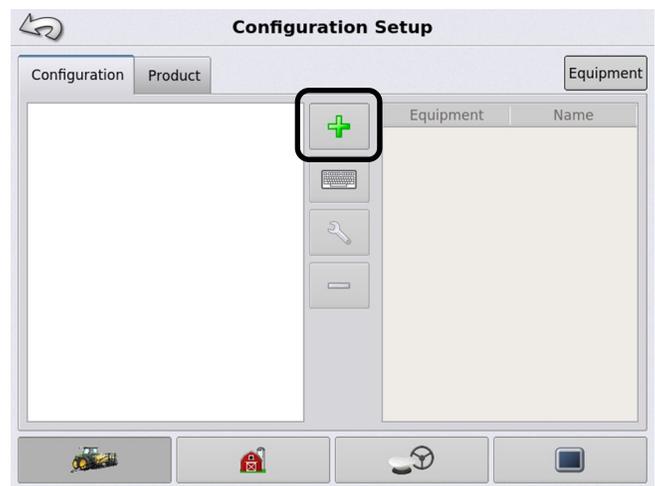
STEP 8

There may or may not be information on this screen. The following steps are setting up a new tractor, implement and controller. Some steps may be bypassed due to your current setup.

Press the ![plus icon] tab to get started.

Chose Operating Configuration

Choose Operating Configuration Type

Tillage	Create a tillage operating configuration for coverage logging and guidance-only operations.
Planting	Create a planting operating configuration.
Application	Create a liquid and granular application, or strip-till operating configuration.
Harvest	Create a harvest grain or forage yield monitoring operating configuration.
Surveying	Create a surveying operating configuration to record ground elevation.

STEP 9

The Sentinel will need to be setup for Application control.

Press **Application** to continue.

Operating Configuration: Vehicle

Operating Configuration: Vehicle

Select Vehicle

STEP 10

If your tractor is listed in the drop-down menu, select it.

Press ➕ to setup a new tractor.

Vehicle Wizard: Make and Model

Vehicle Wizard: Make and Model

Vehicle Type
Front wheel steer tractor ▼

Make
CaseIH ▼

Model
Magnum 340 ▼
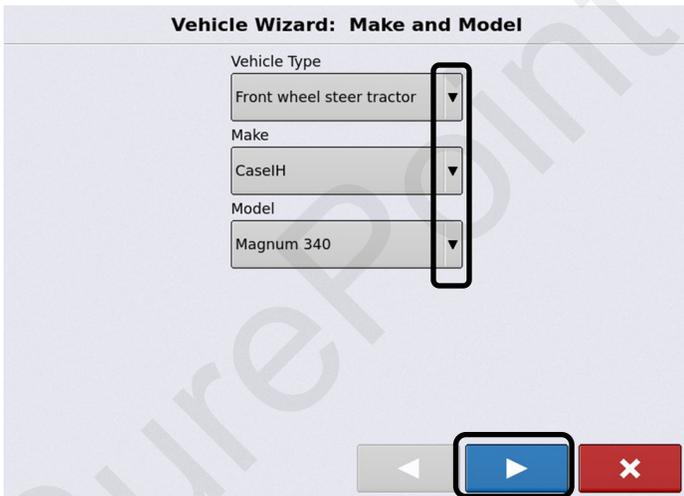
STEP 11

From the drop-down menus, select your tractor profile.

When completed, press ▶ to continue.

Vehicle Wizard: Attachment

Vehicle Wizard: Attachment Points

Enter Distance from Rear Axle to the Following Locations

☑ Rear Drawbar	48 in
☑ Rear Lift Arms	48 in
☐ Front Lift Arms	0 in

STEP 12

Using a tape measure, check mark the attachments that your tractor has and fill out the measurements.

Press ▶ to continue.

Vehicle Wizard: Antenna Offsets

Vehicle Wizard: Antenna Offsets

35.433 in Fore   0 in Right   131.496 in High

STEP 13

Using a tape measure, verify all measurements and adjust accordingly. These measurements must be accurate for mapping, Task Control operation and data acquisition.

Press ▶ to continue.

Operating Configuration: Vehicle

Operating Configuration: Vehicle

Select Vehicle

CaseIH Magnum 340

STEP 14

Confirmation page: Should show the tractor that was setup.

Press ▶ to continue.

Operating Configuration: Implement

Operating Configuration: Implement

Select Implement

STEP 15

If your implement is already setup, select it in the drop-down menu. To setup a new implement:

Press ✚ tab to proceed.

Implement Wizard: Make and Model

Implement Wizard: Make and Model

Enter Implement Information

Make

Model

STEP 16

Enter **Make** and **Model** of your new implement.

Press ▶ to proceed.

Implement Wizard: Make and Model

Implement Wizard: Make and Model

Enter Implement Information

Make

Case

Model

1255

STEP 17

Confirmation page

Press ▶ to proceed.

Implement Wizard: Attachment Type

Implement Wizard: Attachment Type

Implement Attachment Type

Rear Lift Arms ▼

STEP 18

From the drop-down menu, select the attachment type that fits the profile of your implement.

Press ▶ to proceed.

Implement Wizard: Application Channels

Implement Wizard: Application Channels

➕ Liquid Application

➕ Direct Injection

➕ Granular Application

Edit Container

▬ Remove

STEP 19

The Application controller (Sentinel) will need to be installed and setup.

Select ➕ Liquid Application to proceed.

Equipment Setup Wizard: Rate Controller

Equipment Setup Wizard: Rate Controller

Select Application Rate Controller

No Controller ▼ ➕

STEP 20

The Sentinel Rate Controller will need to be setup.

Press ➕ to proceed.

Controller Setup Wizard: Device

Controller Setup Wizard: Device

Select Controller or Flow Meter

Device

DirectCommand® ▼

Direct Type

DirectCommand® L2 ▼

☐ NH3 Application

◀ ▶ ✕

STEP 21

The correct Device will need to setup for Sentinel.

Device

DirectCommand® ▼

Press the drop-down arrow to continue.

Controller Setup Wizard: Device

Controller Setup Wizard: Device

Select Controller or Flow Meter

Device

ISOBUS ▼

◀ ▶ ✕

STEP 22

From the drop down-down menu, select

Device

ISOBUS ▼

.

Press ▶ to proceed.

Controller Setup Wizard: Make and Model

Controller Setup Wizard: Make and Model

Select Controller Make and Model

Make

Ag Leader ▼

Model

ISO Liquid Control ▼

☑ Supports Rate Control

◀ ▶ ✕

STEP 23

Make and Model of the Sentinel Controller will need to be setup.

Make

Ag Leader ▼

Press the drop-down arrow to enter in the Make.

Controller Setup Wizard: Make and Model

Controller Setup Wizard: Make and Model

Select Controller Make and Model

Make

Generic ▼

☑ Supports Rate Control

◀ ▶ ✕

STEP 24

From the drop down menu, Select

Make

Generic ▼

.

Check mark **Supports Rate Control.**

Press ▶ to proceed.

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396-6562Y1 AgLeader InCommand 800
Sentinel Setup With Task Control
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12

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Controller Setup Wizard: Controller Name

Controller Setup Wizard: Controller Name

Controller Name

Generic

STEP 25

Using the keyboard function, the controller name can be changed from **_Generic to Sentinel._** Press ✔ to proceed.

Equipment Setup Wizard: Rate Controller

Equipment Setup Wizard: Rate Controller

Select Application Rate Controller

Sentinel ▼ ➕

STEP 26

Ensure the Sentinel Rate controller is selected.

Press ▶ to proceed.

Equipment Setup Wizard: Application Channels

Equipment Setup Wizard: Application Channels

Number of Application Channels

1

STEP 27

The number of Application Channels will need to be set. This is the number of product tanks & products that will be used.

Select and Press ▶ to proceed.

Equipment Setup Wizard: Container

Equipment Setup Wizard: Container

Container Name	Capacity	Units
Main Tank	0	gallons ▼

STEP 28

Edit the name of the container being used, enter the capacity of the container, and select units. You cannot proceed until all selections are made.

Equipment Setup Wizard: Container

Equipment Setup Wizard: Container

Container Name | Capacity | Units
Main Tank | 1000 | gallons

STEP 29

Press ▶ to proceed.

Equipment Setup Wizard: Sections

Equipment Setup Wizard: Sections

Enter Number of Boom Sections

− 2 +

TIP: DO NOT enter the number of individual rows. For most implements, enter the number of swath sections that can be independently turned on and off.

STEP 30

Select the number of boom sections being used. This must match settings previously setup for the Sentinel UT controller.

Press ▶ to proceed.

Equipment Setup Wizard: Swath

Equipment Setup Wizard: Swath Width

Enter Full Swath Width

20 ft

TIP: For tillage implements, enter the working swath width (actual implement width minus the typical overlap). This results in a more accurate area calculation.

STEP 31

Enter the correct Swath Width for the implement being used. This must match the settings previously setup for the Sentinel controller.

Press ▶ to proceed.

Equipment Setup Wizard: Section Configuration

Equipment Setup Wizard: Section Configuration

Enter Boom Section Widths from Left to Right

Section	Swath Width (ft)
1	10.0000
2	10.0000

TIP: The implement is divided into equal section sizes by default. To modify the sections, press the keypad button for each section that needs to be changed.

STEP 32

Confirm Section Width, adjust if needed. This must match the setup previously performed in the Sentinel configuration.

Press ▶ to proceed.

Equipment Setup Wizard: Application Point Offset

Equipment Setup Wizard: Application Point Offset

Enter Distance from Hitch to Application Point
(front to back)

12 ft

STEP 33

Using a tape measure, enter the appropriate information. This must match settings previously setup in the Sentinel controller.

Press ✔ to continue.

Implement Wizard: Application Channels

Implement Wizard: Application Channels

Device	Sentinel
Application	Liquid
Swath Width (ft)	20
Number of Sections	2
Capacity (gallons)	1000

Liquid Application

Direct Injection

Granular Application

Edit Container

Remove

STEP 34

This is the confirmation page. This should show the liquid rate controller and settings that were just setup.

Press ▶ to proceed.

Implement Wizard: Hitch Point Configuration

Implement Wizard: Hitch Point Configuration

Enter Hitch Point Information

☐ Implement Provides a Rear Hitch

Enter Left or Right Distance

0 ft   to the left ▼

Enter Forward or Backward Distance

0 ft

Enter the left or right offset and the forward or backward distance from the point the implement connects to a vehicle to the implement's hitch point.

STEP 35

Fill out this information.

Press ▶ to proceed.

Implement Wizard: Implement Name

Implement Wizard: Implement Name

Enter Implement Name

Case 1255

STEP 36

Confirmation page.

Press ✔ to proceed.

Operating Configuration: Implement

Operating Configuration: Implement

Select Implement

Case 1255 ▼ ➕

Equipment	Name
Implement	Case 1255
Device	Sentinel
Container	Main Tank

◀ ▶ ✖

STEP 37

Confirmation page.

Press ▶ to proceed.

Operating Configuration: Speed Source

Operating Configuration: Speed Source

Primary Source

Display GPS ▼

Backup Source

Auxiliary Device ▼

Auxiliary Device Channel

Radar ▼

Auxiliary Channel Calibration

2000 ▦ | Calibrate Distance

Pulses / 100 ft

◀ ▶ ✖

STEP 38

From the drop-down menus, select the correct speed source.

Press ▶ to proceed.

Configuration Setup

Configuration Setup

Vehicle
CaseIH Magnum 340

Vehicle Offsets

| 1 |

Implement: Case 1255
Full Swath: 20 ft
Sections: 2

Controller: Sentinel
Device: ISOBUS
Make: Generic

Speed Input

Auxiliary Input

Automatic Swath Control

Equipment Settings

Offsets

✔

STEP 39

This confirms the information setup in the Wizard that was just performed. Items can be edited from this screen.

Press ✔ to proceed.

Configuration Setup

Configuration Setup

↩

Configuration | Product | Equipment

Application

CaseIH Magnum 340, Case 1255

➕ ⌨ 🔧 ➖

Equipment	Name
Vehicle	CaseIH Magnu...
Implement	Case 1255
Device	Sentinel
Container	Main Tank

STEP 40

To add or select a Product, press the Product **tab.**
To check, add, or change any equipment, press Equipment **tab.**
Equipment and controllers are now setup.

Press ↩ to return to the Home setup screen.

Home screen

STEP 41

Press [Application] tab to proceed.

Operation Configuration Selection

STEP 42

Vehicle, Implement, and Controller confirmation.
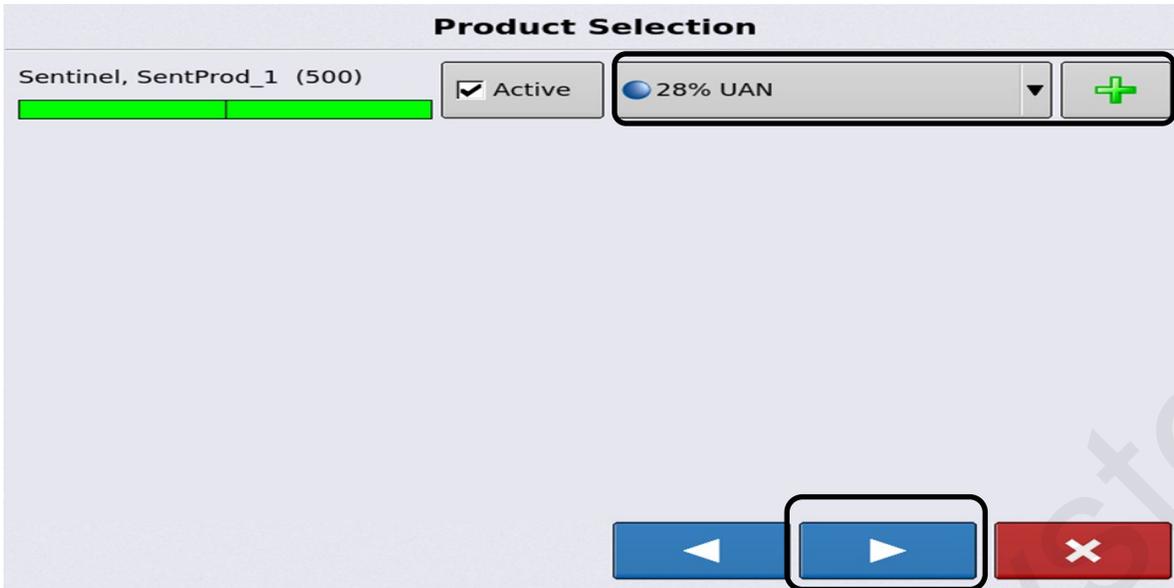
Press [▶] to proceed.

Management Selection

STEP 43

Enter all information as needed.
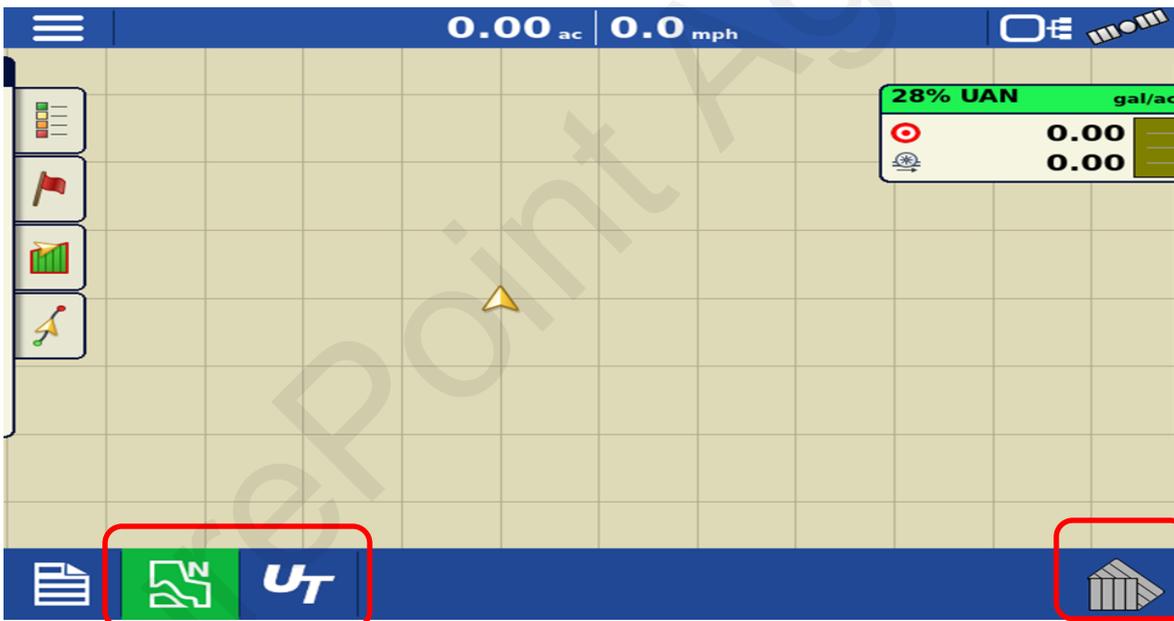
Press [▶] to proceed.

Product Selection

STEP 44

This page shows the Sentinel Controller with two sections. From the drop-down menu select the product type or enter a new product.

Press [▶] to proceed.

Application Run Screen

STEP   **45**

Refer to your AgLeader Operator's manual.
Select and Setup Target Rate as needed.

Begin applying Liquid via Sentinel. *Sentinel* can be viewed in the UT screen [UT] .

Application and mapping can be viewed in this screen [icon] . *Section control* can be switched

using [icon] .

AgLeader InCommand 800 L2 Controller

General Description

This can be configured for Flow-based or Pressure-based control.

Each swath module can support up to 12 sections, with the capability of three swath modules for a total of 36 sections.

L2 configurations support up to 144 nozzles.

Polarity reversing valves are limited to 18 sections as they use multiple signal pins from the swath module.

Basic setup needed for controller to function properly

Grower, Farm, Field
Display/Console
GPS/Guidance
Configuration
Application
Rate
Manual Speed

Grower, Farm, Field

STEP 1

Power on the display and the Home Screen should be showing.

Select Setup 🔧 .

Grower, Farm, Field
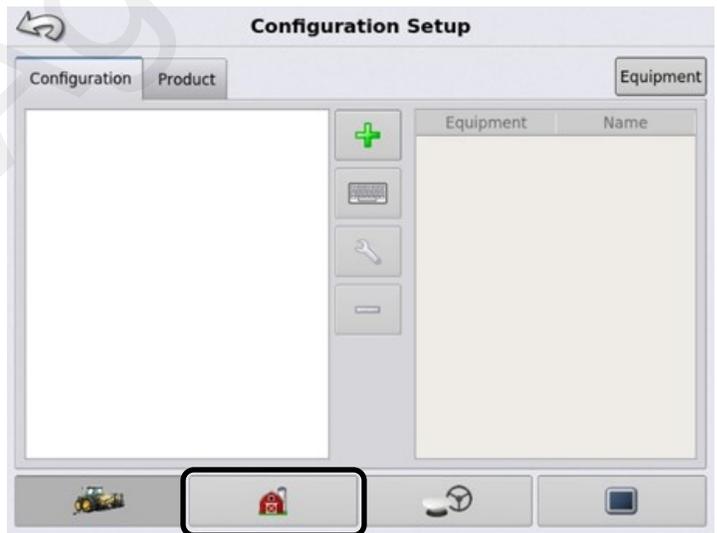
STEP 2

Select 🏠 .

Select Grower, Farm, Field
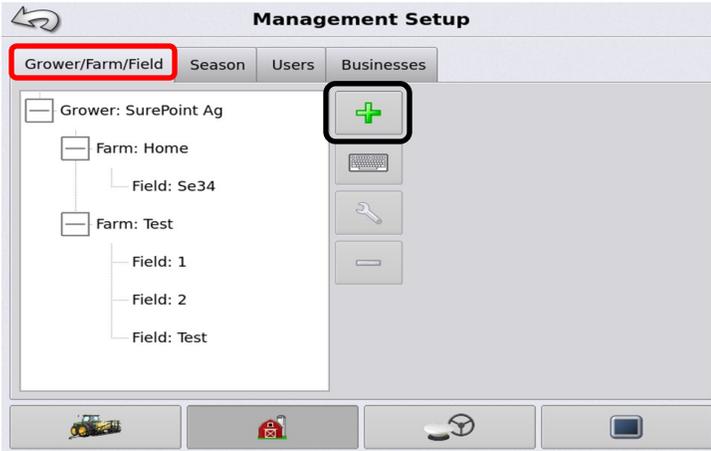
STEP 3

Enter Grower, Farm, and Field information.

Use the [+] to add or edit information.

Select Season
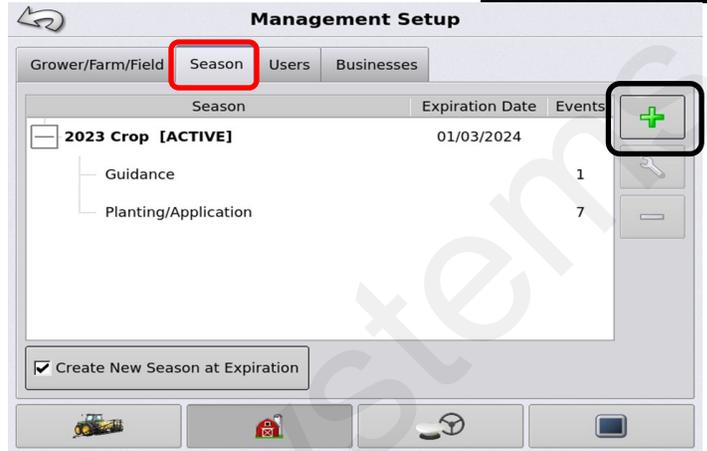
STEP 4

Edit this information for your annual farming
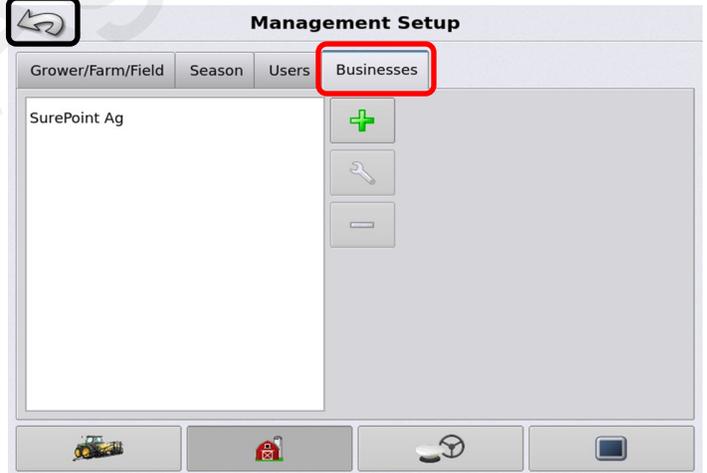
operation. This can be done by using the [+] .
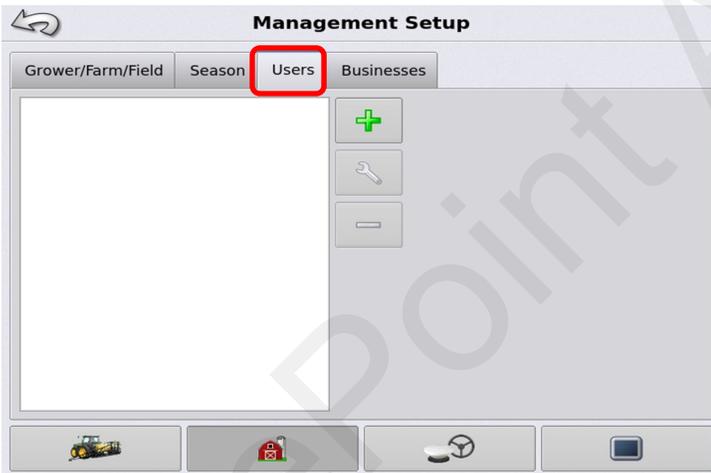
Select Users

STEP 5

Enter the *Operators/Users* that will be operating your equipment. This is for data management only.

Select Businesses

STEP 6

Enter *Business* information, as needed. This is for data management only.

Press the [←] to return to the home screen.

The Display / Console will need to be setup correctly.

STEP 7

Press **Setup** to begin .

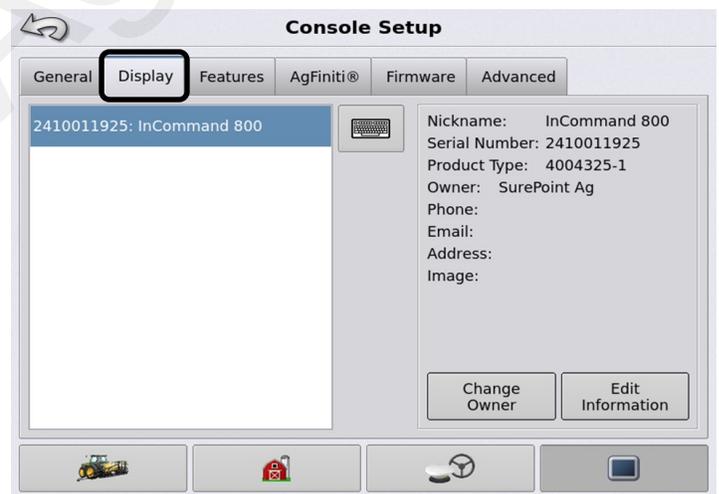**This page will appear first.**

STEP 8

Select the **Display** icon .

Console setup - General
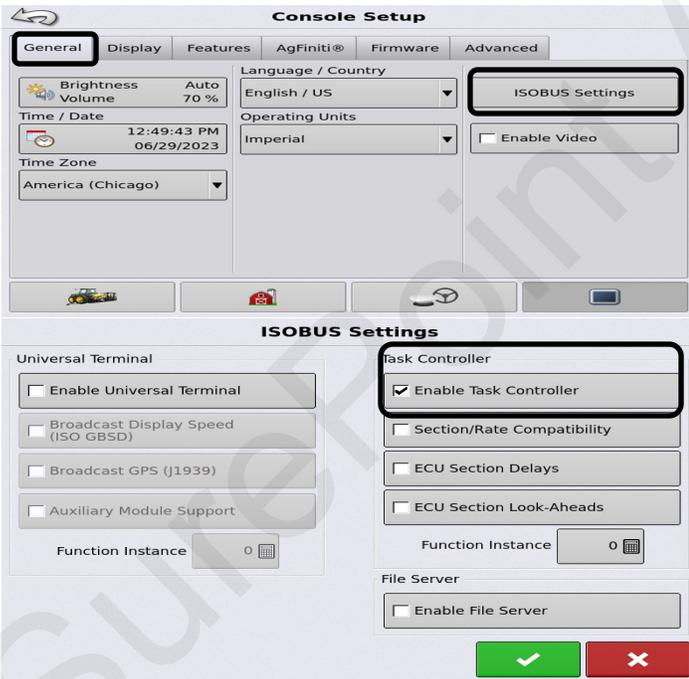
STEP 9

Using the *General tab,* adjust Brightness/Volume, Time/Date, Time Zone, Language. Country, and Operating Units to match your preferences.
Select ISOBUS.
Enable Task Controller.

Console Setup – Display

STEP 10

Display: Information on this screen can be edited. This is optional.

Console Setup – Features

STEP 11

Features: Provides information on the Unlocks the display currently has. If Unlocks are needed for your operation, you will need to contact your AgLeader dealer. Multiple Product unlock is not Enabled on this display. If using more than one product, a Multiple Product unlock must be purchased from an AgLeader dealer.

Console Setup - AgFiniti

STEP 12

AgFiniti: Is used for Mobile Data Management. This is optional. Contact your AgLeader dealer for more information and subscription details.
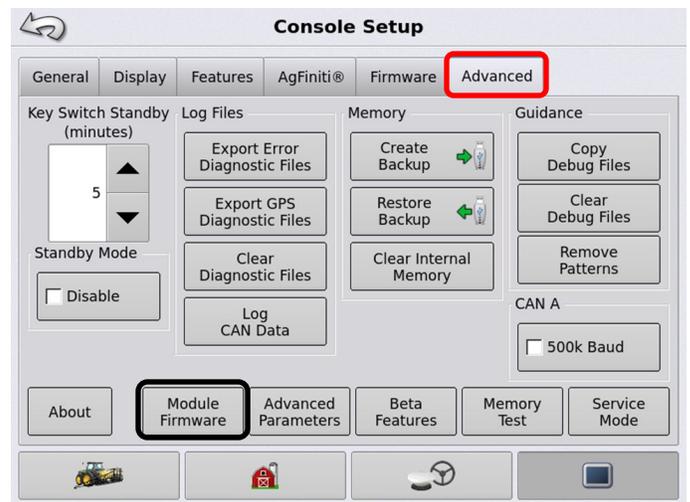
Console Setup – Firmware

STEP 13

Firmware: Firmware can be Upgraded and Installed from this page. Check with your AgLeader dealer for detailed information.
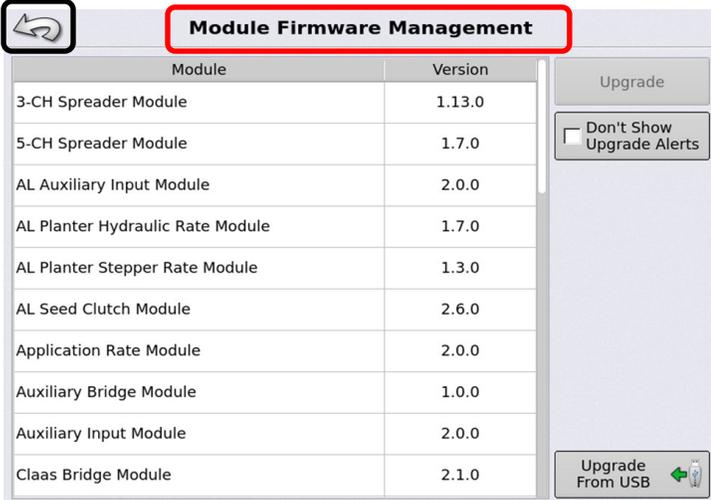
Console Setup – Advanced

STEP 14

Advanced: DO NOT adjust any of these settings without consulting your owner's manual or contacting your AgLeader dealer.

Select ⬚Module Firmware⬚ .

Console Setup: Module Firmware Management

Module Firmware Management

Module	Version	
3-CH Spreader Module	1.13.0	Upgrade
5-CH Spreader Module	1.7.0	☐ Don't Show Upgrade Alerts
AL Auxiliary Input Module	2.0.0	
AL Planter Hydraulic Rate Module	1.7.0	
AL Planter Stepper Rate Module	1.3.0	
AL Seed Clutch Module	2.6.0	
Application Rate Module	2.0.0	
Auxiliary Bridge Module	1.0.0	
Auxiliary Input Module	2.0.0	
Claas Bridge Module	2.1.0	Upgrade From USB

STEP 15

Module Firmware Management*:* This shows the current Firmware installed for all components associated with your display. If upgrades are needed, this can be done using a USB. Contact your AgLeader dealer for more information.

Press ⬅ twice to go back to the home screen.

GPS / Guidance Setup

STEP 16

Press Setup to begin 🔧 .

GPS/Guidance Setup

Configuration Setup

STEP 17

Select the Guidance Icon ⬸ .

GPS/Guidance Setup

GPS/Guidance Setup

Steering:
Manual Guidance

Receiver:
(Autodetect)

Operator Presence Alarm
15 Minutes

Lightbar Settings | Ag Leader® NTRIP Setup

☑ Require Differential Correction for Guidance

☑ Use Heading Detection

STEP 18

GPS/Guidance Setup*:* Refer to your operator's manual or contact your AgLeader dealer for instructions on how to setup your GPS/Guidance system.

Press ⬅ to go back to the home screen.
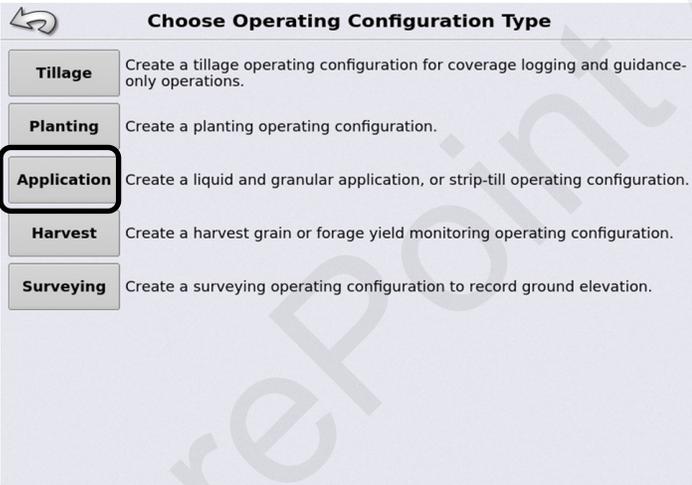
Configuration Setup

STEP 19

Press Setup to begin .

Configuration Setup

STEP 20

This page should be the default screen.

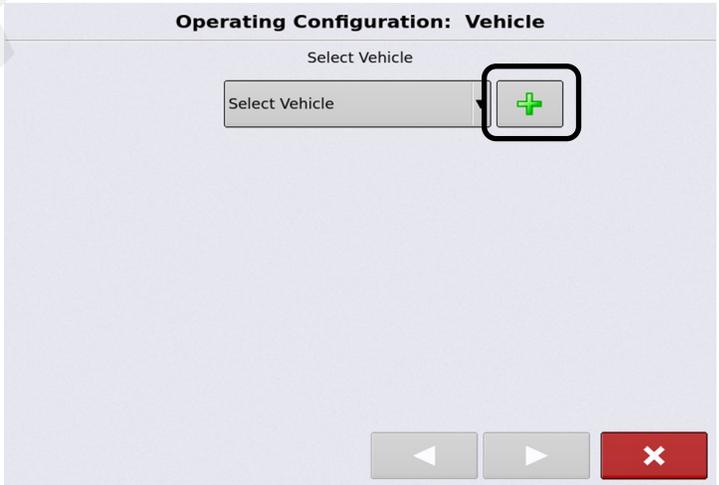Press the Symbol.

Configuration Setup

STEP 21

Select Application .

Configuration Setup

STEP 22

If using an existing Vehicle, select the vehicle from the drop-down menu.

If creating a new vehicle, press .

Configuration Setup

Vehicle Wizard: Make and Model

Vehicle Type

Front wheel steer tractor ▼

Make

John Deere ▼

Model

8130 ▼

◄ ► ✕

STEP 23

Use the drop-down menu to fill in the correct information for the Vehicle that you will be using.

When completed, press ► to continue.

Configuration Setup

Vehicle Wizard: Attachment Points

Enter Distance from Rear Axle to the Following Locations

☑ Rear Drawbar   24 in

☐ Rear Lift Arms   0 in

☐ Front Lift Arms   0 in

◄ ► ✕

STEP 24

Attachment Points: select the appropriate attachment point and enter the distance from the axle to your location.

Press ► to continue.

Configuration Setup

Vehicle Wizard: Antenna Offsets

27.559 in Fore   0 in Right   127.953 in High

◄ ► ✕

STEP 25

Antenna Offsets: Confirm antenna location and measurements for your vehicle.

Press ► to continue.

Configuration Setup

Vehicle Wizard: Vehicle Name

Enter Vehicle Name

John Deere 8130

◄ ✓ ✕

STEP 26

Vehicle Name: This should be the vehicle that was previously setup.

Press ✓ to continue.

Configuration Setup

Operating Configuration: Vehicle

Select Vehicle

John Deere 8130 ▼

STEP 27

Vehicle: Confirmation of Vehicle selection.

Press ▶ to continue.

Configuration Setup

Operating Configuration: Implement
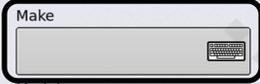
Select Implement

Select Implement ▼

STEP 28

Select Implement: Use the drop-down menu to select an existing Implement.

Press ✚ to select a new Implement.

Press ▶ to continue.

Configuration Setup

Implement Wizard: Make and Model

Enter Implement Information

Make

Model

STEP 29

Make and Model: Select Make.

Configuration Setup

Implement Make

Deere

1	2	3	4	5	6	7	8	9	0
q	w	e	r	t	y	u	i	o	p
a	s	d	f	g	h	j	k	l
z	x	c	v	b	n	m	,	.	-

Symbols

STEP 30

Enter Make of your Implement.

Press ✔ to continue.

Configuration Setup

Implement Wizard: Make and Model

Enter Implement Information

Make

Deere

Model

STEP 31

Make and Model*:* Select Model.

Configuration Setup

Implement Model

1770nt

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

q w e r t y u i o p

a s d f g h j k l

z x c v b n m , . -

Symbols

STEP 32

Implement Model: Enter the Model of your Implement.

Press ✔ to continue

Configuration Setup

Implement Wizard: Make and Model

Enter Implement Information

Make

Deere

Model

1770nt

STEP 33

Make and Model: This confirms the Implement settings.

Press ▶ to continue.

Configuration Setup

Implement Wizard: Attachment Type

Implement Attachment Type

Rear Drawbar ▼

STEP 34

Attachment Type: Use the drop-down menu to select the Implement Attachment Type.

Press ▶ to continue.

Configuration Setup

Implement Wizard: Axle Offsets

Enter Hitch to Implement Axle Distance

10 ft

STEP 35

Axle Offsets: Enter correct measurements.

Press ▶ to continue.

Configuration Setup

Implement Wizard: Application Channels

➕ Liquid Application

➕ Direct Injection

➕ Granular Application

Edit Container

Remove

STEP 36

Application Channels.

Select ➕ Liquid Application to proceed.

Configuration Setup

Equipment Setup Wizard: Rate Controller

Select Application Rate Controller

No Controller   ➕

STEP 37

Rate Controller.

Press ➕ to continue.

Configuration Setup

Controller Setup Wizard: Device

Select Controller or Flow Meter

Device

DirectCommand® ▼

Direct Type

DirectCommand® L2 ▼

☐ NH3 Application

STEP 38

Device: From the drop-down menu, select the correct Device, and Direct Type.

Press ▶ to continue.

Configuration Setup

Controller Setup Wizard: Meter Calibration

Flow Meter Calibration Number

− 0 pls/gal +

Flow Meter 2 Calibration Number

− 0 pls/gal +

STEP 39

Meter Calibration:

Configuration Setup

Controller Setup Wizard: Meter Calibration

Flow Meter Calibration Number

− 2000 pls/gal +

Flow Meter 2 Calibration Number

− 0 pls/gal +

STEP 40

Meter Calibration:
Enter the Flow Meter Calibration Number that is labeled on your flow meter.
The Flow Cal number for SurePoint flowmeters is on the serial number sticker on the side of the flowmeter.

Press ▶ to continue.

Configuration Setup

Controller Setup Wizard: Controller Name

Controller Name

Direct L2

STEP 41

Press ✔ to continue.

Configuration Setup

Equipment Setup Wizard: Rate Controller

Select Application Rate Controller

Direct L2 ▼ +

STEP 42

Select Application Rate Controller.
Select Direct L2 from the drop-down menu.

Press ▶ to continue.

Configuration Setup

Equipment Setup Wizard: Container

Container Name	Capacity	Units
Main Tank	0	gallons

STEP 43

Container: Name your chemical container and enter Capacity and Units.

Configuration Setup

Equipment Setup Wizard: Container

Container Name	Capacity	Units
Main Tank	1000	gallons

STEP 44

Press ▶ to continue.

Configuration Setup

Equipment Setup Wizard: Nozzle Count

Number of Nozzles
— 8 +

Nozzle Spacing
— 30 in +

Full Swath: 20.0000 ft

STEP 45

Nozzle Count: Enter Number of Nozzles and Nozzle Spacing for your application.

Press ▶ to continue.

Configuration Setup

Number of Boom Sections

Original Value: 1

2

7 8 9
4 5 6
1 2 3
0 . +/-

STEP 46

Number of Boom Section: Enter the number of boom sections being used.

Press ✓ to continue.

Configuration Setup

Equipment Setup Wizard: Sections

Enter Number of Boom Section Valves

−   2   +

STEP 47

Sections: Confirm Number of Boom Section Valves.

Press ▶ to continue.

Configuration Setup

Equipment Setup Wizard: Section Configuration

Enter Number of Nozzles per Section from Left to Right

Section	Number of Nozzles
1	4
2	4

TIP: The implement is divided into equal number of nozzles per section by default. To modify the sections, press the keypad button for each section that needs to be changed.

STEP 48

Section Configuration: Confirm Boom Section and Nozzle configuration. Follow instructions for editing.

Press ▶ to continue.

Configuration Setup

Equipment Setup Wizard: Section Valve

Signal Type   12 V - High

Valve Type   Standard

STEP 49

Section Valve.
Signal Type/Valve Type: From the drop-down menu, select the valve type that is being used.

Press ▶ to continue.

Configuration Setup

Equipment Setup Wizard: Application Point Offset

Enter Distance from Hitch to Application Point
(front to back)

6 ft

STEP 50

Application Point Offset: Enter the correct dimensions.

Press ✔ to continue.

Configuration Setup

Implement Wizard: Application Channels

Device	Direct L2
Application	Liquid
Swath Width (ft)	20
Number of Sections	2
Capacity (gallons)	1000

+ Liquid Application
+ Direct Injection
+ Granular Application

Edit Container

— Remove

◄ ► ✕

STEP 51

Application Channels.
This is a summary of what has been set up.
NOTICE: Warning about Multi-Product unlock. If there is more than one product being used, a Multi-Product unlock must be purchased and installed.

Press ► to continue.

Configuration Setup

Implement Wizard: Hitch Point Configuration

Enter Hitch Point Information

☐ Implement Provides a Rear Hitch

Enter Left or Right Distance

0 ft ▦   to the left ▼

Enter Forward or Backward Distance

0 ft ▦

Enter the left or right offset and the forward or backward distance from the point the implement connects to a vehicle to the implement's hitch point.

◄ ► ✕

STEP 52

Hitch Point Configuration.
Enter the appropriate information.

Press ► to continue.

Configuration Setup

Implement Wizard: Implement Name

Enter Implement Name

Deere 1770nt ⌨

✓ ◄ ✕

STEP 53

Implement Name: Confirms Implement being used.

Press ✓ to continue.

Configuration Setup

Operating Configuration: Implement

Select Implement

Deere 1770nt ▼ +

Equipment	Name
Implement	Deere 1770nt
—Device	Direct L2
—Container	Main Tank

◄ ► ✕

STEP 54

Implement: Summary of Implement, controller, and tank being used.

Press ► to continue.

Configuration Setup

Operating Configuration: Speed Source

Primary Source
Display GPS ▾

Backup Source
Auxiliary Device ▾

Auxiliary Device Channel
Radar ▾

Auxiliary Channel Calibration

2000 🔢 | Calibrate Distance

Pulses / 100 ft

◀ ▶ ✕

STEP 55

Speed Source: Select the appropriate Source and Calibration information.

Press ▶ to continue.

Configuration Setup

Operating Configuration: Configuration Name

Suggested Name for Configuration

John Deere 8130, Deere 1770nt ⌨

◀ ✔ ✕

STEP 56

Configuration Name: Suggested Name can be edited.

Press ✔ to continue.

Configuration Setup

Configuration Setup

Vehicle
John Deere 8130

Vehicle Offsets

1

Implement: Deere 1770nt

Full Swath: 20 ft
Sections: 2
Nozzles: 8
Boom Valves: 2
Signal Type: 12 V - High
Valve Type: Standard

Controller: Direct L2

Serial Number: Unassigned
Device: DirectCommand®
Type: Liquid
Flow Meter Cal (pls/gal) 2000.00
Flow Meter 2 Cal (pls/gal) 0.00

Speed Input

Auxiliary Input

Automatic Swath Control

Equipment Settings

Offsets

Calibrate Sensors

Controller Settings

✔

STEP 57

Configuration Setup: Page 1 Summary

Press ✔ to continue.

Configuration Setup

Configuration Setup

Vehicle
John Deere 8130

Vehicle Offsets

1

Implement: Deere 1770nt

Full Swath: 20 ft
Sections: 2
Nozzles: 8
Boom Valves: 2
Signal Type: 12 V - High
Valve Type: Standard

Controller: Direct L2

Serial Number: Unassigned
Device: DirectCommand®
Type: Liquid
Flow Meter Cal (pls/gal) 2000.00
Flow Meter 2 Cal (pls/gal) 0.00

Speed Input

Auxiliary Input

Automatic Swath Control

Equipment Settings

Offsets

Calibrate Sensors

Controller Settings

✔

STEP 58

Configuration Setup: Summary details.

Select Auxiliary Input .

Configuration Setup

Auxiliary Input

	Direct L2	
F1 (Master)	Channel On/Off	
F2 (Switch 1)	1	
F3 (Switch 2)	2	
F4 (Switch 3)		
F5 (Switch 4)		
F6 (Switch 5)		
F7 (Switch 6)		
F8 (Switch 7)		
F9 (Switch 8)		
F10 (Switch 9)		

Assign

Master Source

Switch ▼

Reset All

STEP 59

Auxiliary Input: When using an Auxiliary Switch Box for Auto/Manual Section Control, this page will need to be setup accordingly. Refer to the operator's manual or contact your AgLeader dealer.

Press [icon] to return.

Configuration Setup

Configuration Setup

Vehicle
John Deere 8130

Implement: Deere 1770nt   **Controller: Direct L2**

Full Swath:	20 ft	Serial Number:	Unassigned
Sections:	2	Device:	DirectCommand®
Nozzles:	8	Type:	Liquid
Boom Valves:	2	Flow Meter Cal (pls/gal)	2000.00
Signal Type:	12 V - High	Flow Meter 2 Cal (pls/gal)	0.00
Valve Type:	Standard		

Vehicle Offsets • Speed Input • Auxiliary Input • Automatic Swath Control • Equipment Settings • Offsets • Calibrate Sensors • Controller Settings

STEP 60

Select [Automatic Swath Control] .

Configuration Setup

Automatic Swath Control

Application

Outside Boundary Option
- Keep Unchanged
- Turn Section Off

[Look-Ahead Settings]

Coverage Option
- Minimize Skip
- Minimize Overlap
- User Defined   100 %

STEP 61

Application Swath Control: Select your option. Refer to the operator's manual or contact an AgLeader dealer for more information.

Press [Look-Ahead Settings] .

Configuration Setup

Look Ahead Settings

AGL Sprayer(4)	Turn-On:	1.0 s	Turn-Off:	0.5 s
Direct L2	Turn-On:	1.0 s	Turn-Off:	0.5 s

STEP 62

Look Ahead Settings: Refer to the operator's manual or contact an AgLeader dealer for more information.

Press [✓] to continue.

Configuration Setup

Configuration Setup

Vehicle
John Deere 8130

Vehicle Offsets

| 1 |

Implement: Deere 1770nt
Full Swath: 20 ft
Sections: 2
Nozzles: 8
Boom Valves: 2
Signal Type: 12 V - High
Valve Type: Standard

Controller: Direct L2
Serial Number: Unassigned
Device: DirectCommand®
Type: Liquid
Flow Meter Cal (pls/gal) 2000.00
Flow Meter 2 Cal (pls/gal) 0.00

Speed Input

Auxiliary Input

Automatic Swath Control

Equipment Settings

Offsets

Calibrate Sensors

Controller Settings
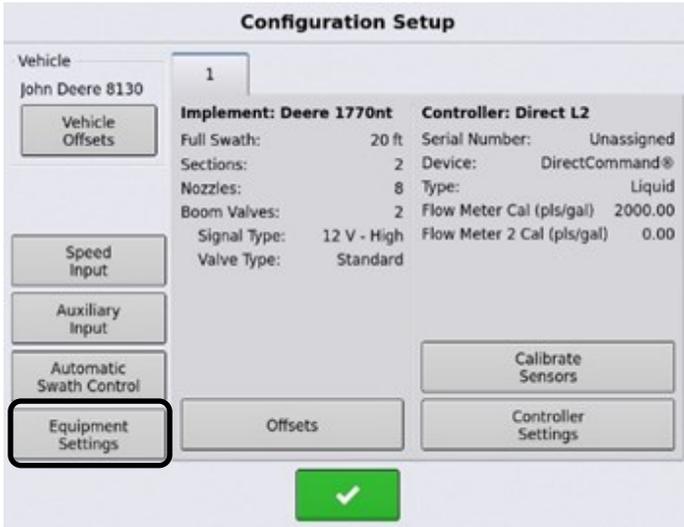
STEP 63

Select **Equipment Settings** .

Configuration Setup

Equipment Configuration Settings

Rate Outside of Field: Zero

Rate Change Look-Ahead: 0 sec

Implement Switch Polarity: None

☑ Rate Display Smoothing
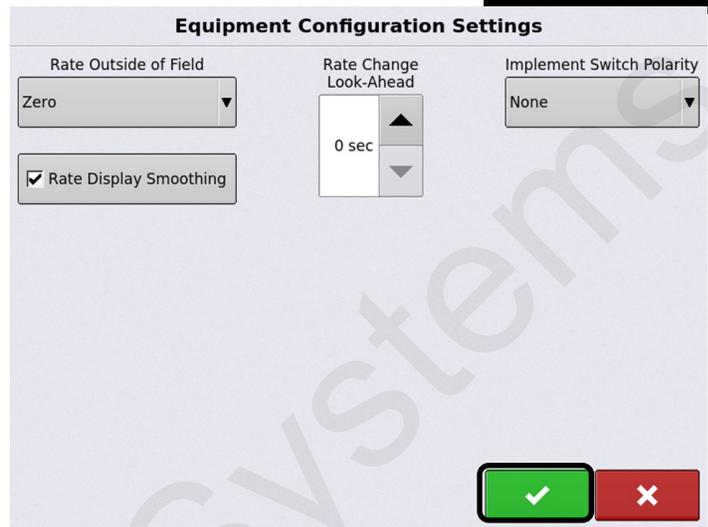
STEP 64

Equipment Configuration Settings: Refer to the operator's manual or contact an AgLeader dealer for more information.

Press ✔ to continue.

Configuration Setup

Configuration Setup

Vehicle
John Deere 8130

Vehicle Offsets

| 1 |

Implement: Deere 1770nt
Full Swath: 20 ft
Sections: 2
Nozzles: 8
Boom Valves: 2
Signal Type: 12 V - High
Valve Type: Standard

Controller: Direct L2
Serial Number: Unassigned
Device: DirectCommand®
Type: Liquid
Flow Meter Cal (pls/gal) 2000.00
Flow Meter 2 Cal (pls/gal) 0.00

Speed Input
Auxiliary Input
Automatic Swath Control
Equipment Settings
Offsets
Calibrate Sensors
Controller Settings
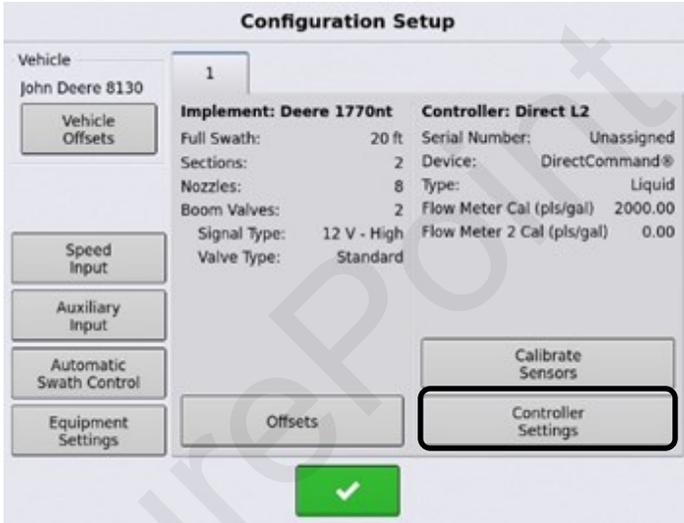
STEP 65

Select **Controller Settings** .

Configuration Setup

Controller Settings

Control Feedback | Rate Settings

Feedback Type: Flow Meter

Flow Control Delay: 0 s

Flow Meter Calibration 1: 2000 pls/gal

☐ Pressure Fallback

Flow Meter Calibration 2: 0 pls/gal

Flow Threshold: 0.1 gal/min

Control Valve Settings
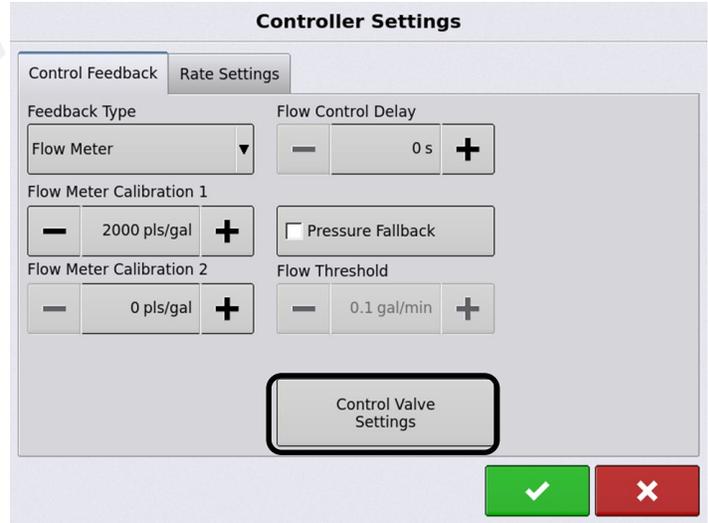
STEP 66

Controller Settings: Feedback Type set to Flow Meter. Check Flow Meter Calibration for accuracy.

Select **Control Valve Settings** .

Configuration Setup

Control Valve Settings

Control Valve	PWM 12 volt ▼

PWM Frequency	100
PWM Gain	1000
PWM Standby	50
Zero Flow Offset	30

Allowable Error

2 % ▲ ▼

STEP 67

Control Valve Settings: *These are critical.* Set these for SurePoint systems.
Control Valve: PWM 12 volt
PWM Frequency: 100
PWM Gain: 800 (decrease if rate is varying; increase to adjust more quickly.
Zero Flow Offset: Can be set higher if system is slow to get to Target Rate when starting. Can be set lower if pump will not slow enough for low rates. This is the same as LOW PWM LIMIT.

Press ✔ to continue.

Configuration Setup

Controller Settings

Control Feedback | **Rate Settings**

Feedback Type
Flow Meter ▼

Flow Meter Calibration 1
− 2000 pls/gal +

Flow Meter Calibration 2
− 0 pls/gal +

Flow Control Delay
− 0 s +

☐ Pressure Fallback

Flow Threshold
− 0.1 gal/min +

Control Valve Settings

STEP 69

Select **Rate Settings** .

Configuration Setup

Configuration Setup

Vehicle
John Deere 8130

Vehicle Offsets

Speed Input

Auxiliary Input

Automatic Swath Control

Equipment Settings

Tab: 1

Implement: Deere 1770nt
Full Swath: 20 ft
Sections: 2
Nozzles: 8
Boom Valves: 2
Signal Type: 12 V - High
Valve Type: Standard

Controller: Direct L2
Serial Number: Unassigned
Device: DirectCommand®
Type: Liquid
Flow Meter Cal (pls/gal) 2000.00
Flow Meter 2 Cal (pls/gal) 0.00

Calibrate Sensors

Offsets | **Controller Settings**

STEP 68

Select **Controller Settings** .

Configuration Setup

Controller Settings

Control Feedback | **Rate Settings**

Rate Off Behavior
Flow Control Valve
Maintain Standby Duty Cycle ▼

Standby Pressure
− 0.00 PSI +

Auxiliary Valve 1
Close ▼

Auxiliary Valve 2
Close ▼

Rate Error Alarm
Timeout
− 5 s +

Threshold
− 30 % +

STEP 70

Flow Control Valve drop-down menu options. Hold, Close, Maintain Standby Duty Cycle, and Maintain Standby Pressure. Set as needed.

Press ✔ to continue.

Configuration Setup

Configuration Setup

Vehicle
John Deere 8130

Vehicle Offsets	

Implement: Deere 1770nt

		Controller: Direct L2	
Full Swath:	20 ft	Serial Number:	Unassigned
Sections:	2	Device:	DirectCommand®
Nozzles:	8	Type:	Liquid
Boom Valves:	2	Flow Meter Cal (pls/gal)	2000.00
Signal Type:	12 V - High	Flow Meter 2 Cal (pls/gal)	0.00
Valve Type:	Standard		

Speed Input

Auxiliary Input

Automatic Swath Control

Equipment Settings

Offsets

Calibrate Sensors

Controller Settings

✔

STEP 71

Select [Calibrate Sensors] .

Configuration Setup

Pressure Sensor Calibration

Select Sensor to Calibrate

Main ▼

◄ ► ✕

STEP 72

Pressure Sensor Calibration: Select Main from the drop-down menu.

Press [►] to continue.

Configuration Setup

Pressure Sensor Calibration

Set Point Type

Single Set Point ▼

Sensor Type

Voltage ▼

◄ ► ✕
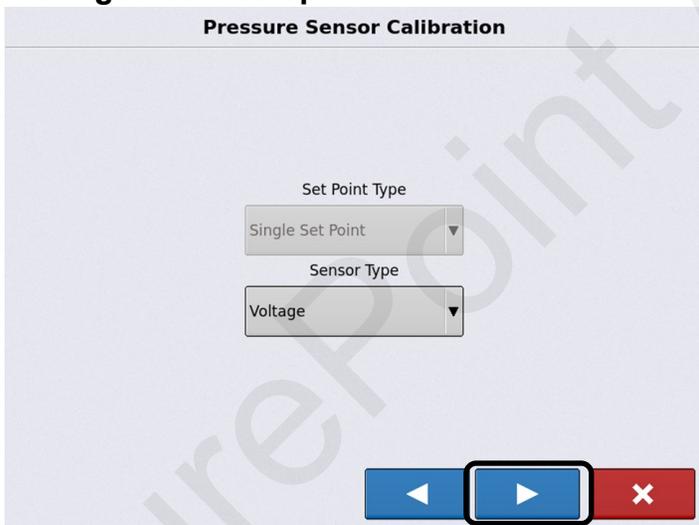
STEP 73

Pressure Sensor Calibration.
If using a SurePoint pressure transducer, set as depicted.

Press [►] to continue.

Configuration Setup

Pressure Sensor Calibration

Enter Voltage / Pressure Ratio

50.0 mV/PSI

◄ ► ✕

STEP 74

Pressure Sensor Calibration.
If using a SurePoint pressure transducer, set as depicted.

Press [►] to continue.

Configuration Setup
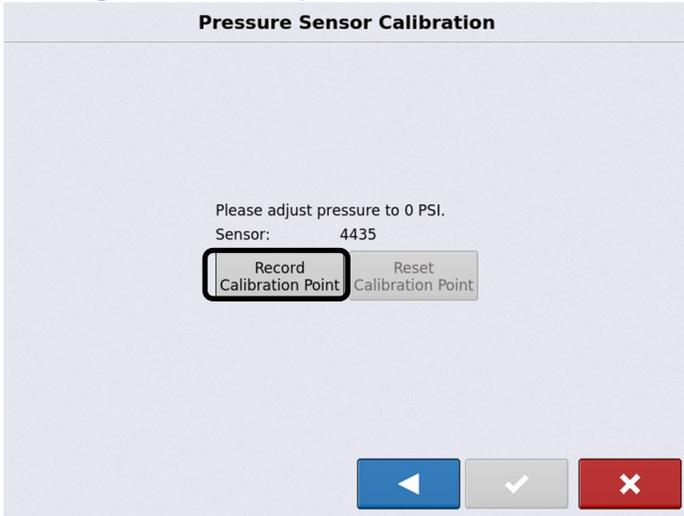
STEP 75

Pressure Sensor Calibration.
Ensure that there is 0 PSI at the pressure transducer or unplug the wire harness going to the sensor.

Select **Record Calibration Point** .

Application

STEP 77

Select **Application** .

Configuration Setup

STEP 76

Pressure calibration is complete. Plug sensor back in, if needed.

Press ✔ to continue.
Setup screens are concluded. Exit out of all screens, and go to the home screen.

Application

STEP 78

Operating Configuration Selection.
In the drop-down menu, select the vehicle and implement that was setup.

Press ► to continue.

Application

Management Selection

Growing Season
2023 Crop(2) ▼ ➕

Grower
SurePoint Ag ▼ ➕

Farm
Test ▼ ➕

Field
1 ▼ ➕

☑ Enable Management

◀ ▶ ✖

Management Selection.

Enter all information.

Press ▶ to continue.

Application

Product Selection

Direct L2   ☑ Active   Select Product ▼ ➕

◀ ▶ ✖

Product Selection.

Select Product ▼ ➕   Use the drop-down

menu to select or create a new product.

Application

Product Selection

Direct L2   ☑ Active   ⬤ 30% UAN ▼ ➕

◀ ▶ ✖

Press ▶ to continue.

Application

Event Selection

▦ Start New Event

Event: 2023-07-11_13:50:40

◀ ▶ ✖

Event Selection.
Select: Start a New Event or Resume an Old Event.

Application

Event Selection

Start New Event

Event: 2023-07-11_13:50:40

30% UAN ▼

◀ ▶ ✕
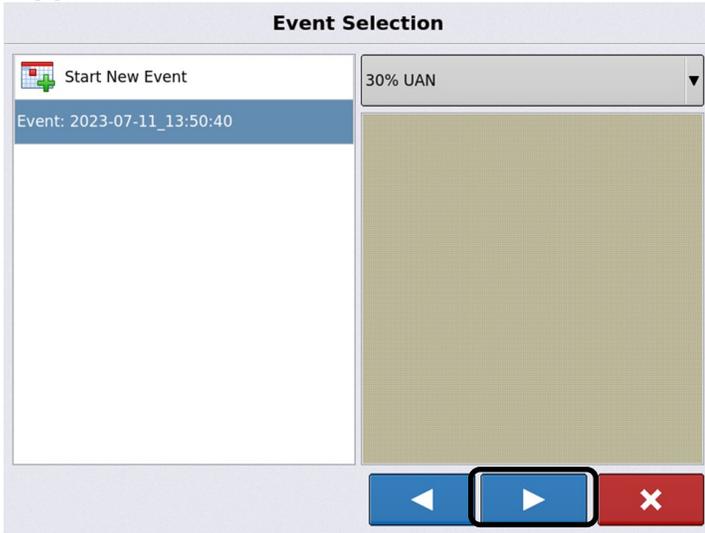
STEP 83

After the selection is made.
Press ▶ to continue.

Application

Options

Region

➕ | <1> ▼ | ⌨

Controlling Product

30% UAN (gal) ▼

◀ ✔ ✕

STEP 84

Options:
Edit Region or Controlling Product, as needed.

Press ✔ to continue.

Application

0.00 ac | 0.0 mph

30% UAN   gal/ac
⊙   0.00
⚙   0.00

40 60 80 100
20   120
PSI   140
0
No Nozzle

Prime

💧 Agitation: 0 PSI
💧 Auxiliary: 0 PSI
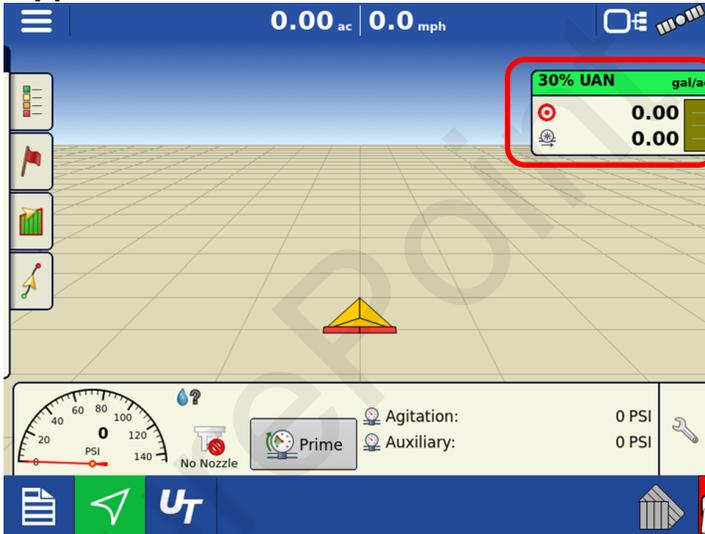
STEP 85

Target Rates will need to be setup.

30% UAN   gal/ac
⊙   0.00
⚙   0.00

Select ____ .

Rate Setup

0.00 ac | 0.0 mph

30% UAN   gal/ac
⊙   0.00
⚙   0.00

⊙1   0
⊙2   0
M

Rx | 🔧

Flow: 0.0 gal/min
Container: 0 gal
0 ft 0 in   0 %

40 60 80 100
20   120
PSI   140
0
No Nozzle

Prime

💧 Agitation: 0 PSI
💧 Auxiliary: 0 PSI
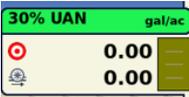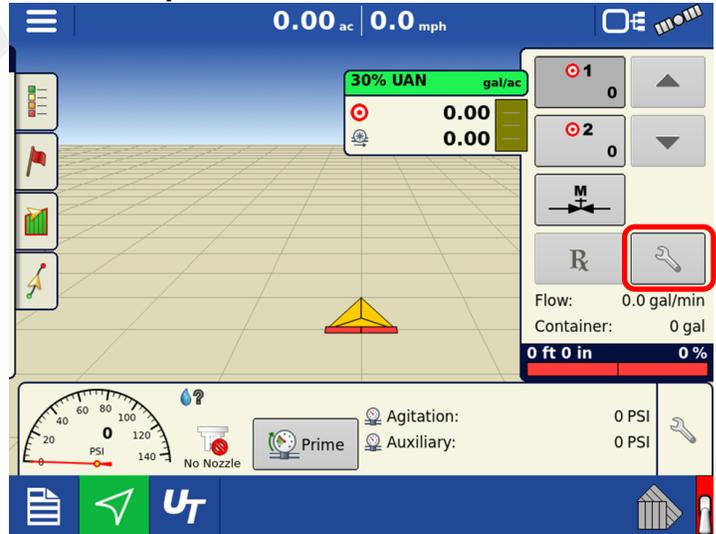
STEP 86

Select 🔧 located in the Target Rate area.

Rate Setup

Rate Control Settings

Rate Control | Containers

30% UAN (gal)

Rate 1	Rate 2	Increment	Minimum Flow	Rx
0.00	0.00	0.00	0.00 gal/min	

STEP 87

Rate Setup

Rate Control Settings

Rate Control | **Containers**

30% UAN (gal)

Rate 1	Rate 2	Increment	Minimum Flow	Rx
5.00	10.00	1.00	0.20 gal/min	
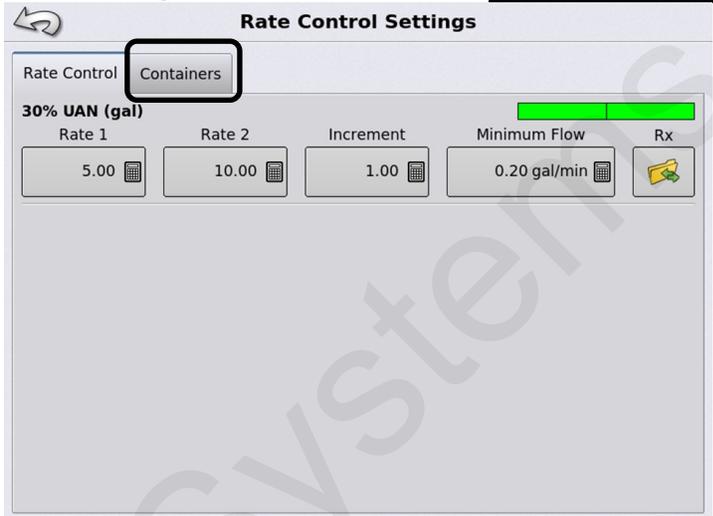
STEP 88

Rate Control Settings.
Enter desired rates for Rate 1, 2.
Set Increment for +/- manual rate adjustment.
Set Minimum Flow for Rate Alarm.
Select RX, if using prescriptions.

Select Containers .

Rate Setup

Rate Control Settings

Rate Control | Containers

Main Tank - 30% UAN
Full: 1000 gal
Current: 0 gal
               0.0 %

100 gal
10 %
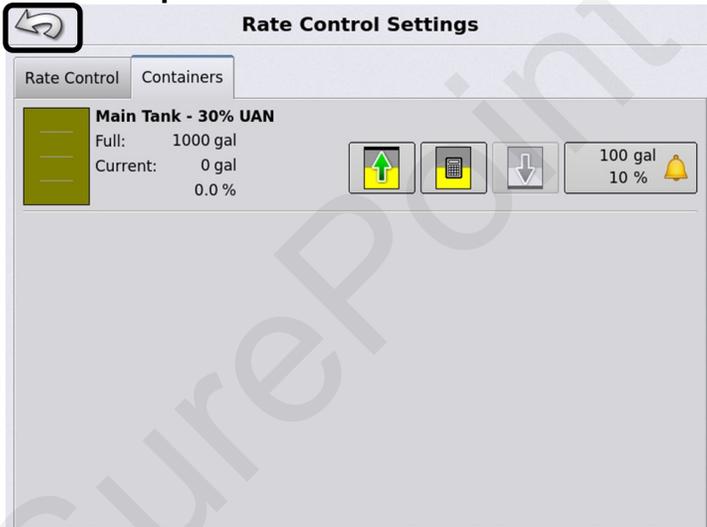
STEP 89

Enter information, if needed.

Select .

Rate Setup

0.00 ac | 0.0 mph

30% UAN   gal/ac
                5.00
                0.00

⊙1   5
⊙2   10

M

Rx

Flow: 0.0 gal/min
Container: 0 gal

0 ft 0 in   0 %

40 60 80 100
20   120
  0
PSI 140
No Nozzle

Prime

Agitation: 0 PSI
Auxiliary: 0 PSI
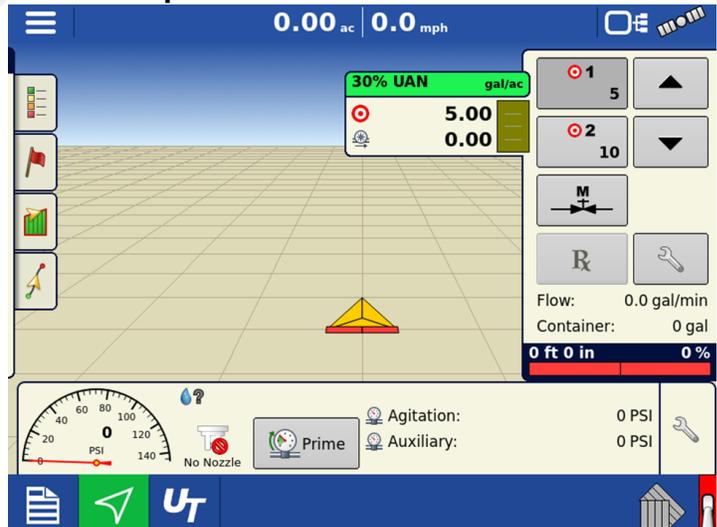
STEP 90

The system is ready to apply Liquid.

SurePoint
Ag Systems
396-6562Y1 AgLeader InCommand 800
Sentinel Setup With Task Control
© 2010-2024 SurePoint Ag Systems Inc.
42
Revised 03/23/2024
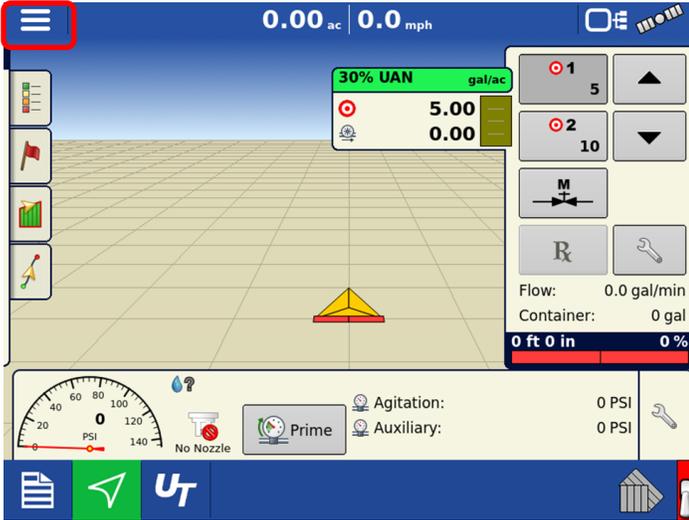
Manual Speed Entry

STEP 91

Select ☰ for a drop-down menu.
Select Settings.

Manual Speed Entry

STEP 92

Select [Configuration Settings] .
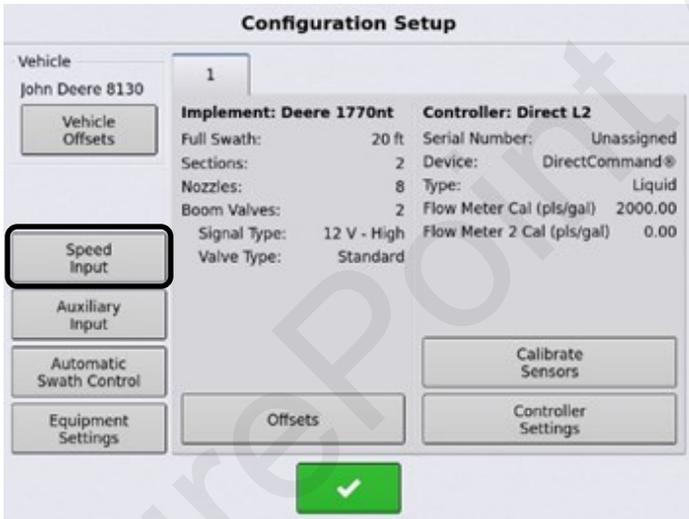
Manual Speed Entry

STEP 93

Configuration Setup.
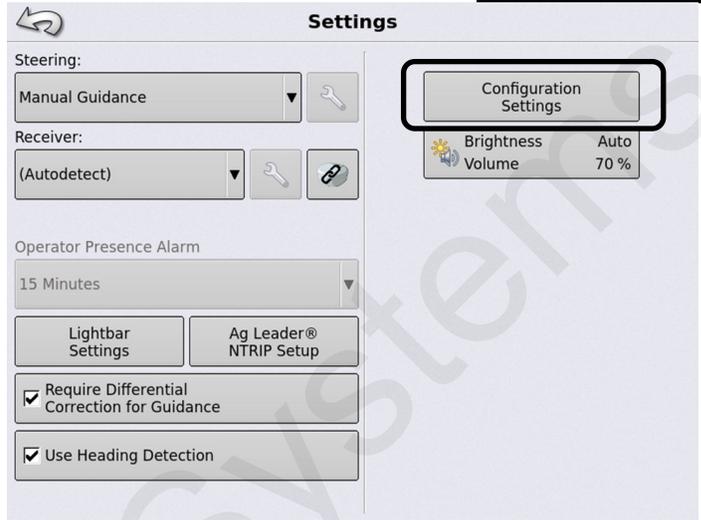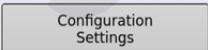
Select [Speed Input] .

Manual Speed Entry
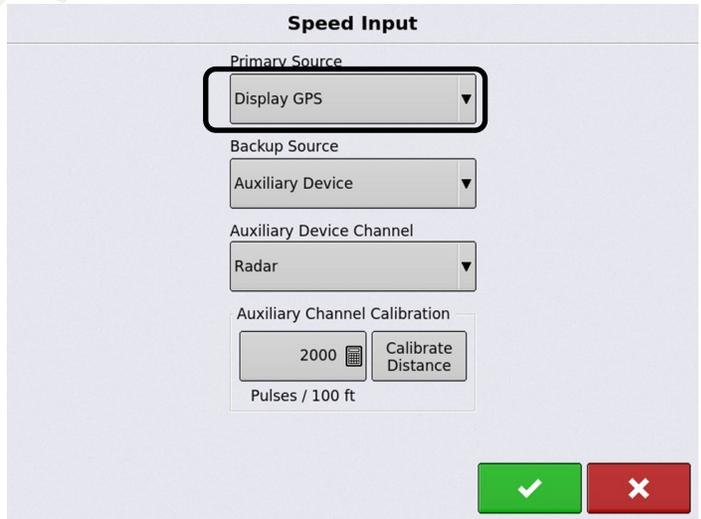
STEP 94
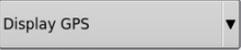
Select [Display GPS] using the drop-down menu.
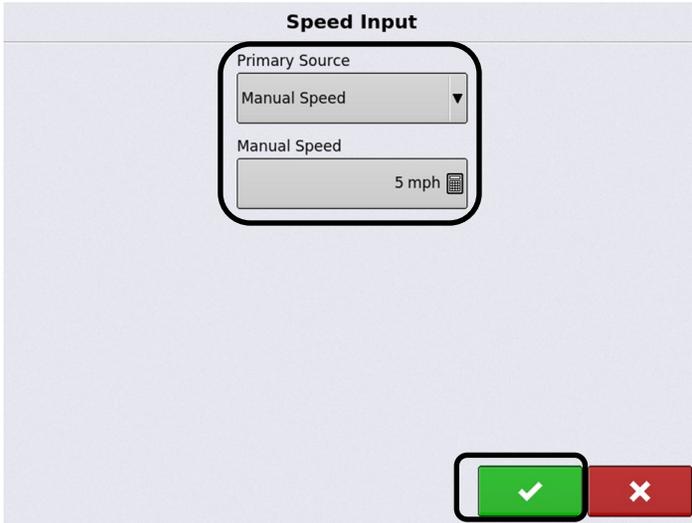
Manual Speed Entry

STEP 95

Speed Input.
Select Manual Speed and enter a Manual Speed MPH.

Press [✓] to continue.
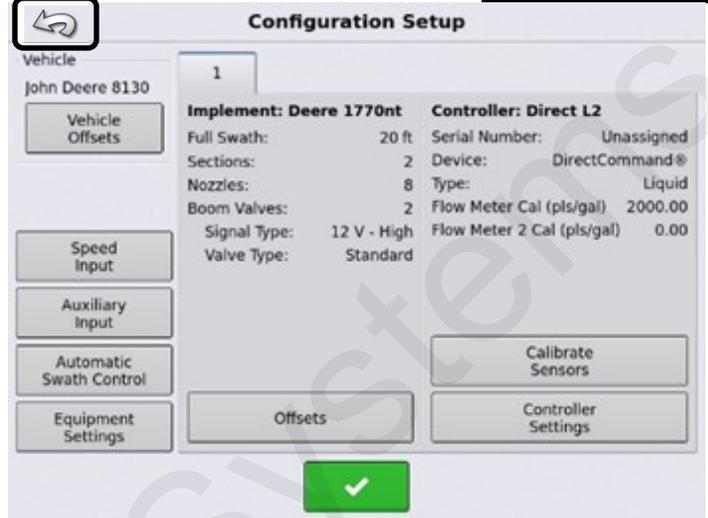
Manual Speed Entry

STEP 96

Select [↩] to return to Application Screen.
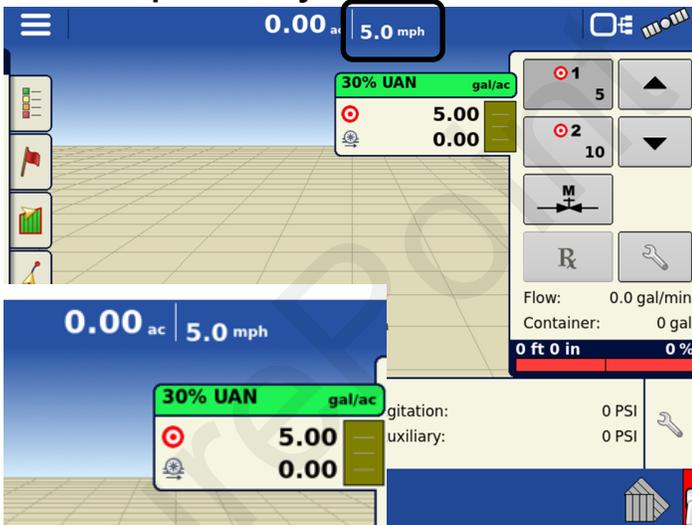
Manual Speed Entry

STEP 97

There is now a test speed of 5 mph. We can effectively test the system while being stationary.
Refer to the operator's manual or contact an AgLeader dealer for additional information.
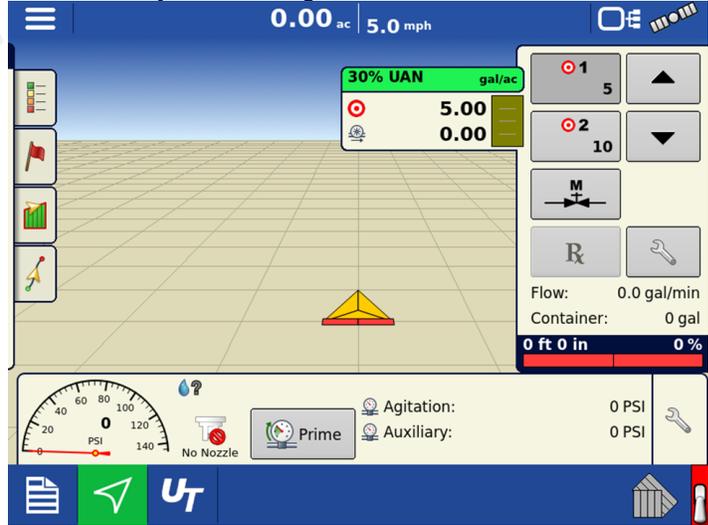
Manual Speed Entry

STEP 98

Go back to Settings < Configuration Settings < Speed Input < Primary Source
Change Primary Source setting from Manual Speed to Display GPS for normal operation.

AgLeader ISO Liquid Control
What is the maximum Number of Sections that can be controlled?
Up to 36 sections using three AgLeader Liquid Swath Control Modules
Up to 144 sections with Non AgLeader ISO ECU's. This is dependent on the maximum number of sections the Non-AgLeader ECU can control up to 144 sections.
Will the main page show up the number of sections?
When the configuration is setup, it will show the number of section on the screen. If there are 24 sections on the sprayer, it will have a picture of the 24 sections on the screen.
Can be configured for Flow-based or Pressure-based control
Basic setup needed for controller to function properly
Grower, Farm, Field
Activate UT
UT Setup / Configuration
Display / Console
GPS / Guidance
Configuration
Application
Rate
Manual Speed
Refer to AgLeader Operator's Manual
4004700-ENG Rev. U InCommand 800 Display User Guide
2006251-ENG Rev. A ISOBUS Liquid Module
2006017-ENG InCommand ISO Liquid Control
2006034-ENG InCommand Aux Functions

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Ag Systems

396-6562Y1 AgLeader InCommand 800   46
Sentinel Setup With Task Control
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STEP 1

Power on the display and the Home Screen should be showing.

Select Setup .

STEP 2

Select .

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Sentinel Setup With Task Control
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47

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Select Grower, Farm, Field

STEP 3

Enter in your Grower, Farm, and Field information.

Use the [+] to edit or add information.

Select Season

STEP 4

Edit this information as needed for your annual farming operation. This can be done by using the [+].

Select Users

STEP 5

You can enter in the *operators/users* that will be operating your equipment. This is for data management only.

Use the [+] to edit or add information.

Select Businesses

STEP 6

Enter in *Business* information as need. This is for data management only.

Use the [+] to edit or add information.

Press the return arrow. [↩]

The Display / Console will need to be setup correctly.

STEP 7

Press Setup to begin .

This page will appear first.

STEP 8

Select the Display icon .

Console setup: General
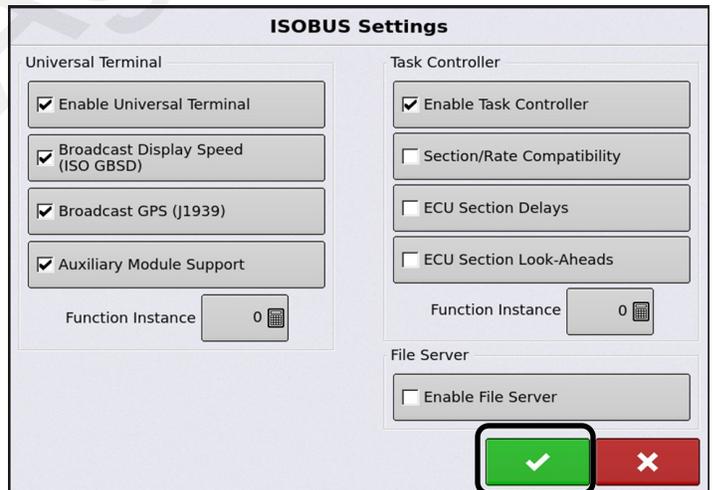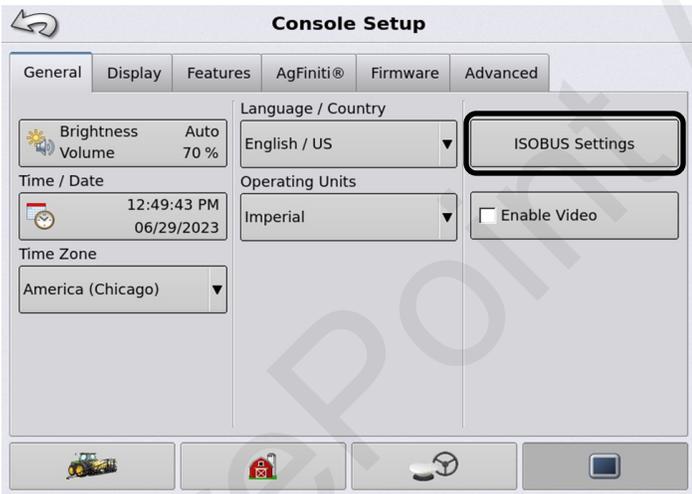
STEP 9

Using the **General tab, enter Brightness/ Volume, Time/Date, Time Zone, Language.** Country and Operating Units to match your preferences.

Select ISOBUS Settings.

Enable Video will not be used.

Console Setup: General: ISO Selection

STEP 10

NOTE: See next page for explanation of settings.
Set as needed for your operation.

Select to continue.

D

AgLeader ISO Liquid Control

Common Terminology: Control Setup – General – ISO Selection
ISOBUS Working Set: One or more ISOBUS modules that control an implement's functionality.
Working Set Master (WSM): Main module responsible for coordinating all communication between the UT and the Working Set, including loading of the Object Pool to the UT screen.
Object Pool: The graphic image presented to the user on the UT display. The Object Pool is sent to the UT by the ISOBUS module.

ATTENTION!: Before operating an ISOBUS implement with the display, read the operator's manual provided by the implement's manufacturer and follow all safety information provided in the manual. When this display is used with an ISOBUS implement, the information and functions on the display are provided by the implement ECU and are the responsibility of the implement manufacturer.
Broadcast Display Speed (ISO GBSD): Checking this box allows speed source currently being utilized by the display to be broadcast over the ISOBUS to the implement ECU.
Broadcast GPS (J1939): Checking this box allows GPS data being supplied by the GPS receiver to be broadcast over the ISOBUS to the implement ECU.
Auxiliary Module Support: Checking this box allows the AgLeader Auxiliary Input Module or Smart Switchbox, to be used with ISOBUS ECUs that support AUX-N auxiliary functions.
Universal Terminal Functional Instance: Always set to 0 except when there are multiple UTs on the ISOBUS.
Section/Rate Compatibility: This setting determines how often the Display target rate message is sent to the ISOBUS ECU.
• When unchecked, the target rate message is only sent when it is changed on the display.
• When checked, the target rate message is sent at regular intervals. This is a non-standard ISOBUS setting. Leave this setting off unless ISOBUS ECU has an issue with the target rate resetting to zero on its own.
ECU Section Delays: Determines the manner in which mapping delays are handled with ISOBUS ECUs.
• When checked (default), mapping delays are determined by ISOBUS ECU and the "look-ahead" interval stored in the AgLeader display. Leave this checked when using DirectCommand Gen2 ISO Liquid.
Control Setup – General – ISO Selection.
• When unchecked, mapping delays are determined by the look-ahead interval stored in the AgLeader display. This method is thought of as industry standard and is used by various manufacturers. Leave this unchecked when on-ground AutoSwath performance is correct, but display mapping is showing gaps/overlaps.

NOTE!: Enabling/disabling this setting does not effect on-ground section performance.

Enable File Server: Enables Hardi Sprayer specific diagnostic logging for troubleshooting purposes.
Task Controller Function Instance: Always set to 0 except when there are multiple TCs on the ISOBUS. Use to change instance. Reboot Display.
ECU Section Look-Ahead: Determines how "look-aheads" are used for AutoSwath with ISOBUS ECU.
• When checked (default), the display will use "look-ahead" settings from the ISOBUS ECU.
• When unchecked, the display will use "look-ahead" settings that are entered and stored in the displays Automatic Swath Control settings.

NOTE!: Enabling/disabling this setting will effect on-ground section performance

********NOTE*********
This information was copied from AgLeader Operation manual .
PN 4004700-ENG Rev. U

STEP 11

Display: Information on this screen *can be* edited as needed. This is optional.

Console Setup – Features
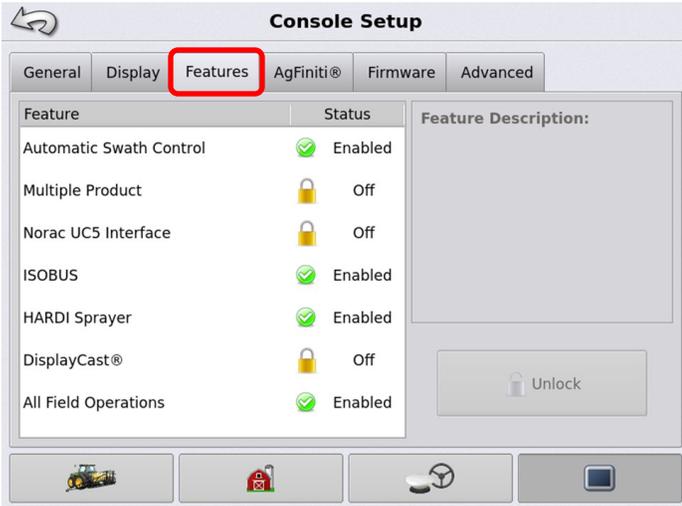
STEP 12

Features: Provides information on the Unlocks the display currently has. If Unlocks are needed for your operation, you will need to contact your AgLeader dealer.
Multiple Product unlock is not Enabled on this display.

Console Setup - AgFiniti

STEP 13

AgFiniti: Is used for Mobile Data Management. This is optional. Contact your AgLeader dealer for more information and subscription details.

Console Setup – Firmware

STEP 14

Firmware: Firmware can be Upgraded and installed from this page. Check with your AgLeader dealer for detailed information.

Console Setup – Advanced
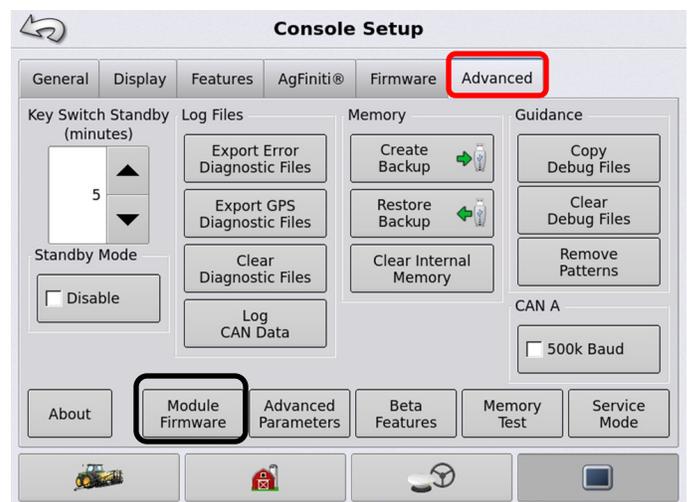
STEP 15

Advanced: *DO NOT* adjust any of these settings without consulting your owner's manual or contacting your AgLeader dealer.

Select- Module Firmware .

Console Setup – Module Firmware Management

Module Firmware Management

Module	Version
3-CH Spreader Module	1.13.0
5-CH Spreader Module	1.7.0
AL Auxiliary Input Module	2.0.0
AL Planter Hydraulic Rate Module	1.7.0
AL Planter Stepper Rate Module	1.3.0
AL Seed Clutch Module	2.6.0
Application Rate Module	2.0.0
Auxiliary Bridge Module	1.0.0
Auxiliary Input Module	2.0.0
Claas Bridge Module	2.1.0

Upgrade

☐ Don't Show Upgrade Alerts

Upgrade From USB

STEP 16

UT Setup for ISO Rate Control

STEP 17

Module Firmware Management: This shows the current Firmware installed for all components associated with your display. If upgrades are needed, this can be done using a USB. Contact your AgLeader dealer for more information.

Press the return arrow twice to proceed.

Press [Universal Terminal] to continue.
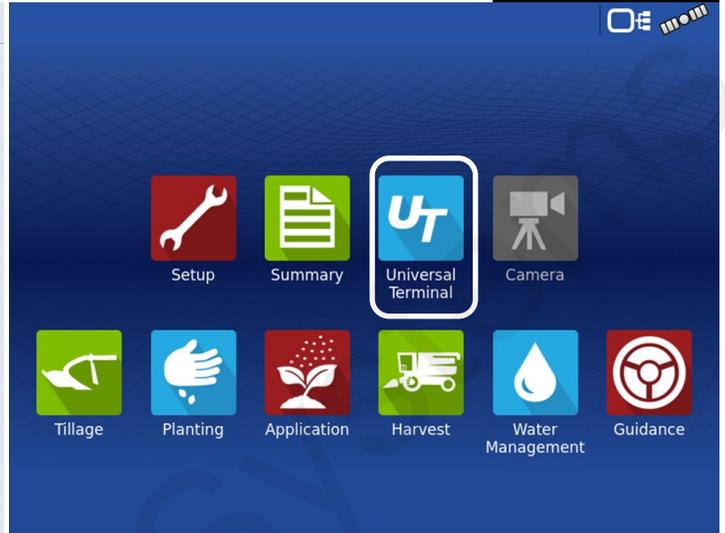
UT Setup for ISO Rate Control
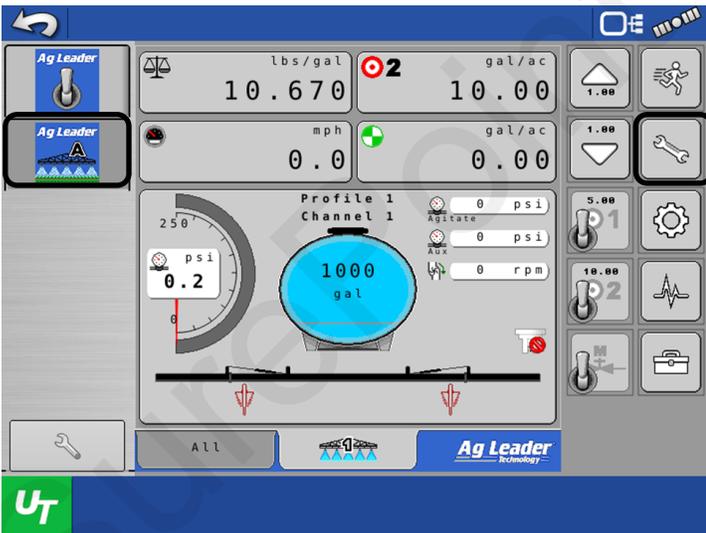
STEP 18

To view the **ISOBUS** screen select.

Press [wrench] to continue.

UT Setup for ISO Rate Control

Settings

Manage Components	Edit Profiles and Nozzles
Control Valve Settings	Update Control Valve Parameters
Alarm Settings	Edit Alarm Thresholds
System Settings	Change Initial Settings

STEP 19

Press Manage Components .

UT Setup for ISO Rate Control

STEP 20

Confirm Number of Sections, Width, Nozzles and Nozzle Spacing.

Press [wrench icon] to edit changes. Proceed to **Step21.**

If No changes are needed, Proceed to **Step 31.**

UT Setup for ISO Rate Control

STEP 21

Press [System Settings] .
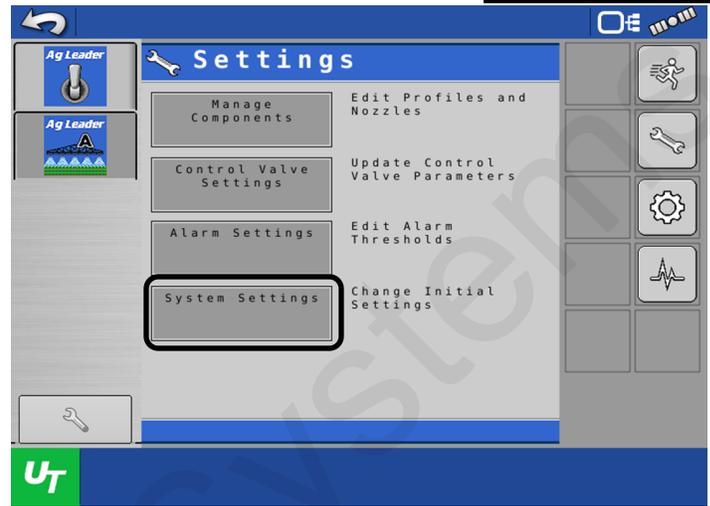
UT Setup for ISO Rate Control

STEP 22

Press [Reconfigure] .
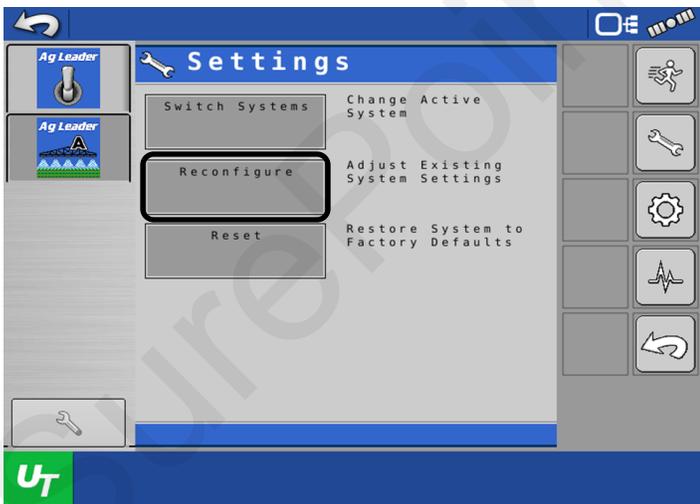
UT Setup for ISO Rate Control
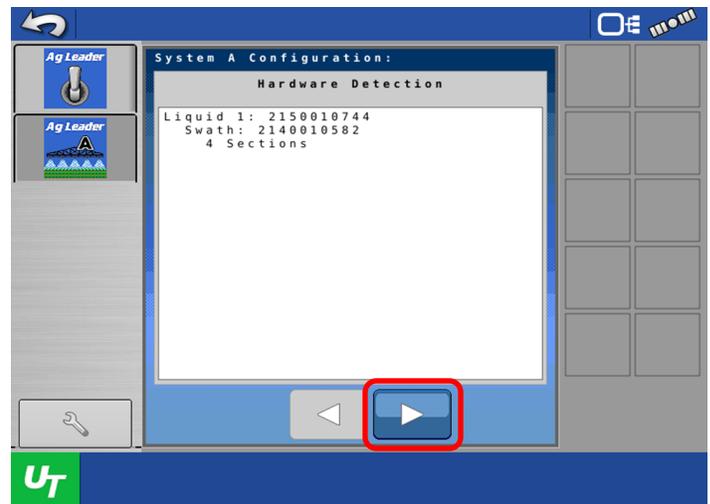
STEP 23

This page shows the Number of Sections currently setup.

Press [▶] to continue.

UT Setup for ISO Rate Control
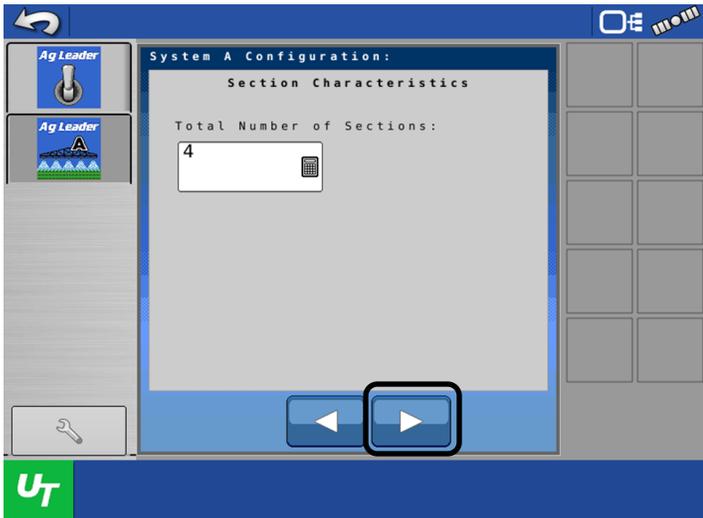
STEP 24

Enter the correct number of sections for your operation.

Press ▶ to continue.

STEP 25

Use the drop-down menu.
Enter correct Signal Type and Section Valve type for your operation.

Press ▶ to continue.

UT Setup for ISO Rate Control
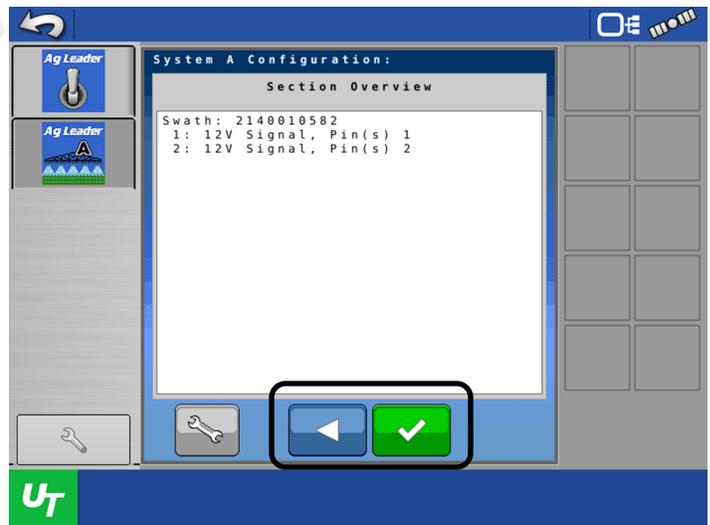
STEP 26

Confirm Section Overview.

If correct press ✔ to continue.

If incorrect press ◀ to go back to previous pages and re-enter correct information.

UT Setup for ISO Rate Control
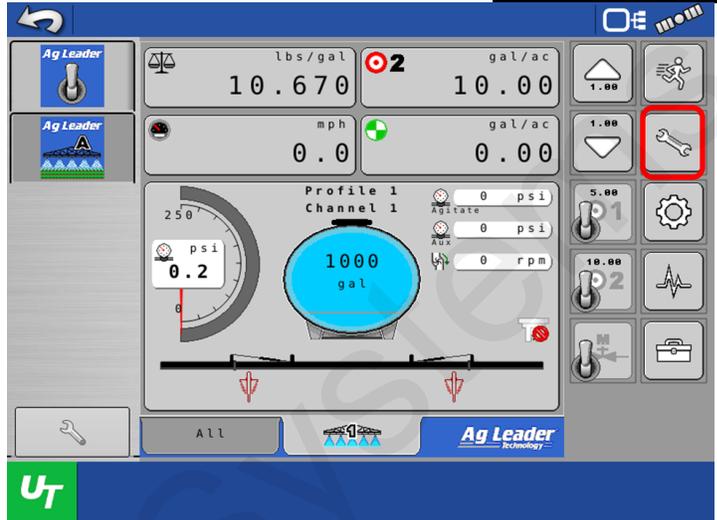
STEP 27

Press [✓] to restart UT so modifications will be updated.

UT Setup for ISO Rate Control

STEP 28

Press [🔧] to continue.

UT Setup for ISO Rate Control

STEP 29

Press

```
Manage
Components
```

.

UT Setup for ISO Rate Control
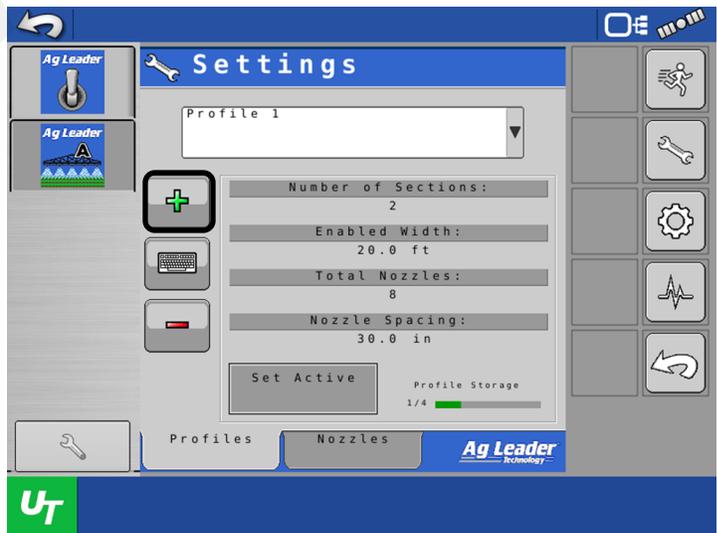
STEP 30

Press [➕] to Edit Profile and continue.

UT Setup for ISO Rate Control
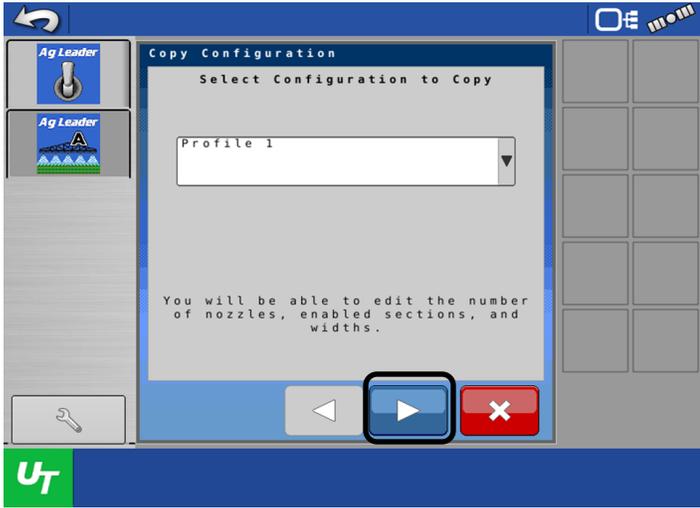
STEP 31

Press to enter controller settings.

UT Setup for ISO Rate Control
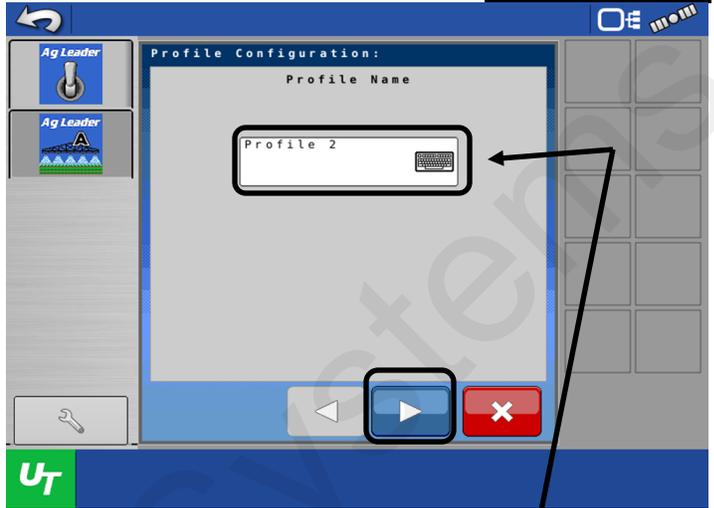
STEP 32

  Press the keyboard and edit
the Profile Name.

Press to continue.

UT Setup for ISO Rate Control

STEP 33

Press to continue.

UT Setup for ISO Rate Control
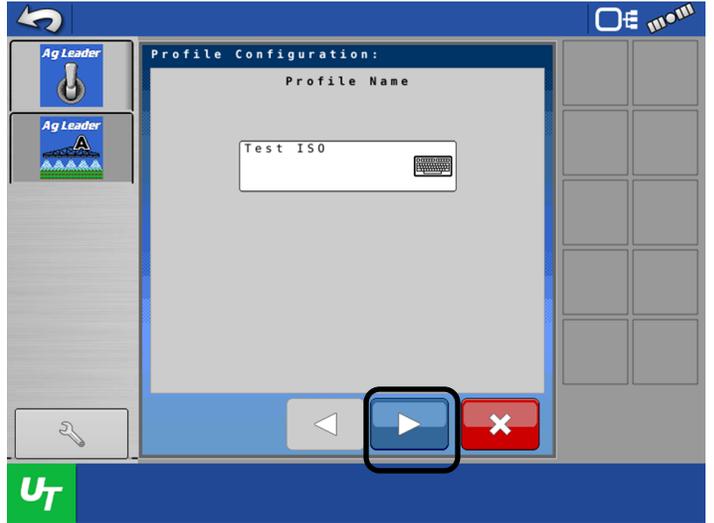
STEP 34

Press to continue.

UT Setup for ISO Rate Control
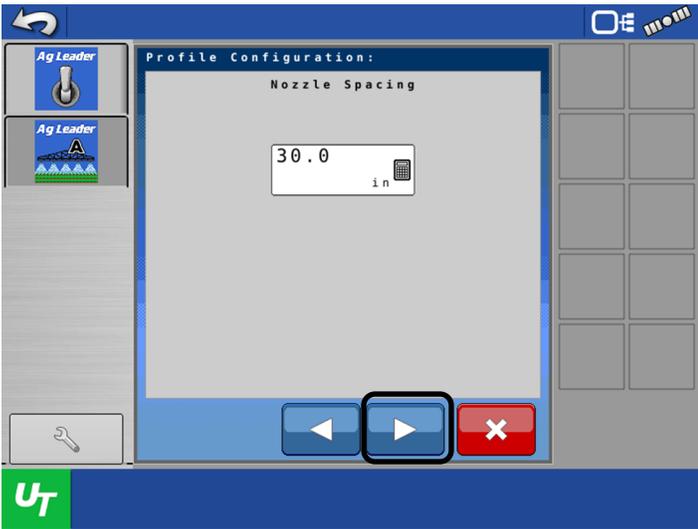
STEP 35

Enter Nozzle/Row Spacing Configuration.

Press [▶] to continue.

UT Setup for ISO Rate Control

STEP 36

Enter number of Nozzles [4 Nozzles] per Section.

Use [▲▼] to toggle between sections.

Press [▶] to continue.

UT Setup for ISO Rate Control
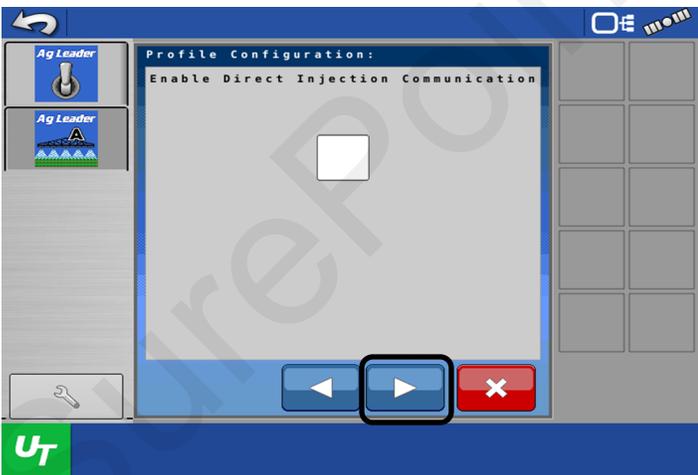
STEP 37

If using Direct Injection, select and setup as needed.
Refer to the AgLeader Operator's manual for further information.

Press [▶] to continue.

UT Setup for ISO Rate Control
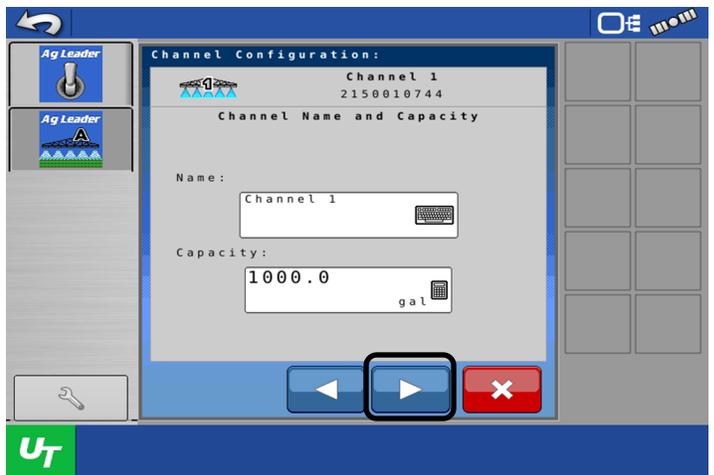
STEP 38

Setup Channel Name and Capacity.
This is the supply Tank that will be used.
Example (Main Tank).

Press [▶] to continue.

UT Setup for ISO Rate Control
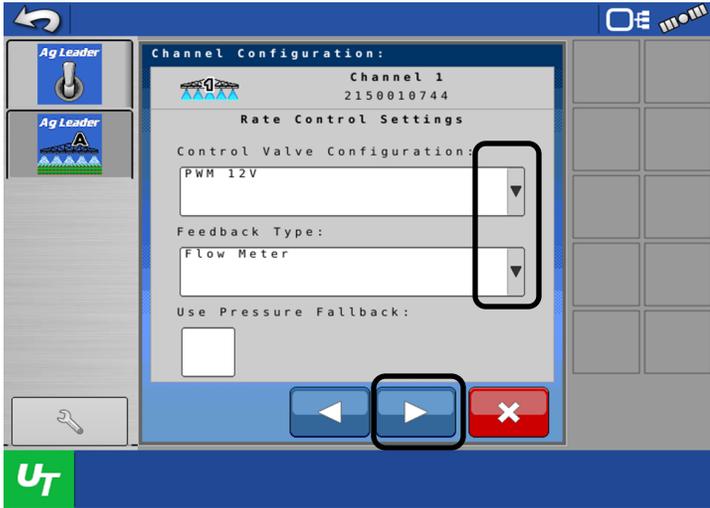
STEP 39

From the drop-down menu, select the correct Control Valve Configuration and Feedback Type for your operation. If using a SurePoint Pump, select PWM 12v. Feedback type will be set to Flow Meter.

Press ▶ to continue.

UT Setup for ISO Rate Control

STEP 40

Valve Behavior:
For SurePoint systems, Aux Valve Behavior will be set to Closed, Control Valve behavior will be set to Closed.
Refer to the AgLeader Operator's Manual for explanation on valve settings.

Press ▶ to continue.

UT Setup for ISO Rate Control

STEP 41

Enter GPS Offsets for Task Controller.
With the use of a _**tape measure**_, get accurate measurements.

Press ▶ to continue.

UT Setup for ISO Rate Control
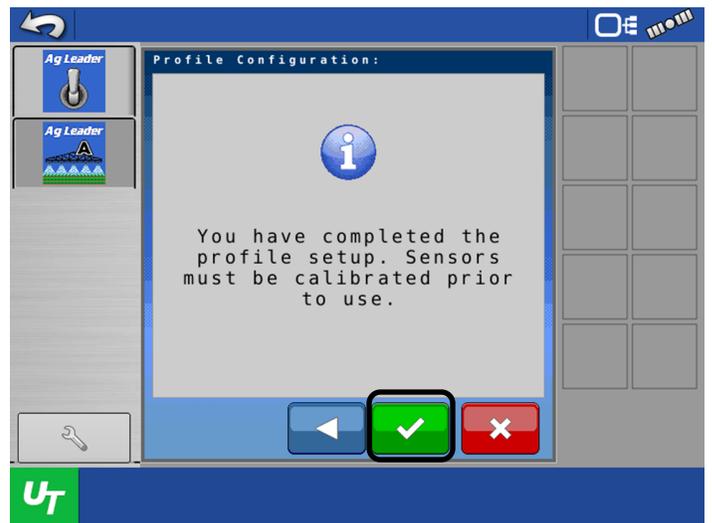
STEP 42

Press ✓ to continue.

UT Setup for ISO Rate Control

STEP 43

The controller will reset.

Press ✅ to continue.

UT Setup for ISO Rate Control
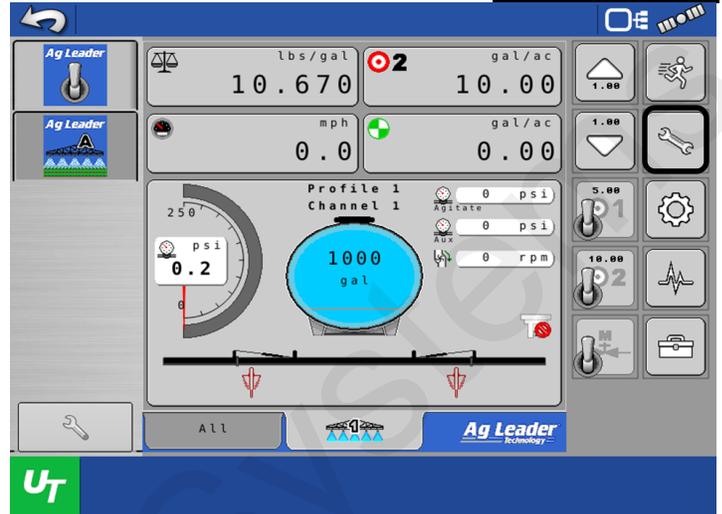
STEP 44

Press 🔧 to continue.

UT Setup for ISO Rate Control

STEP 45

Press Control Valve Settings .
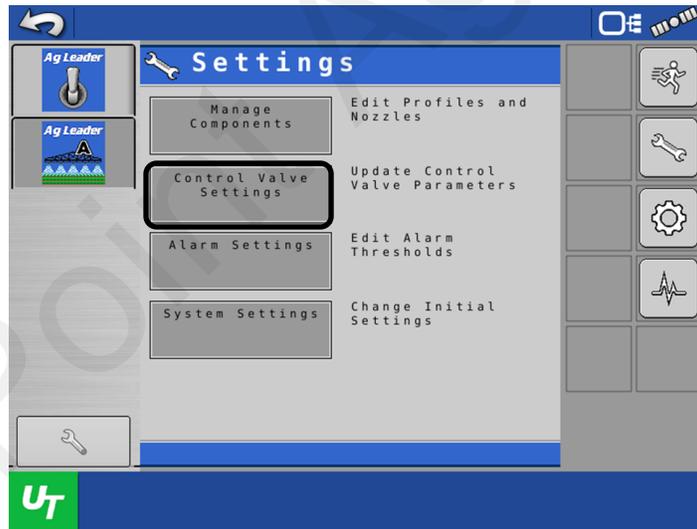
UT Setup for ISO Rate Control
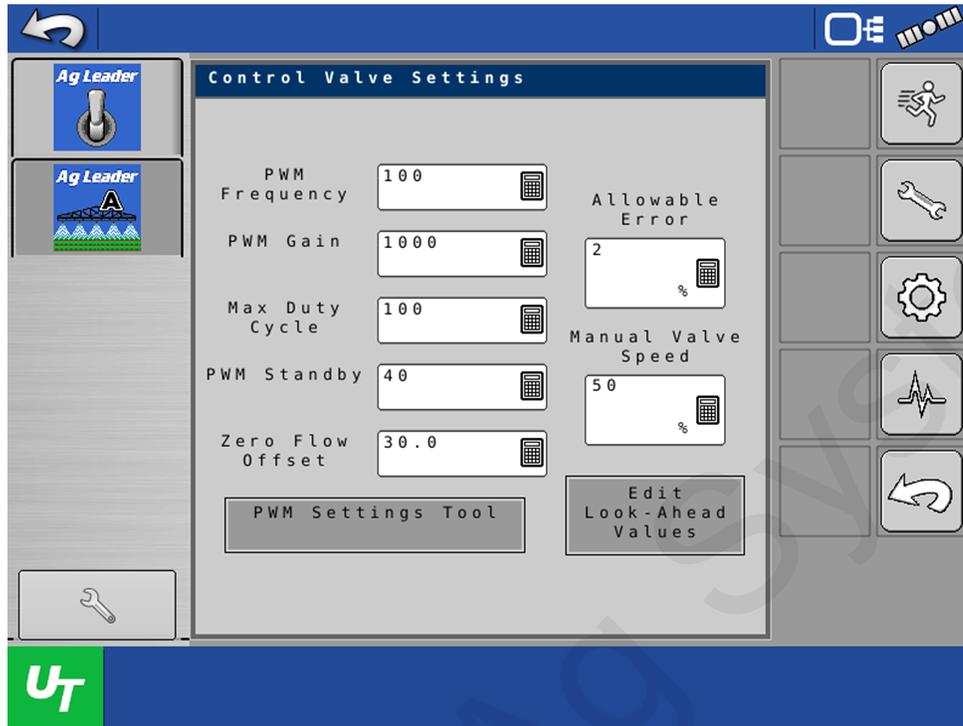
STEP 46

Change Settings as follows:

PWM Frequency	100
PWM Gain	9900
Max Duty Cycle	100
PWM Standby	10
Zero Flow Offset	10

Zero Flow Offset is Low PWM Limit.
Lower this if pump will not go low enough.
Raise this to get to rate quicker on startup.

SurePoint Tower Settings

PWM Frequency	100
PWM Gain	800

Increase PWM Gain if pump is slow to adjust.
Decrease PWM Gain is pump will not lock onto rate going across the field.

Max Duty Cycle	100
PWM Standby	30
Zero Flow Offset	30

Zero Flow Offset is Low PWM Limit.
Lower this if pump will not go low enough.
Raise this to get to rate quicker on startup.

SurePoint PR Series PumpRight Hydraulic Pump Settings

UT Setup for ISO Rate Control

STEP 47

Press ![Edit Look-Ahead Values] to edit.
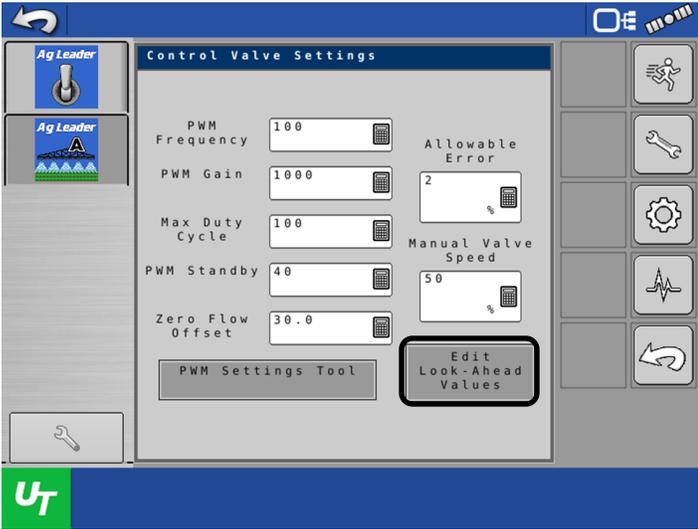
UT Setup for ISO Rate Control

STEP 48

Adjust these settings as required. Refer to the AgLeader Operator's Manual for further information.

Press ![✓] To Continue.

UT Setup for ISO Rate Control

STEP 49

Press ![gear] to continue.

UT Setup for ISO Rate Control
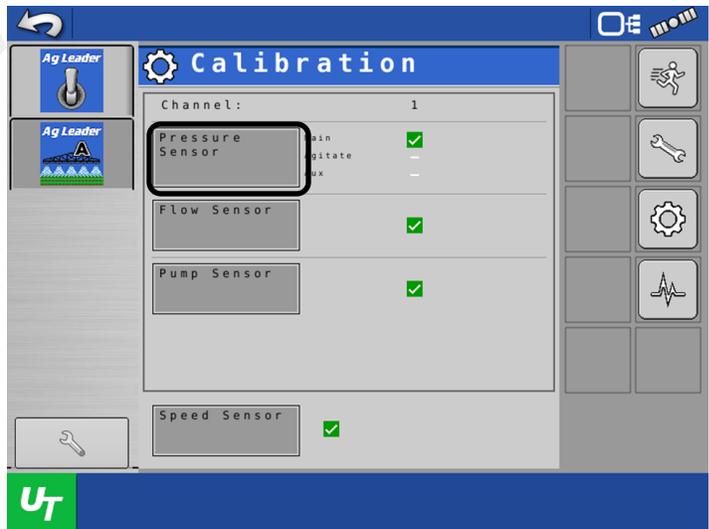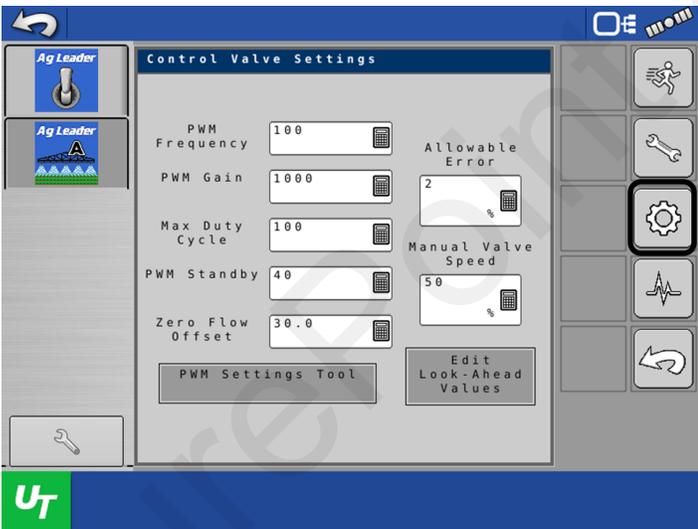
STEP 50

Press ![Pressure Sensor] to calibrate the Pressure Sensor.

UT Setup for ISO Rate Control
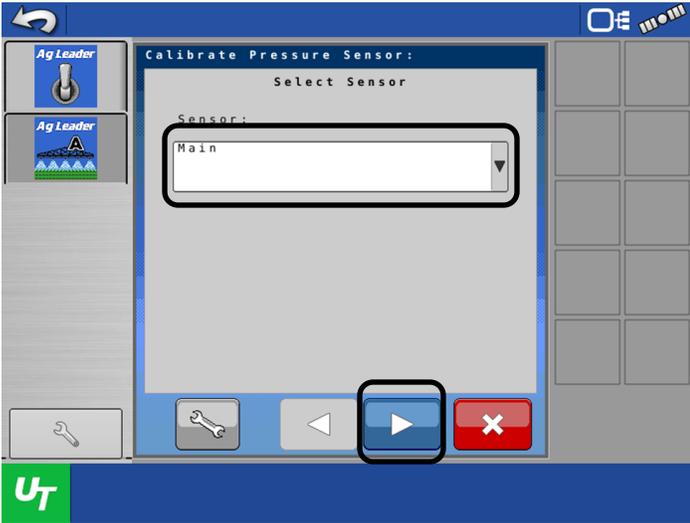
STEP 51

From the drop-down menu, select Main.

Press to continue.

UT Setup for ISO Rate Control
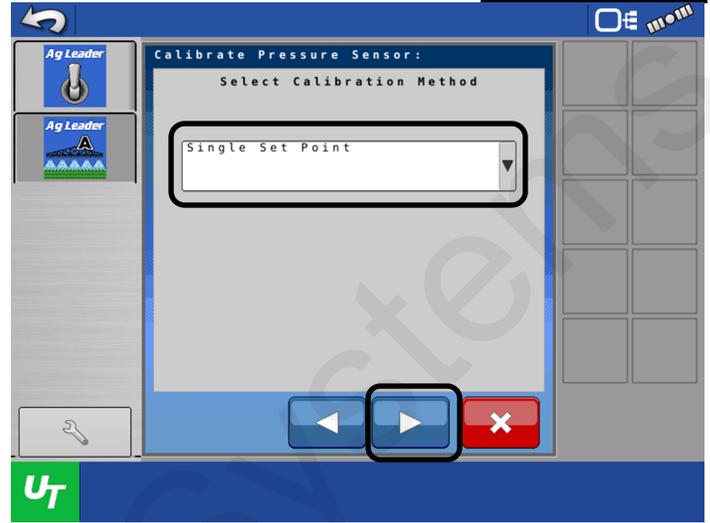
STEP 52

From the drop-down menu, select Single Set Point, if using a SurePoint Pressure Sensor.

Press to continue.

UT Setup for ISO Rate Control
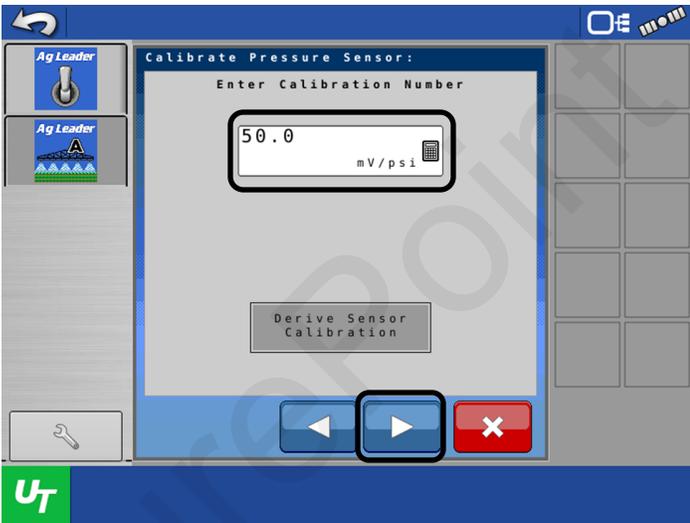
STEP 53

For a SurePoint Pressure Sensor, Enter 50.0 mV/psi as the Calibration Number.

Press to continue.

UT Setup for ISO Rate Control

STEP 54

Ensure there is 0 psi on the system or unplug the Pressure Sensor.

Press .

UT Setup for ISO Rate Control
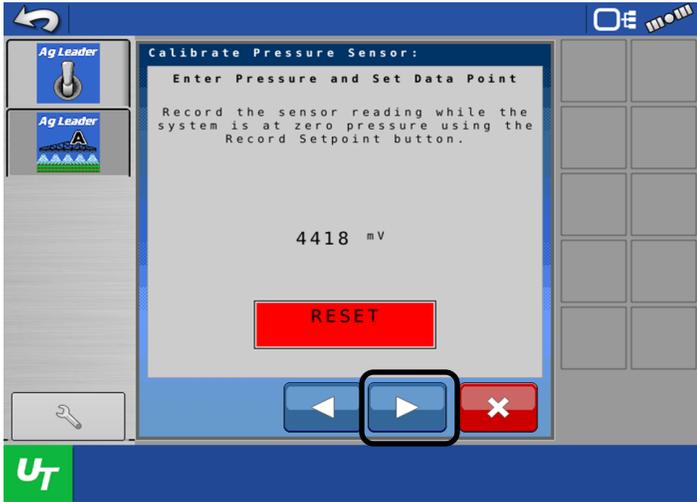
STEP 55

Press [▶] to continue.

UT Setup for ISO Rate Control
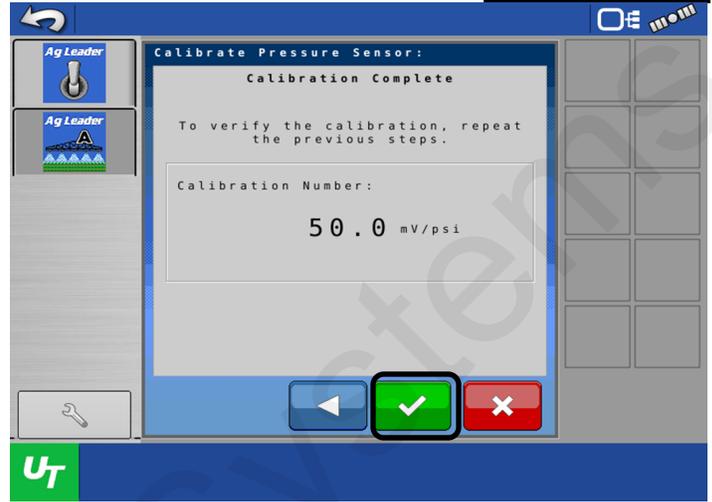
STEP 56

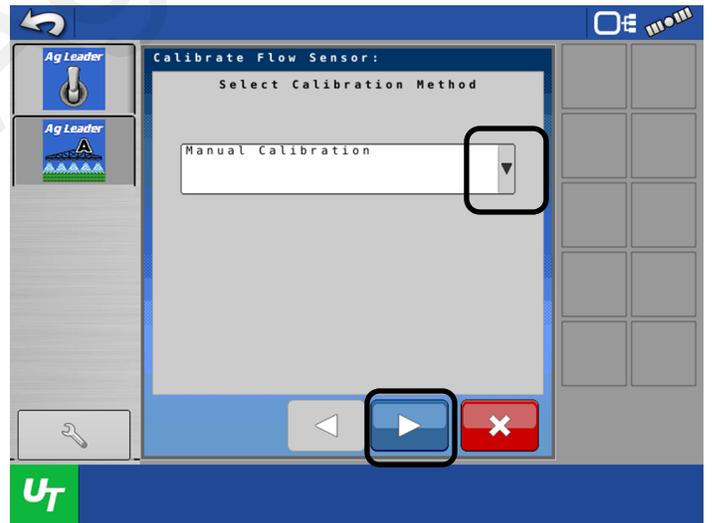Pressure Sensor Calibration is complete.

Press [✓] to continue.

UT Setup for ISO Rate Control

STEP 57

Press Flow Sensor.
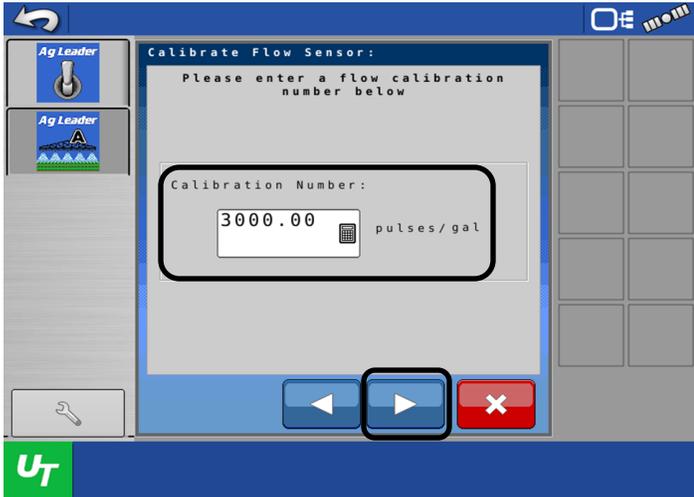
UT Setup for ISO Rate Control

STEP 58

From the drop-down menu, select Manual Calibration.

Press [▶] to continue.

UT Setup for ISO Rate Control

STEP 59

Enter the Calibration Number that is located on the side of the Flow Meter.

Press [▶] to continue.

STEP 60

Press [◀] to go back and edit.
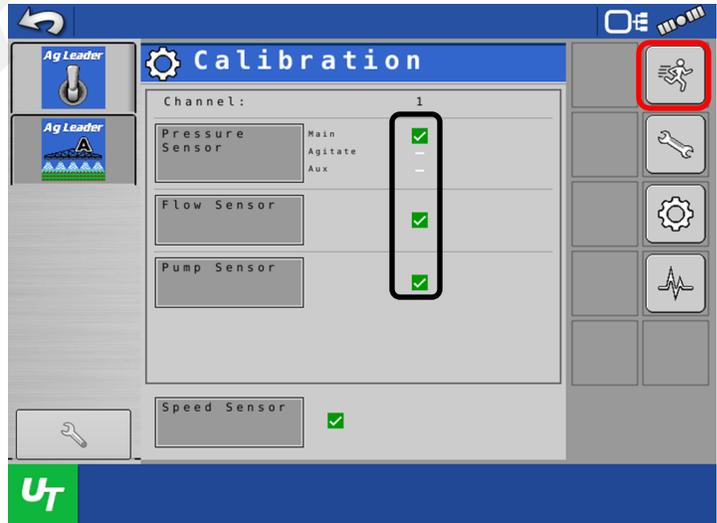***OR:***

Press [✓] to continue.

UT Setup for ISO Rate Control

STEP 61

If the pump uses a Pump Speed Sensor, enter the Calibration Number for the sensor.
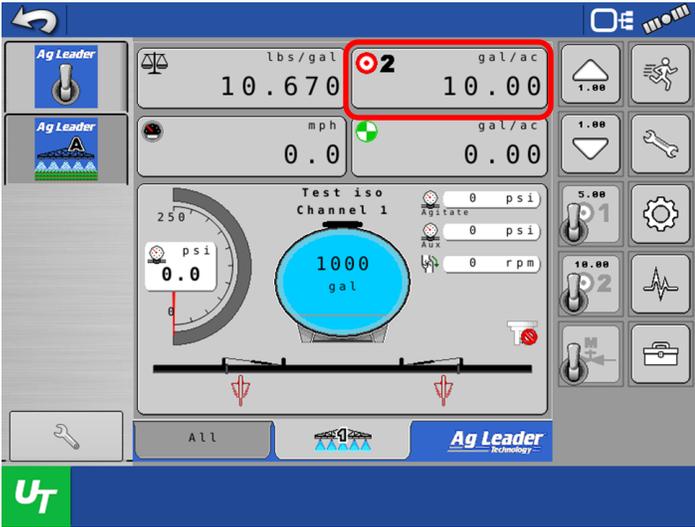
Press [✓] to continue.

STEP 62

A [✓] indicates all calibrations have been performed.

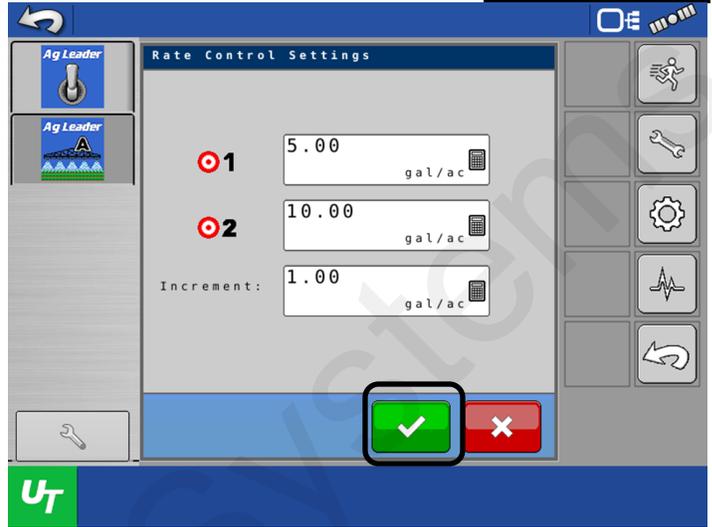Press [🏃] to get to the Run Screen.

UT Setup for ISO Rate Control

STEP 63

Press [rate box] to set Target Rates.
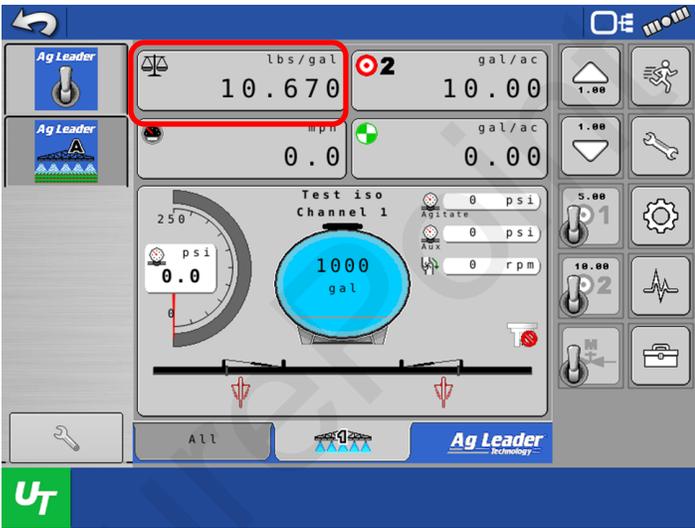
UT Setup for ISO Rate Control

STEP 64

Enter Target Rates for your application needs.
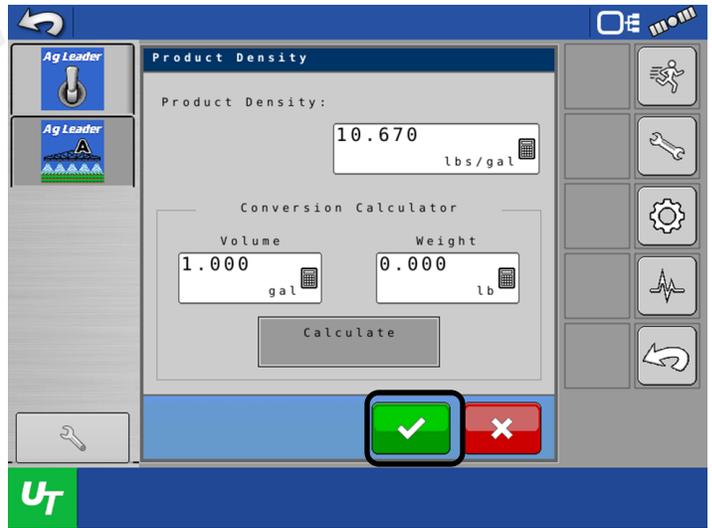Set Increment for +/- GPA for manual increase.

Press [✓] to continue.

UT Setup for ISO Rate Control

STEP 65

Select [density box] to edit Chemical
Density.

UT Setup for ISO Rate Control

STEP 66

Enter information for your operation as needed.,

Press [✓] to continue.

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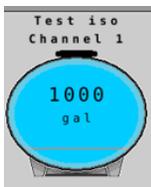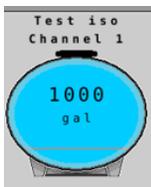
Revised 03/23/2024

UT Setup for ISO Rate Control
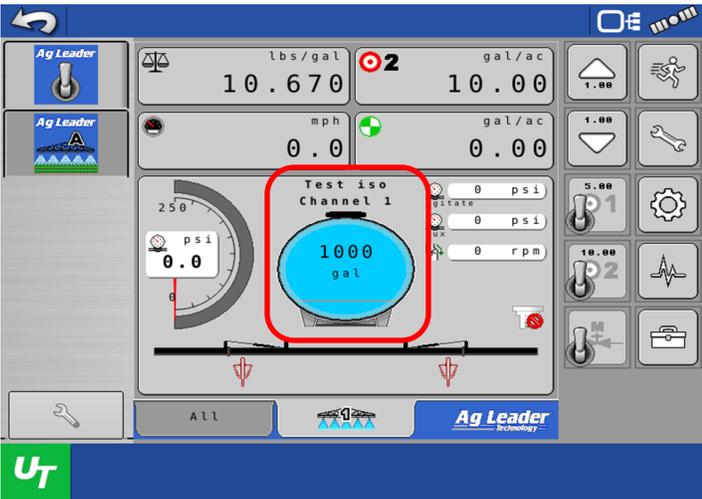
STEP 67

Tank Level information.

Press [tank icon] to adjust tank level.

UT Setup for ISO Rate Con-
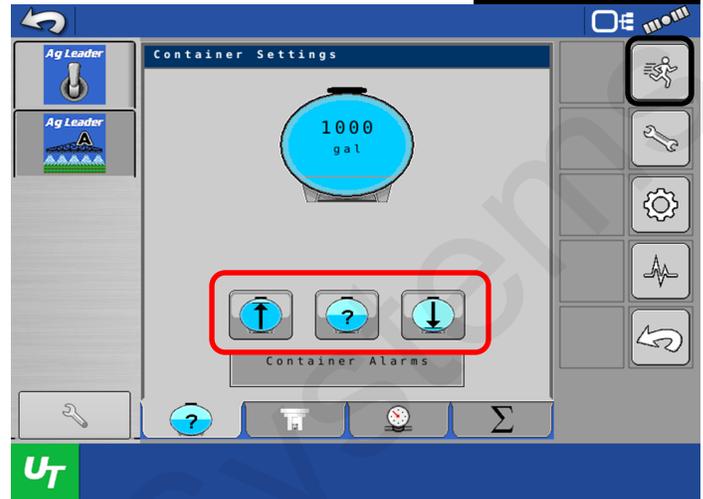
STEP 68

Use these settings [icons] to adjust your tank level. Refer to the AgLeader Operator's Manual for further information.

Press [runner icon] to get to the Home Run Screen.

UT Setup for ISO Rate Control
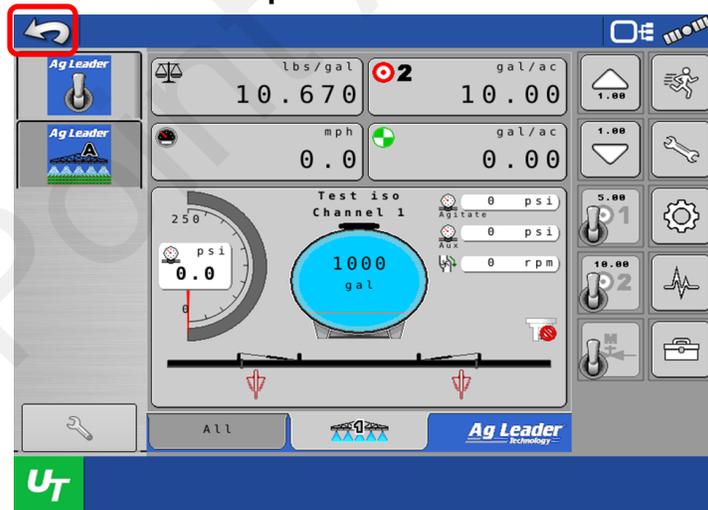
STEP 69

AgLeader Auxiliary Switch configuration will need to be setup per the Switch configuration that is required. Refer to AgLeader Auxiliary Switch operation manual for your model of switch. Proceed to Application Setup.

Press [back arrow icon] to get back to the Main AgLeader Screen.

Configuration Setup
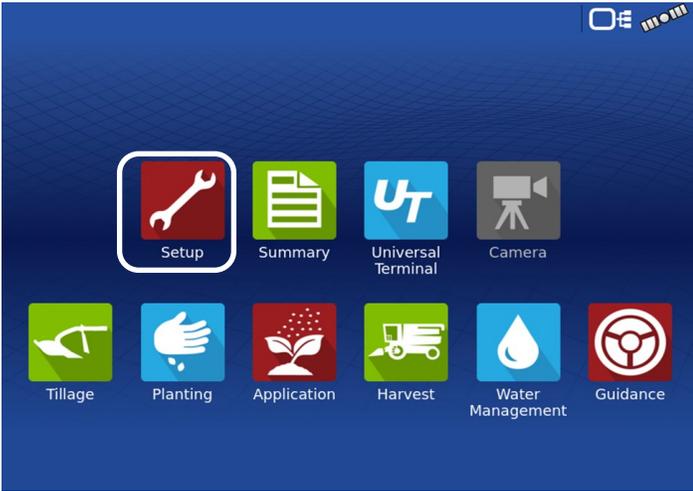
STEP 70

Press Setup to begin .

Configuration Setup
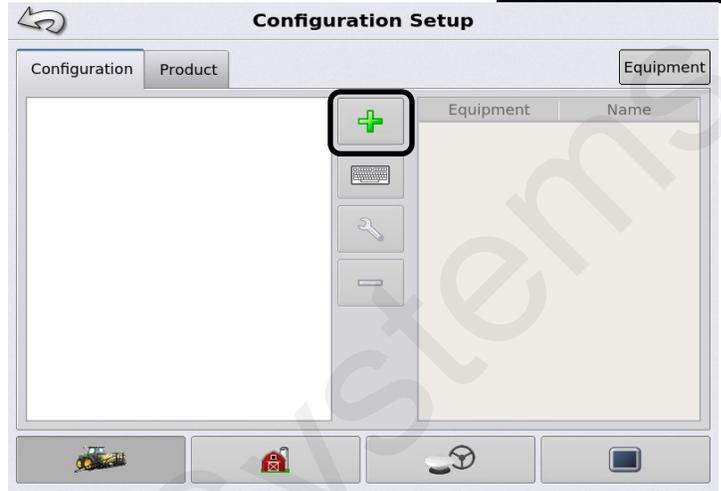
STEP 71

This page should be the default screen.

Press the Symbol.

Configuration Setup

STEP 72

Select Application .

Configuration Setup

STEP 73

If using an existing Vehicle, select it from the drop-down menu.

If creating a new vehicle, press .

Configuration Setup

Vehicle Wizard: Make and Model

Vehicle Type

Front wheel steer tractor ▼

Make

John Deere ▼

Model

8130 ▼

◄ ► ✕

STEP 74

Use the drop-down menu to fill in the correct information for the Vehicle that you will be using.

When completed, press ► to continue.

Configuration Setup

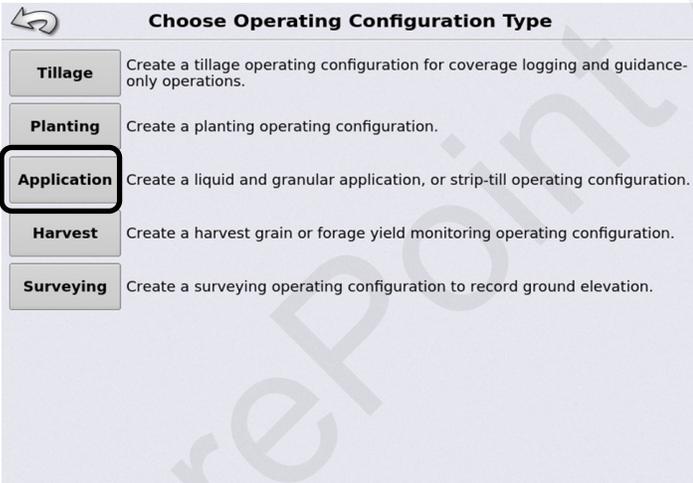**Vehicle Wizard: Attachment Points**

Enter Distance from Rear Axle to the Following Locations

☑ Rear Drawbar | 24 in

☐ Rear Lift Arms | 0 in

☐ Front Lift Arms | 0 in

◄ ► ✕

STEP 75

Attachment Points: Select the appropriate attachment point and enter the distance from the axle to your location.

Press ► to continue.

Configuration Setup

Vehicle Wizard: Antenna Offsets

27.559 in Fore | 0 in Right | 127.953 in High

◄ ► ✕

STEP 76

Antenna Offsets: Confirm antenna location and measurements for your vehicle.

Press ► to continue.

Configuration Setup

Vehicle Wizard: Vehicle Name

Enter Vehicle Name

John Deere 8130

◄ ✔ ✕

STEP 77

Vehicle Name: This should be the vehicle that was previously setup.

Press ✔ to continue.

Configuration Setup

Operating Configuration: Vehicle

Select Vehicle

John Deere 8130

STEP 78

Vehicle: Confirmation of vehicle selection.

Press ▶ to continue.

Configuration Setup

Operating Configuration: Implement

Select Implement

Select Implement

STEP 79

Select Implement: Use the drop-down menu to select an existing Implement.

Press ✛ to select a new Implement.

Press ▶ to continue.

Configuration Setup

Implement Wizard: Make and Model

Enter Implement Information

Make

Model

STEP 80

Make and Model: Select Make.

Configuration Setup

Implement Make

Deere

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

q w e r t y u i o p

a s d f g h j k l

z x c v b n m , . -

Symbols

STEP 81

Enter Make of your Implement.

Press ✓ to continue.

Configuration Setup

Implement Wizard: Make and Model

Enter Implement Information

Make

Deere
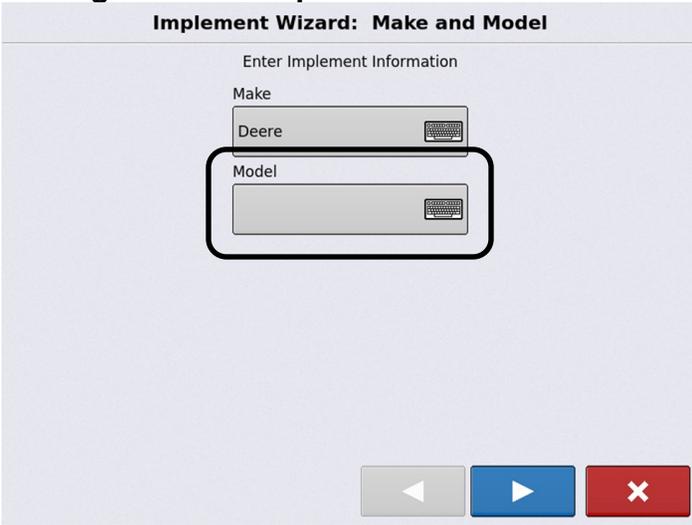
Model

STEP 82

Make and Model: Select Model.

Configuration Setup

Implement Model

1770nt

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

q w e r t y u i o p

a s d f g h j k l

z x c v b n m , . -

Symbols
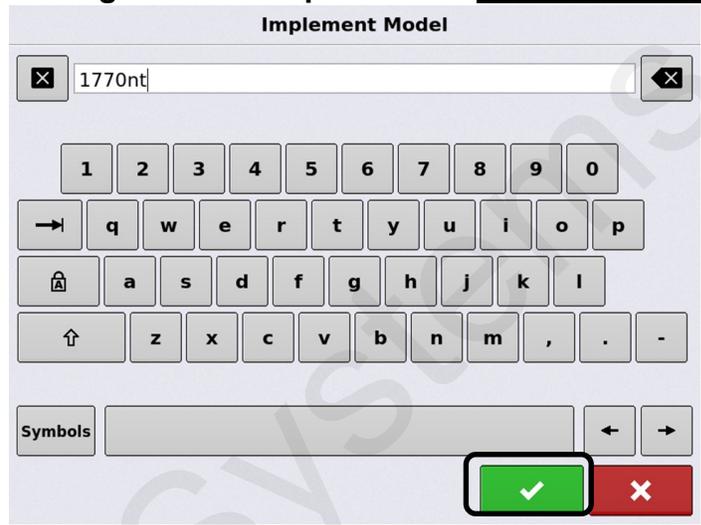
STEP 83

Implement Model: Enter the Model of your Implement.

Press ✔ to continue.

Configuration Setup

Implement Wizard: Make and Model

Enter Implement Information

Make

Deere

Model

1770nt

STEP 84

Make and Model: This confirms the Implement settings.

Press ► to continue.

Configuration Setup

Implement Wizard: Attachment Type

Implement Attachment Type

Rear Drawbar ▼

STEP 85

Attachment Type: Use the drop-down menu to select the Implement Attachment Type.

Press ► to continue.

Configuration Setup

Implement Wizard: Axle Offsets

Enter Hitch to Implement Axle Distance

10 ft

STEP 86

Axle Offsets: Enter correct measurements.

Press ▶ to continue.
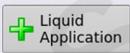
Configuration Setup

Implement Wizard: Application Channels

- Liquid Application
- Direct Injection
- Granular Application
- Edit Container
- Remove
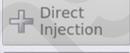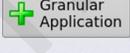
STEP 87

Application Channels.

Select Liquid Application to proceed.

Configuration Setup

Equipment Setup Wizard: Rate Controller

Select Application Rate Controller

No Controller

STEP 88

Rate Controller.

Press ✚ to continue.

Configuration Setup

Controller Setup Wizard: Device

Select Controller or Flow Meter

Device

ISOBUS

STEP 89

From the Device drop-down menu, select ISOBUS.

Press ▶ to continue.

Configuration Setup

Controller Setup Wizard: Make and Model

Select Controller Make and Model

Make

Ag Leader ▼

Model

ISO Liquid Control ▼

☑ Supports Rate Control

◄ ► ✕

STEP 90

From the drop-down menu, select **Make:** AgLeader, **Model:** ISO Liquid Control, and check Supports Rate Control.

Press ► to continue.

Configuration Setup

Controller Setup Wizard: Controller Name

Controller Name

ISO Liquid ⌨

◄ ✔ ✕

STEP 91

This confirms your controller selection. Change the name of the controller, if needed.

Press ✔ to continue.

Configuration Setup

Equipment Setup Wizard: Application Channels

Number of Application Channels

1 ▲ ▼

◄ ► ✕

STEP 92

Set to 1 for only one ISO Controller.

Press ► to continue.

Configuration Setup

Equipment Setup Wizard: Container

Container Name	Capacity	Units
Main Tank ⌨	0 ⌨	gallons ▼

◄ ► ✕

STEP 93

Container: Name your chemical container, enter Capacity and Units.
This should match settings that were previously setup in the UT setup.

Configuration Setup

Equipment Setup Wizard: Container

Container Name | Capacity | Units
Main Tank | 1000 | gallons

STEP 94

Press ▶ to continue.

Configuration Setup

Number of Boom Sections

Original Value: 1

[entered value: 2]

7 8 9
4 5 6
1 2 3
0 . +/-

STEP 95

Number of Boom Section: Enter the number of boom sections being used. This should match settings that were previously set in the UT Setup.

Press ✔ to continue.

Configuration Setup

Equipment Setup Wizard: Sections

Enter Number of Boom Section Valves

— 2 +

STEP 96

Sections: Confirm Number of Boom Section Valves.

Press ▶ to continue.

Configuration Setup

Equipment Setup Wizard: Swath Width

Enter Full Swath Width

20 ft

TIP: For tillage implements, enter the working swath width (actual implement width minus the typical overlap). This results in a more accurate area calculation.

STEP 97

Enter Full Swath Width for your implement.

Press ▶ to continue.

Configuration Setup

Equipment Setup Wizard: Section Configuration

Enter Boom Section Widths from Left to Right

Section	Swath Width (ft)
1	10.0000
2	10.0000

TIP: The implement is divided into equal section sizes by default. To modify the sections, press the keypad button for each section that needs to be changed.

◄ ► ✕

STEP 98

Confirm Swath Width per Section, edit, as needed.

Press ► to continue.

Configuration Setup

Offset

Original Value:
0 ft

☒   12   ⌫

7	8	9
4	5	6
1	2	3
0	.	+/-

✔ ✕

STEP 100

Press ✔ to continue.

Configuration Setup

Equipment Setup Wizard: Application Point Offset

Enter Distance from Hitch to Application Point
(front to back)

0 ft ▦

◄ ✔ ✕

STEP 99

Enter Hitch to Application Point
Use a tape measure to obtain the correct measurement.

Press ✔ to continue.

Configuration Setup

Implement Wizard: Application Channels

Device	AGL Sprayer(2)
Application	Liquid
Swath Width (ft)	20
Number of Sections	2
Capacity (gallons)	20

➕ Liquid Application
➕ Direct Injection
➕ Granular Application
Edit Container
➖ Remove

◄ ► ✕

STEP 101

Confirmation page.
Press ► to continue.

SurePoint
Ag Systems
396-6562Y1 AgLeader InCommand 800
Sentinel Setup With Task Control
© 2010-2024 SurePoint Ag Systems Inc.
74
Revised 03/23/2024

Configuration Setup

Implement Wizard: Hitch Point Configuration

Enter Hitch Point Information

☐ Implement Provides a Rear Hitch

Enter Left or Right Distance

0 ft 🔢 | to the left ▼

Enter Forward or Backward Distance

0 ft 🔢

Enter the left or right offset and the forward or backward distance from the point the implement connects to a vehicle to the implement's hitch point.

◄ ▶ ✕

STEP 102

Enter Hitch Point Information, as needed.

Press ▶ to continue.

Configuration Setup

Implement Wizard: Implement Name

Enter Implement Name

Deere 1770nt ⌨

◄ ✓ ✕

STEP 103

Confirm Implement name.

Press ✓ to continue.

Configuration Setup

Operating Configuration: Implement

Select Implement

Deere 1770nt ▼ ➕

Equipment	Name
Implement	Deere 1770nt
Device	AGL Sprayer
Container	Main Tank

◄ ▶ ✕

STEP 104

Confirm settings.

Press ▶ to continue.

Configuration Setup

Operating Configuration: Speed Source

Primary Source

Display GPS ▼

Backup Source

Auxiliary Device ▼

Auxiliary Device Channel

Radar ▼

Auxiliary Channel Calibration

2000 🔢 | Calibrate Distance

Pulses / 100 ft

◄ ▶ ✕

STEP 105

Confirm Speed Source.

Press ▶ to continue.

Configuration Setup

Operating Configuration: Configuration Name

Suggested Name for Configuration

John Deere 8130, Deere 1770nt

STEP 106

Confirm Configuration Name, edit if needed.

Press ✔ to continue.

Configuration Setup

Configuration Setup

Vehicle
John Deere 8130

Vehicle Offsets

Speed Input

Auxiliary Input

Automatic Swath Control

Equipment Settings

Implement: Deere 1770nt
Full Swath: 20 ft
Sections: 2

Controller: AGL Sprayer
Device: ISOBUS
Make: Ag Leader Technology, Inc.
Structure Label: AGL1977

Offsets

STEP 107

Check Vehicle Offsets, and Speed Input.

Select Automatic Swath Control .

Configuration Setup

Automatic Swath Control

Application

Outside Boundary Option
○ Keep Unchanged
● Turn Section Off

Look-Ahead Settings

Coverage Option
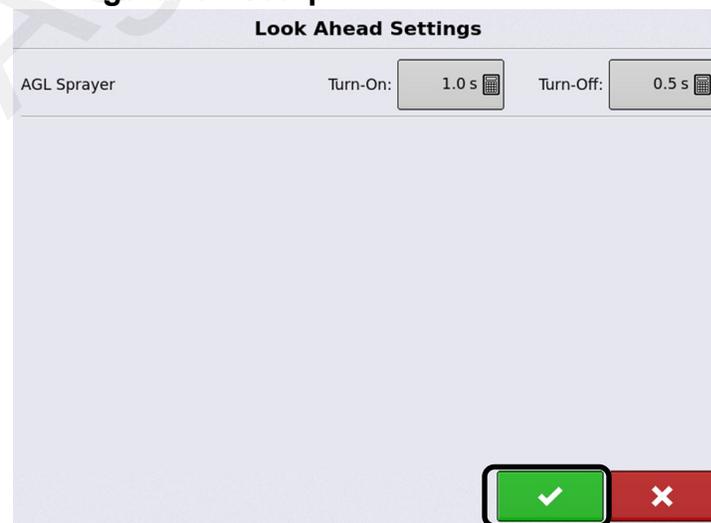● Minimize Skip
○ Minimize Overlap
○ User Defined   100 %

STEP 108

Select Outside Boundary Option for your operational needs.
Select Coverage Options for your operational needs.

Select Look-Ahead Settings .

Configuration Setup

Look Ahead Settings

AGL Sprayer   Turn-On: 1.0 s   Turn-Off: 0.5 s

STEP 109

Set Turn-On and Turn-Off times, as needed.

Press ✔ to continue.

Configuration Setup

Configuration Setup

Vehicle
John Deere 8130

Vehicle Offsets

1

Implement: Deere 1770nt
Full Swath: 20 ft
Sections: 2

Controller: AGL Sprayer
Device: ISOBUS
Make: Ag Leader Technology, Inc.
Structure Label: AGL1977

Speed Input

Auxiliary Input

Automatic Swath Control

Equipment Settings

Offsets

✓

STEP 110

Select [Equipment Settings] .

Configuration Setup

Equipment Configuration Settings

Rate Outside of Field
| Zero ▼ |

☑ Rate Display Smoothing

Rate Change
Look-Ahead
▲
0 sec
▼

Implement Switch Polarity
| None ▼ |

✓   ✗

STEP 111

Refer to the operator's manual for further information on these settings.

Press [✓] to continue.

Configuration Setup

Configuration Setup

⤺

| Configuration | Product | | Equipment |

Application

John Deere 8130, Deere 1770nt

➕
⌨
🔧
➖

Equipment	Name
Vehicle	John Deere 8130
Implement	Deere 1770nt
— Device	AGL Sprayer
— Container	Main Tank

STEP 112

Build or select a product.

Select [Product] to continue.

Configuration Setup

Configuration Setup

⤺

| Configuration | Product | | Equipment |

Application

🔵 28% UAN
🔵 30% UAN
🔵 32% UAN
🔵 Amm. Polyphos
🔵 NH3

➕
⌨
🔧
➖

Manufacturer:
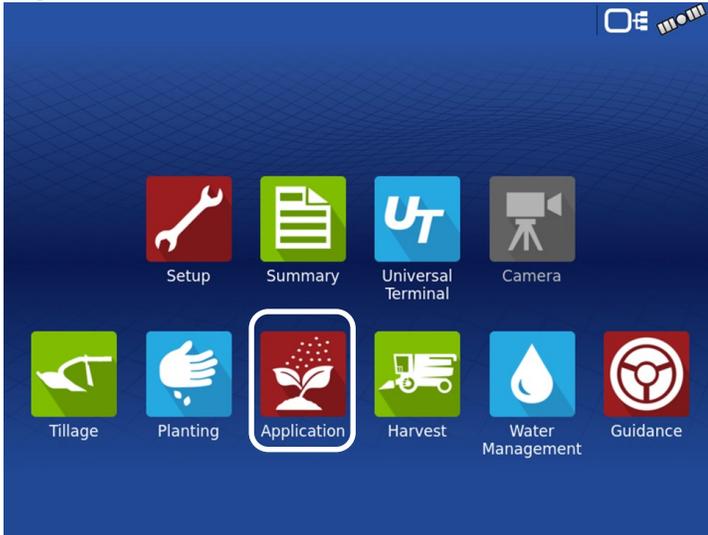Type: Fertilizer
Units: gallons
Restricted Use: No
EPA Number:

STEP 113

Choose an existing product or select the ➕ to create a new product.

Select ⤺ to continue.

Operation

STEP 114

Setup and UT have been completed. It is time to start applying.

Press **Application** to begin.

Operation

STEP 115

This page will confirm the application Vehicle, Implement, Controller and Container that will be used for the application method.

Press [wrench] if changes need to be made.

Press [▶] to continue.

Operation

STEP 116

Confirm all information is correct.

Press the [+] to edit, if all information is correct.
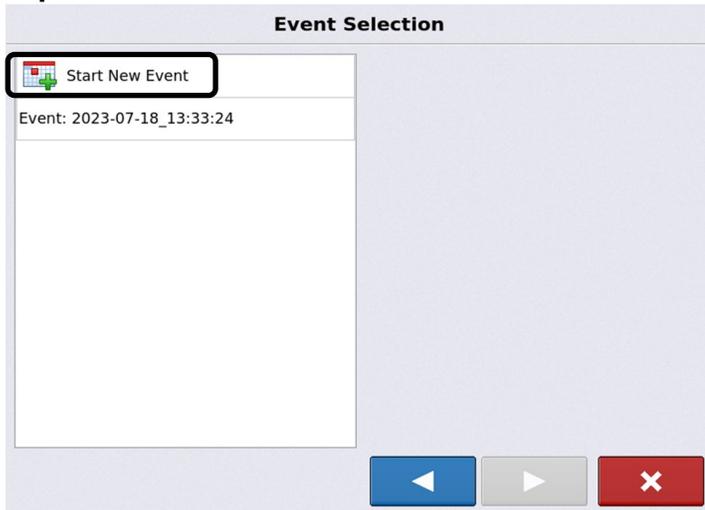
Press [▶] to continue.

Operation

STEP 117

Ensure the correct Product and Boom Section

are correct. Use the drop-down menu or [+] to make changes.

Press [▶] to continue.

Operation

Event Selection

Start New Event

Event: 2023-07-18_13:33:24

◀ ▶ ✕

Press [Start New Event] to begin application.

Operation

Event Selection

Start New Event

28% UAN ▼

Event: 2023-07-18_13:33:24

◀ ▶ ✕

Press ▶ to continue.

Operation

Options

Region

➕ <1> ▼ ⌨

Controlling Product

28% UAN (gal) ▼

◀ ✓ ✕

Confirm that this information is correct.

Press ✓ to continue.

Operation

0.00 ac 0.0 mph

28% UAN   gal/ac
🎯   10.00
⚤   0.00

90 120 150
60   180
30   210
    0
PSI 240
No Nozzle

🔘 Prime

Agitation: 0 PSI
Auxiliary: 0 PSI
Pump Speed: 0 rpm

📄 🔀 Uᴛ
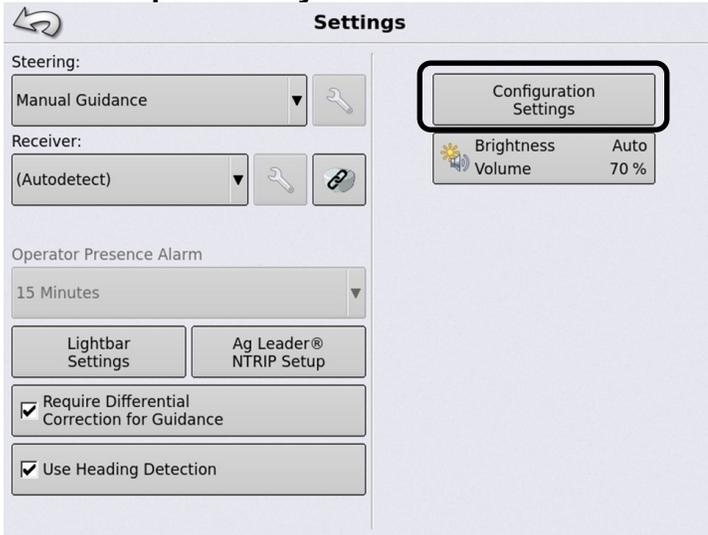
Turn on Master Switch, Select Rate, Turn on Section Control 🔺 and begin applying.
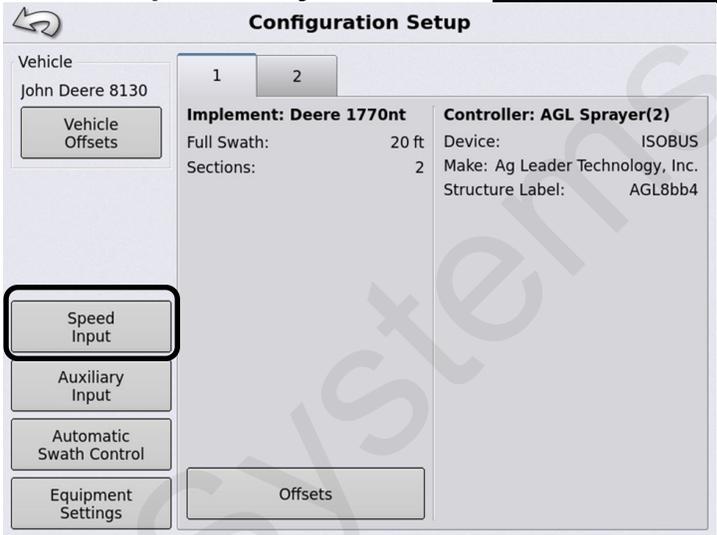If a manual speed is needed for testing, press ☰ and select **Settings.**

Manual Speed Entry

Settings

Steering:
| Manual Guidance | ▼ | 🔧 |

Receiver:
| (Autodetect) | ▼ | 🔧 | 🔗 |

Operator Presence Alarm
| 15 Minutes | ▼ |

| Lightbar Settings | Ag Leader® NTRIP Setup |

☑ Require Differential Correction for Guidance

☑ Use Heading Detection

| Configuration Settings |

🌞 Brightness — Auto
🔊 Volume — 70 %

STEP 122

Select [Configuration Settings] .

Manual Speed Entry

Configuration Setup

Vehicle
John Deere 8130

| 1 | 2 |

| Vehicle Offsets |

Implement: Deere 1770nt
Full Swath: 20 ft
Sections: 2

Controller: AGL Sprayer(2)
Device: ISOBUS
Make: Ag Leader Technology, Inc.
Structure Label: AGL8bb4

| Speed Input |

| Auxiliary Input |

| Automatic Swath Control |

| Equipment Settings |

| Offsets |

STEP 123

Configuration Setup.

Select [Speed Input] .

Manual Speed Entry

Speed Input

Primary Source
| Display GPS | ▼ |

Backup Source
| Auxiliary Device | ▼ |

Auxiliary Device Channel
| Radar | ▼ |

Auxiliary Channel Calibration
| 2000 🖩 | Calibrate Distance |
Pulses / 100 ft

| ✓ | ✗ |

STEP 124

Select [Display GPS ▼] use the drop-down menu.

Manual Speed Entry

Speed Input

Primary Source
| Manual Speed | ▼ |
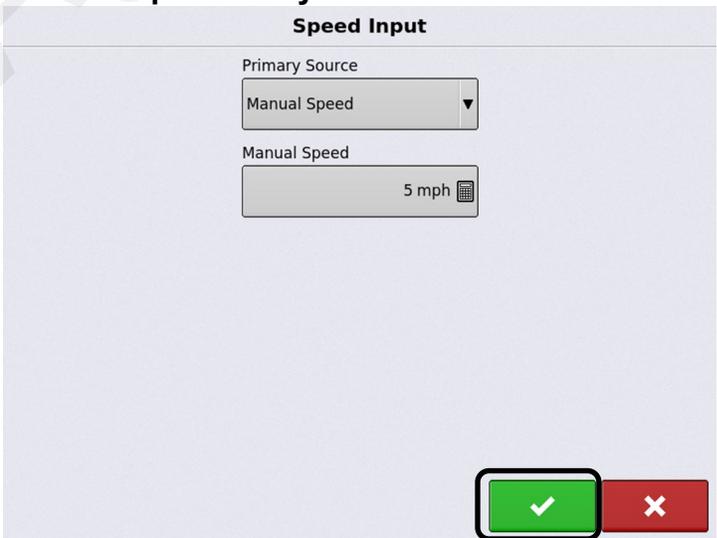
Manual Speed
| 5 mph 🖩 |

| ✓ | ✗ |

STEP 125

Speed Input:
Select Manual Speed and enter a Manual Speed MPH.

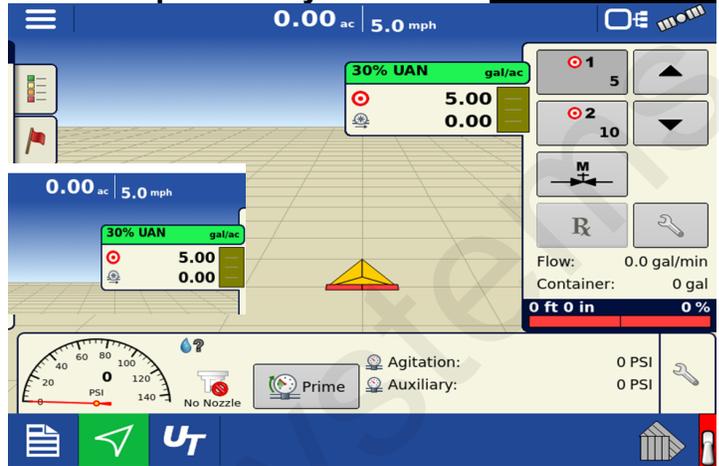Press [✓] to continue.

Manual Speed Entry

STEP 126

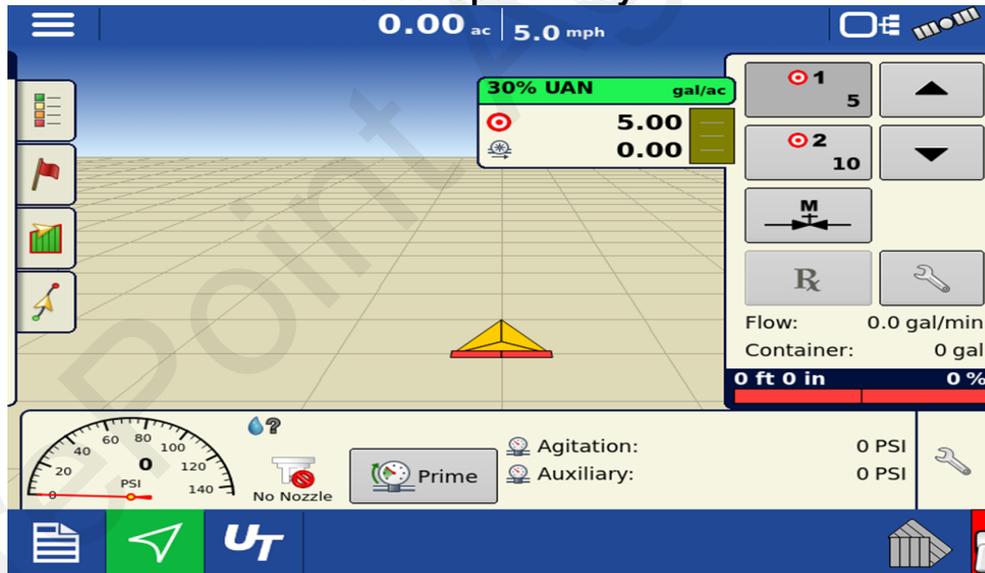Select to return to Application Screen.

Manual Speed Entry

STEP 127

There is now a test speed of 5 mph. We can effectively test the system while being stationary. Refer to the operator's manual or contact an AgLeader dealer for additional information.

Manual Speed Entry

STEP 128

Go back to Settings < Configuration Settings < Speed Input < Primary Source

Change Primary Source setting from Manual Speed to Display GPS for normal operation.