



KIBBLE
EQUIPMENT

READY TO SPRAY GUIDE

Gen4 Monitors



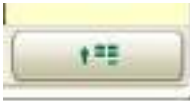
JOHN DEERE

Contents

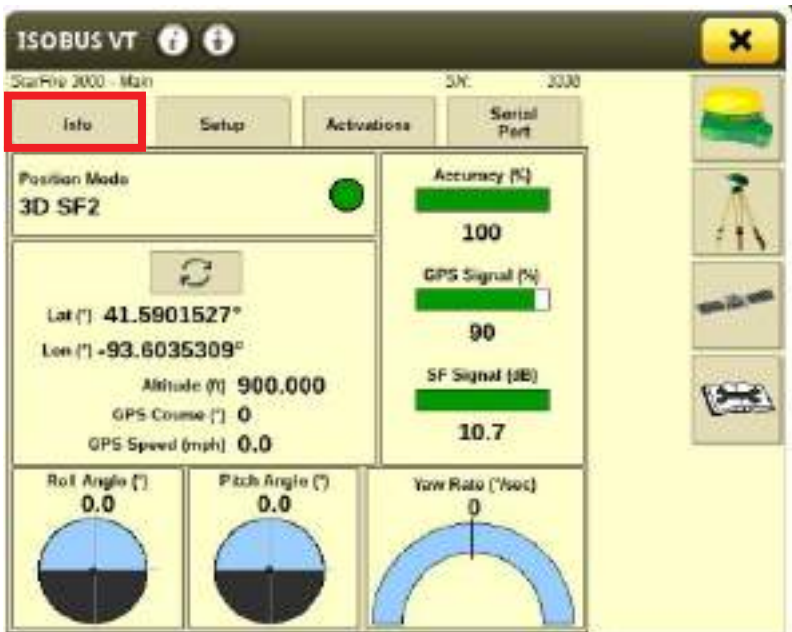
<u>GPS Receiver Setup</u>	<u>4</u>
<u>GPS Receiver Setup</u>	<u>5</u>
<u>Machine Offsets</u>	<u>6</u>
<u>Importing Data</u>	<u>7</u>
<u>Work Setup</u>	<u>8</u>
<u>Work Setup</u>	<u>9</u>
<u>Machine Profile</u>	<u>10</u>
<u>Machine Profile</u>	<u>11</u>
<u>Work Summary</u>	<u>12</u>
<u>Tank Mix</u>	<u>13</u>
<u>Tank Mix</u>	<u>14</u>
<u>Section Control</u>	<u>15</u>
<u>Section Control</u>	<u>16</u>
<u>Map Setup</u>	<u>17</u>
<u>Guidance Setup</u>	<u>18</u>
<u>Guidance Setup</u>	<u>19</u>
<u>Hydro Handle</u>	<u>20</u>
<u>Armrest Controls</u>	<u>21</u>
<u>Armrest Controls</u>	<u>22</u>
<u>Rate Setup</u>	<u>23</u>
<u>Spray System Setup</u>	<u>24</u>
<u>Tank System</u>	<u>25</u>
<u>Boom Settings</u>	<u>26</u>
<u>BoomTrac Pro</u>	<u>27</u>
<u>HMS</u>	<u>28</u>
<u>ExactApply</u>	<u>29</u>
<u>Pulsing Mode</u>	<u>30</u>
<u>A+B Switching</u>	<u>31</u>
<u>ExactApply</u>	<u>32</u>
<u>ExactApply</u>	<u>33</u>
<u>Autotrac Vision</u>	<u>34</u>
<u>Autotrac Vision</u>	<u>35</u>

GPS Receiver Setup

Gen4: Select ISOBUS VT from shortcut bar. Choose Menu button in right hand corner then choose Starfire Receiver.

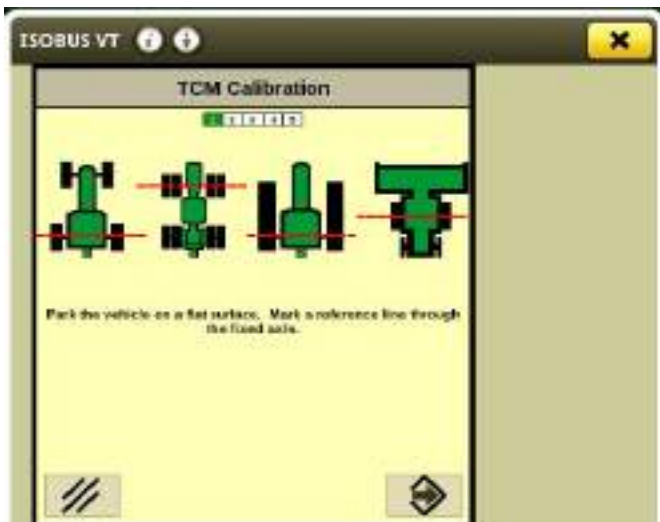
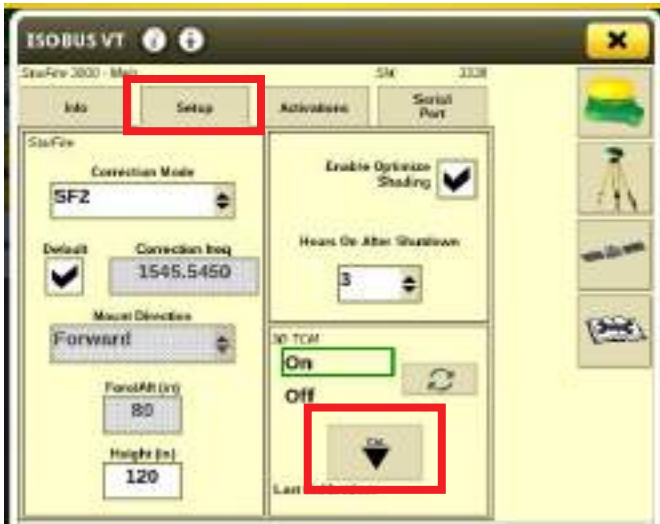


Verify signal is 90% or greater under info tab before starting any fieldwork.



GPS Receiver Setup

Then navigate to setup tab to calibrate TCM. Follow on screen instructions.



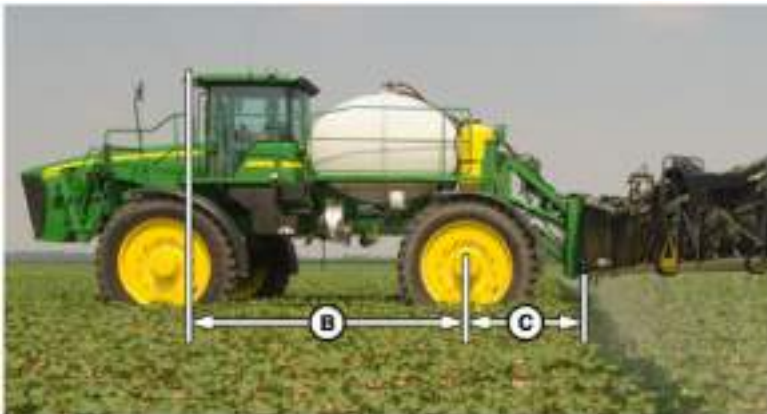
Machine Offsets

A) Center of GPS Receiver to Center line of Machine



B) Center of GPS Receiver to Center of Non-Steering Axle

C) Center of Non-steering axle to spray nozzles
(in operating position)

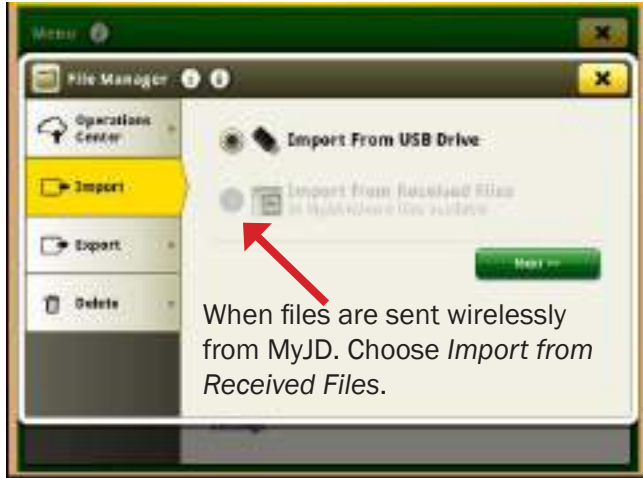


Implement Width: Width of spray area, may extend outside of spray booms.

Importing Data

Data Import using a USB Drive

Insert USB with setup data. Import screen will appear. Select the *Next* button. Choose setup files and *Accept* to import.

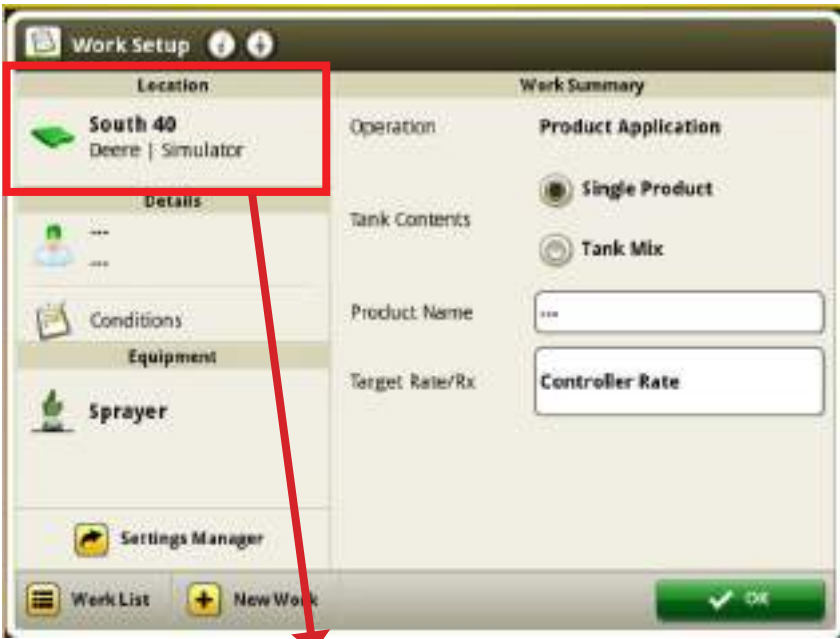


1. Select the *Setup* button



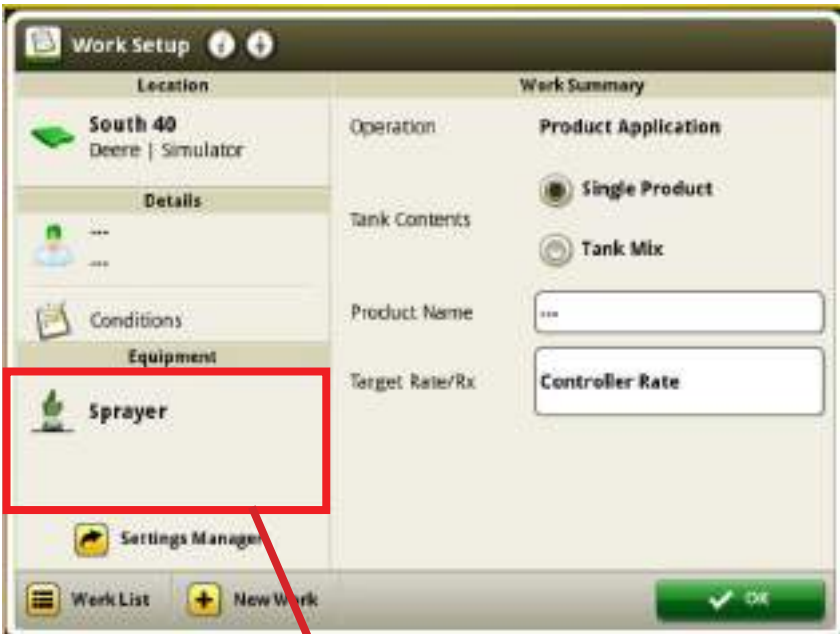
Work Setup

2. Select the *Location* button and select your *Client*, *Farm*, and *Field*. Press *View All* to see entire list.



Work Setup

3. Select the *Equipment* button and select your *Machine*.



4. Select Sprayer and enter offsets

Machine Profile

5. Under Machine Profile select *GPS offsets*.

Confirm Boom and nozzle setting from sprayer controller are accurate.



6. Enter receiver measurements.



Machine Profile

7. Scroll down to work point. Select to edit.



8. Open the *Work Point*. Enter measurement from center of rear axle to spray nozzles.



Work Summary

10. Select *Single Product* then choose *Product Type*.

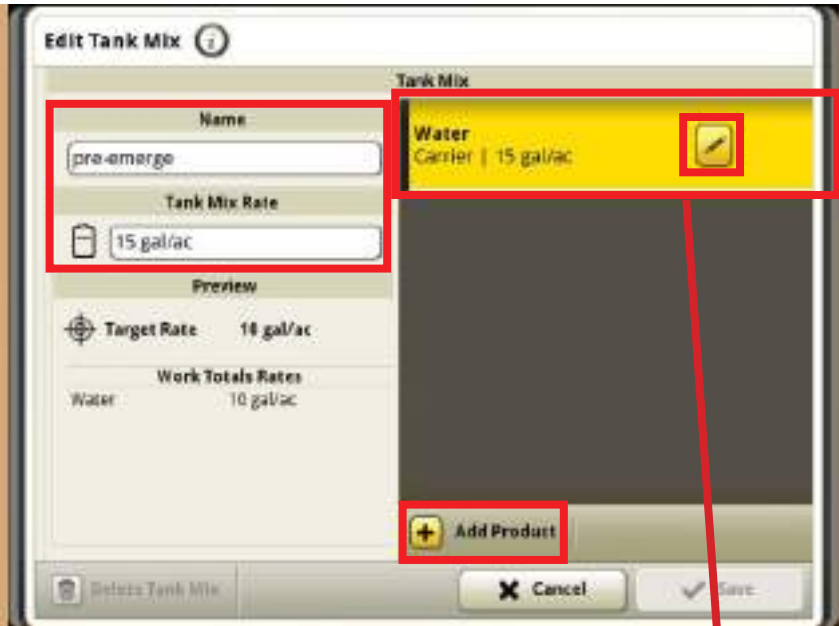


11. Next select *Product Name* and select the name of the product or enter a new name by clicking *New Product* at the bottom of the page.



Tank Mix

12. Select Tank Mix option. Press New Tank Mix and enter name, rate, and add product. Water will be the default carrier but it can be changed by selecting the edit button.

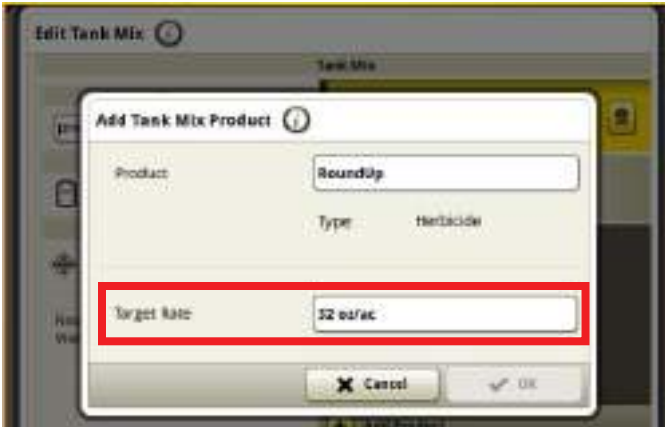


13. Select *Add Product* to select product type and name,

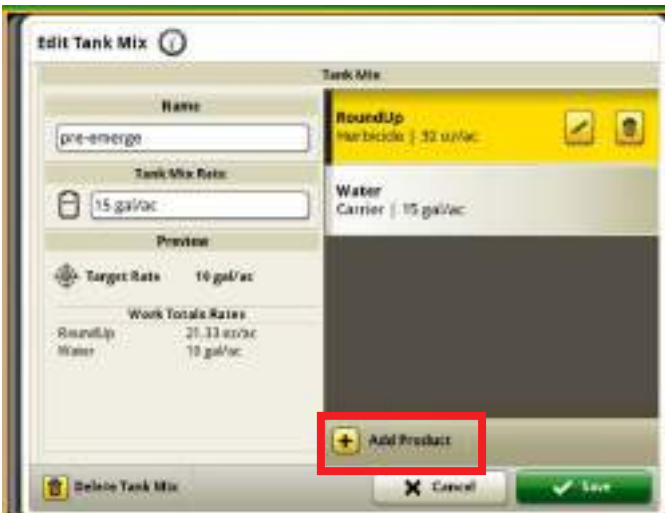


Tank Mix

14. Assign a rate for each product in the tank mix.

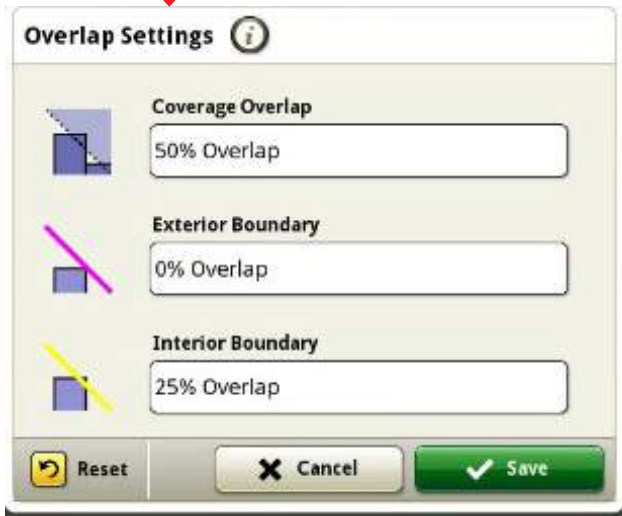
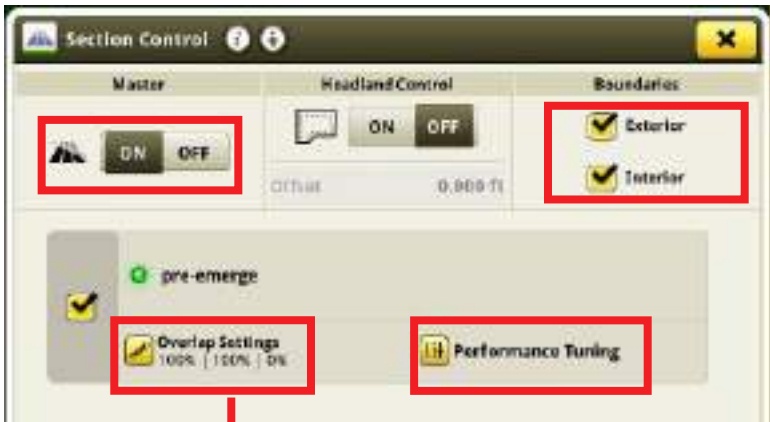


15. Select Add Product to add additional products to complete tank mix.



Section Control

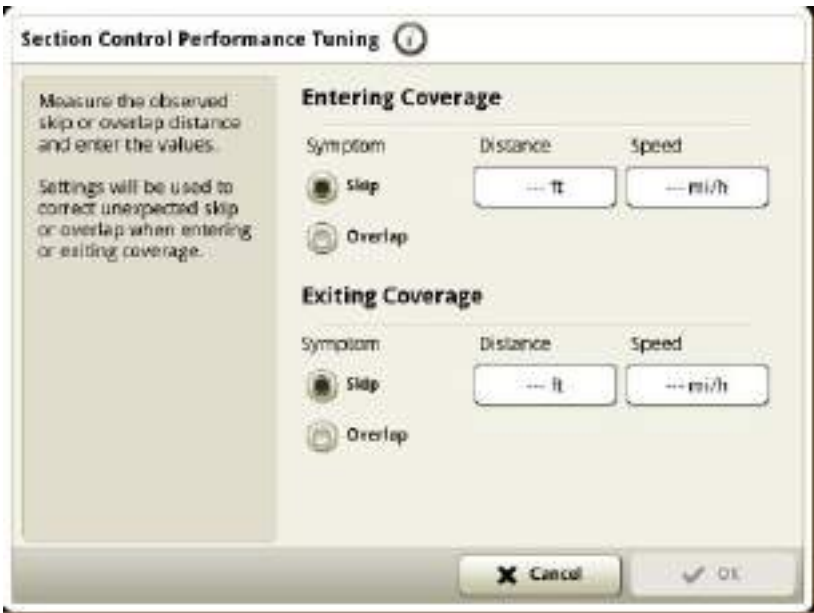
Select Menu -> Applications -> Section Control. Turn Master On. Select Boundaries if using.



Select Overlap Settings to edit values to the desired percent overlap.

Section Control

Use Performance Tuning while spraying to fine tune section control skips/overlaps by measuring distance and noting speed.

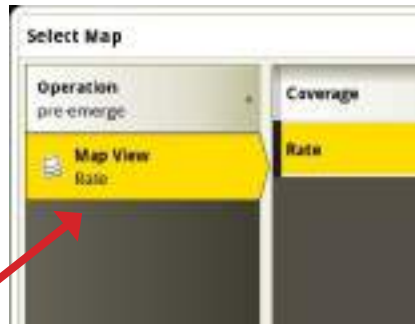
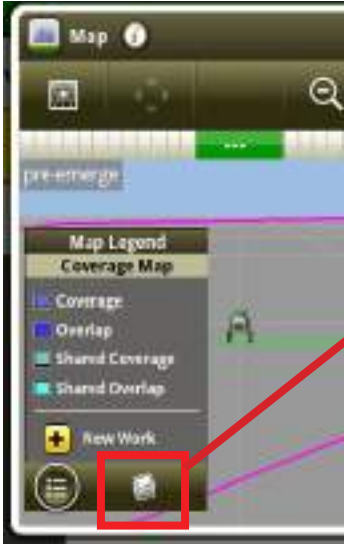


Go to Applications -> Layout Manager -> Shortcut Bars -> Default Shortcut Bar to add section control master switch



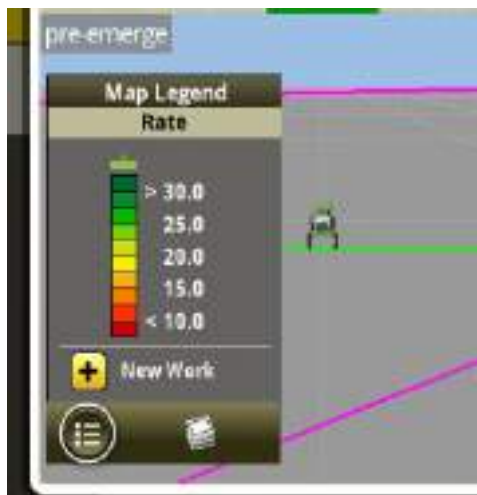
Map Setup

If you'd like to view a rate map instead of a coverage map click *Menu* then *Applications*, Next, select *Mapping* and choose the *Map View* icon.



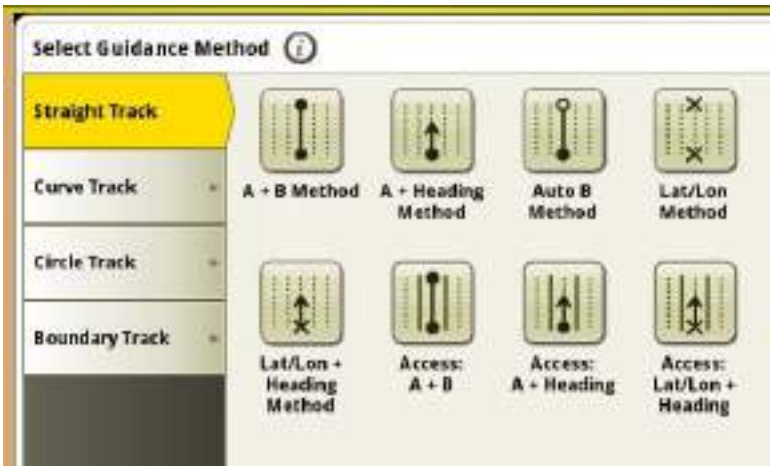
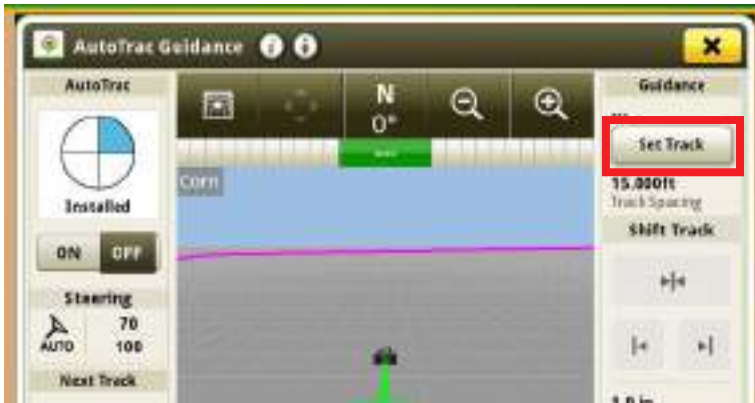
Select *Rate* and *OK* to save settings.

To edit the Map Legend click on the colored Legend and enter desired "Greater Than" and "Less Than" values. Click *OK* to save.



Guidance Setup

Guidance Setup: Select the Guidance shortcut key on the shortcut bar. Click Set Track and choose AB line from the guidance track list or select New track. Next choose type of track and creation method.

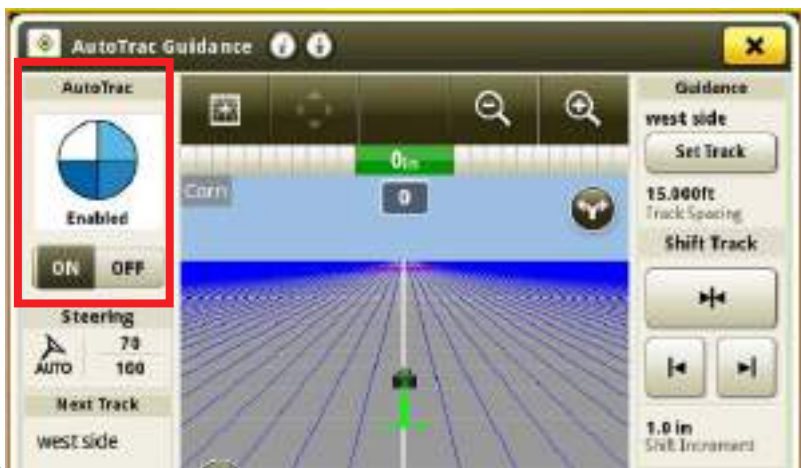


Guidance Setup

Give track a unique name and confirm it is in the correct field. Click OK to continue setup. Set A and drive line. Set B.



Turn On Autotrak and hit Resume button.



Hydro Handle

Boom Index Reset - enable all



Boom Index L & R

Headland Management System

Left/Right Foamer

Raise/Lower Center Boom

Boom tilt Left/Right

Programmable Buttons

Master On/Off
Boomtrac Resume
Autotrac Resume

Armrest Controls

Pump On/Off



Agitation On/Off

Target Rate Selection

Fence Row Nozzles On/Off

Spray Mode Selection

Video Input

Programmable Buttons

Armrest Controls



Throttle

**Road Transport
Lock**

Tread Adjust

Ladder

Diff Lock

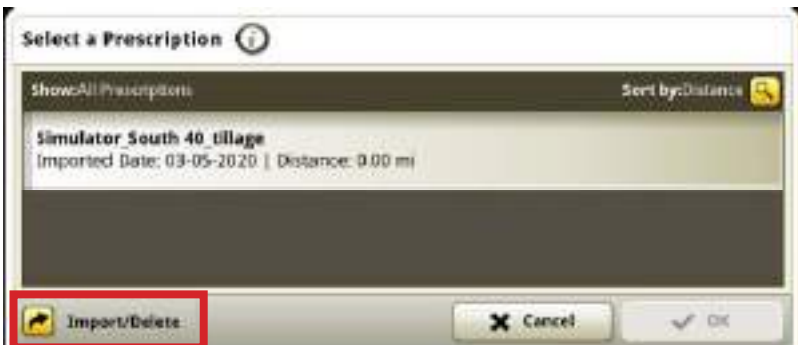
Park Brake

Rate Setup

From the “Spraying” page select “Target Rate”. Enter desired manual pressure, rates, or prescription.



If using RX choose from list. To upload a new RX select “Import/ Delete” to go to file manager.



Spray System Setup



Spray System

Menu -> Machine Settings -> Spray System to set system pressures and flow rate mode.

Target Presets	Pressure	Flow Rate Mode
30.0 psi	15.0 psi	Standard Flow
10.0 gal/ac	Spray Off Pressure	Note: Match Flow Rate Mode to physical valve positions.
12.0 gal/ac	40.0 psi	
15.0 gal/ac	Pressure Relief	Status
Rx ---	ON OFF	OK

Mode	Valve Configuration		Flow Rate
	Flowmeter	Orifice	
<input type="radio"/> High Flow			> 120 gal/min
<input checked="" type="radio"/> Standard Flow			26 - 120 gal/min
<input type="radio"/> Low Flow			< 26 gal/min

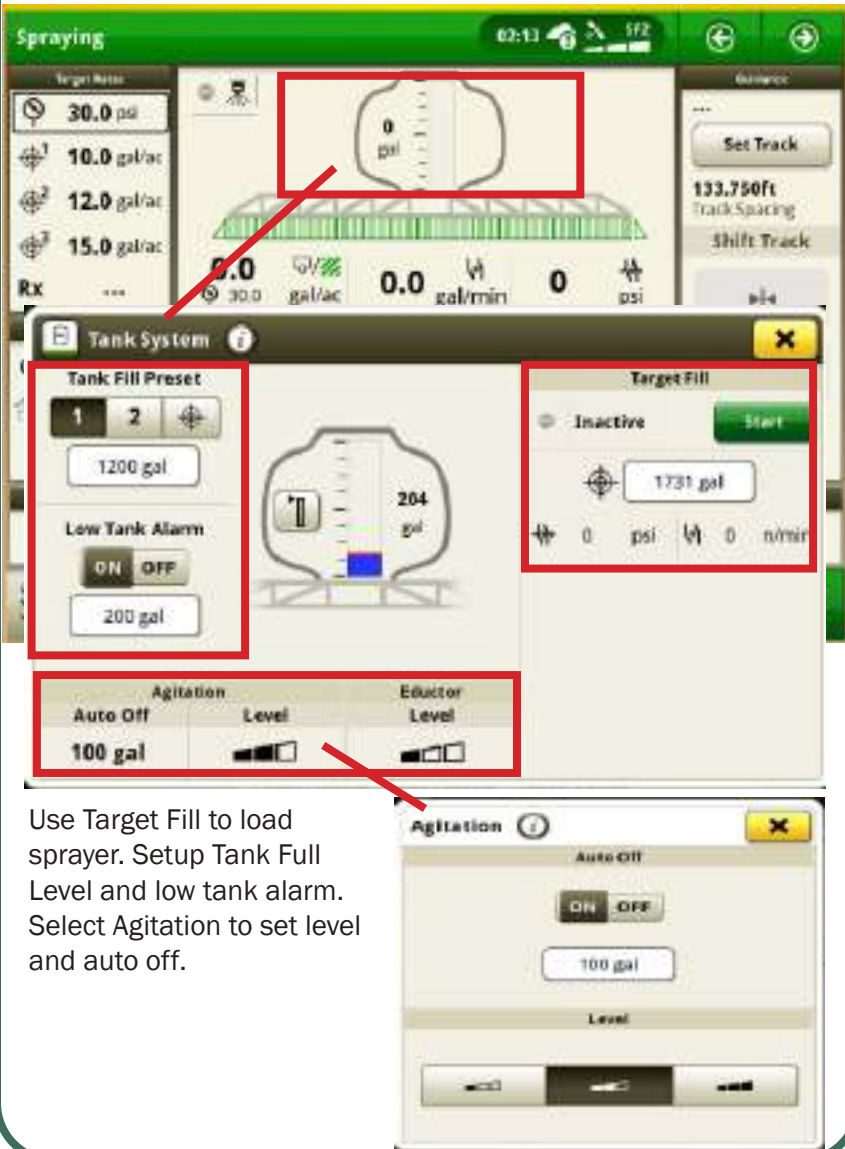
Note: Match Flow Rate Mode to physical valve configuration

Recommendations Cancel OK

Enter working speed and target rate to view recommendations

Tank System

From the “Spraying” page select the Tank to view “Tank System” settings.



Use Target Fill to load sprayer. Setup Tank Full Level and low tank alarm. Select Agitation to set level and auto off.

Boom Settings

From the “Spraying” page select the Boom to view “Boom Sections” and manually turn on/off sections or Enable All.



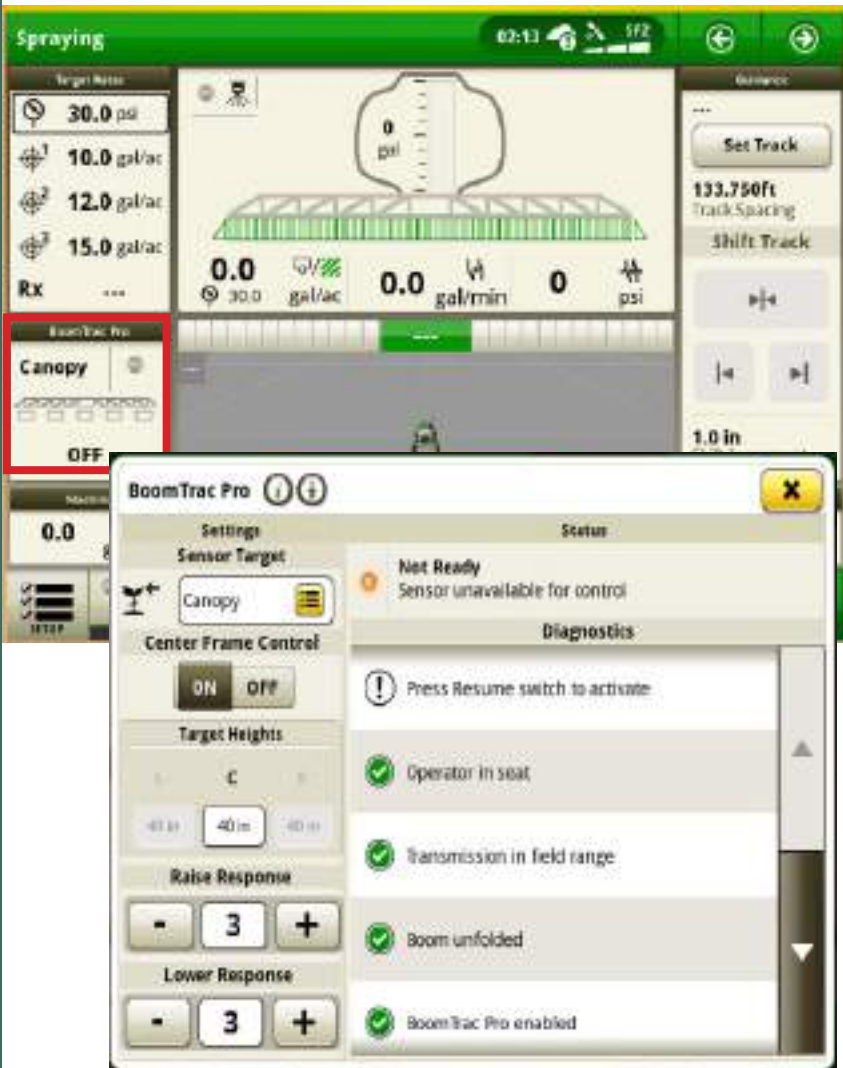
Boom Sections | Custom

Press Advanced Settings button to enable BoomTrac Pro.



BoomTrac Pro

From the “Spraying” page select BoomTrac Pro to setup and troubleshoot.

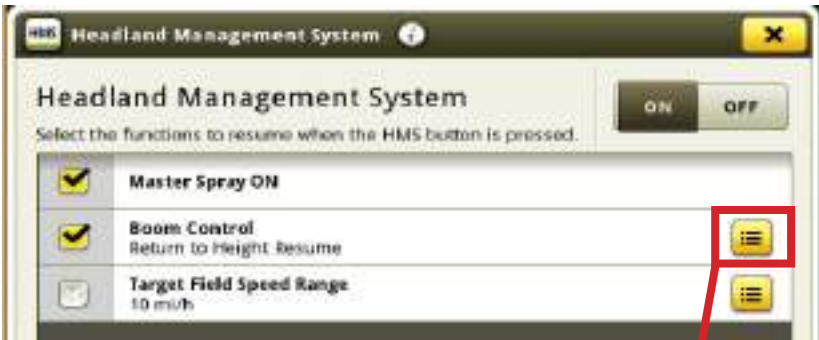


Select Ground or Canopy mode. Setup Center Frame Control, Heights and Raise and Lower Sensitivity settings.

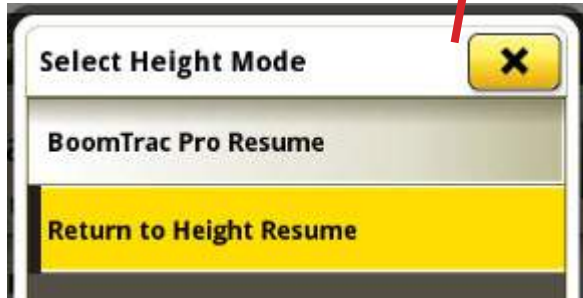
HMS



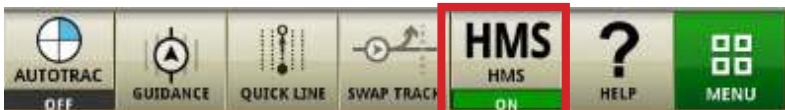
Menu -> Machine Settings -> Headland Management System to configure HMS button functions on the hydro handle.



Choose Master Spray On, Autotrac Resume, and set Boom control and speed ranges if desired.

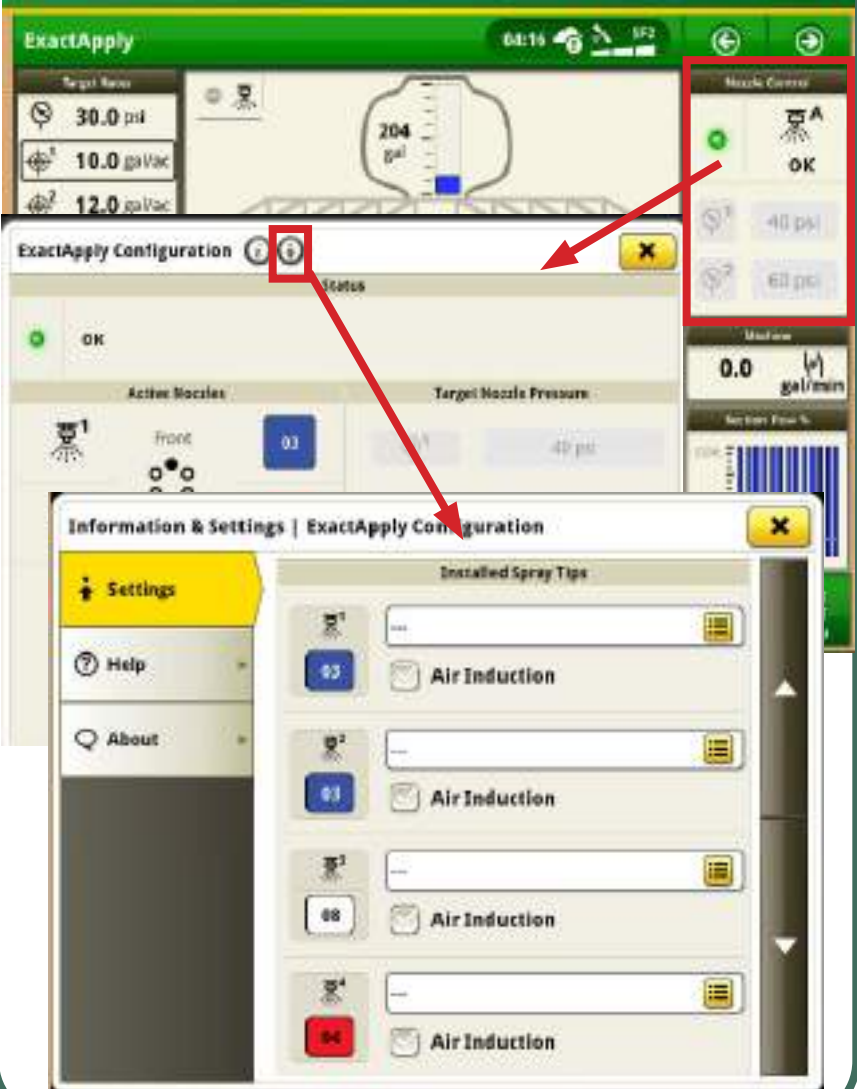


Enable HSM with button on shortcut bar.



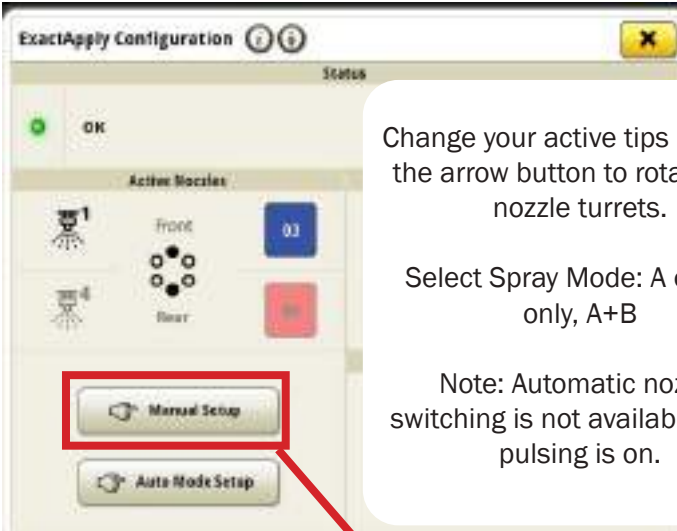
ExactApply

From ExactApply Page select Nozzle Control in righthand corner. Select Advanced Settings to tell system which spray tips are installed in positions 1 through 6.



Pulsing Mode

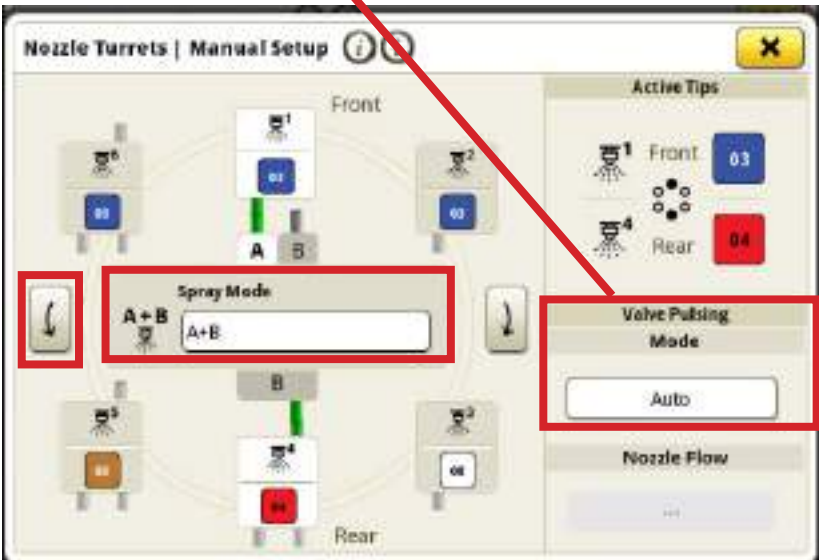
From ExactApply Configuration page choose manual setup to turn on pulsing mode - off/fixed/auto.



Change your active tips by using the arrow button to rotate your nozzle turrets.

Select Spray Mode: A only, B only, A+B

Note: Automatic nozzle switching is not available while pulsing is on.



A+B Switching



Automatic Nozzle Switching Mode Setup - the following conditions must be met before Auto Mode is available:

1. Valve pulsing set to OFF.
2. Nozzle body turret set with 1,2, or 3 in the front position.
3. Spray tips setup in both front and rear turret positions.
4. Rate based application selected.

Enable your tip and adjust min and max pressures. (bottom box shows spray tip used at different speeds)



ExactApply

	Nozzles 4, 5, 6 in the Front Position	
	Combined A + B Pulsing OFF	Combined A + B Automatic Pulsing
Speed Range	Base	Better
Turn Compensation	Not applicable	Good
Boost	Not applicable	Good
Pressure Selection	Not applicable	Target
Coverage	Best	Best
High Application Rates	Best	Better
Manual Nozzle Selection using the Display or CommandArm	No	No
Notes		a

Notes:

- a - One nozzle supplied by two solenoids with alternating pulses
- b – One nozzle supplied by one solenoid
- c – Supplies two nozzles with one solenoid each with alternating pulses.

ExactApply

	Nozzles 1, 2, or 3 in the Front Position		
	A Only or B Only - Automatic Pulsing	A + B Automatic Pulsing	Automatic Pulsing OFF
Speed Range	Best	Best	Good
Turn Compensation	Best	Best	Not applicable
Boost	Best	Best	Not applicable
Pressure Selection	Target	Target	Target Range
Coverage	Good	Best	Best
High Application Rates	Good	Best	Best
Manual Nozzle Selection using the Display or CommandArm	Yes	Yes	Yes
Notes	b	c, d, e	f, g

Notes:

d – Different spray tip sizes can be used on both turret positions. Spray tips must be O2 or larger.

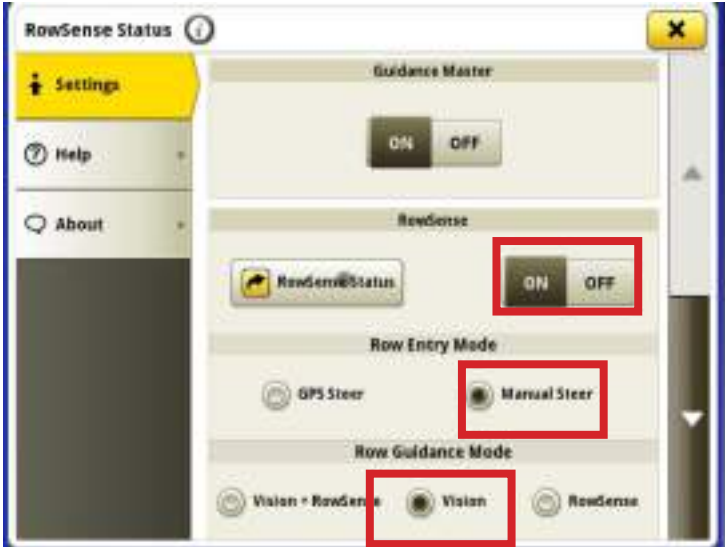
e – Dual fan pattern possible

f – Uses a small and a large spray tip. The large spray tip cannot be more than double the size of the small spray tip.

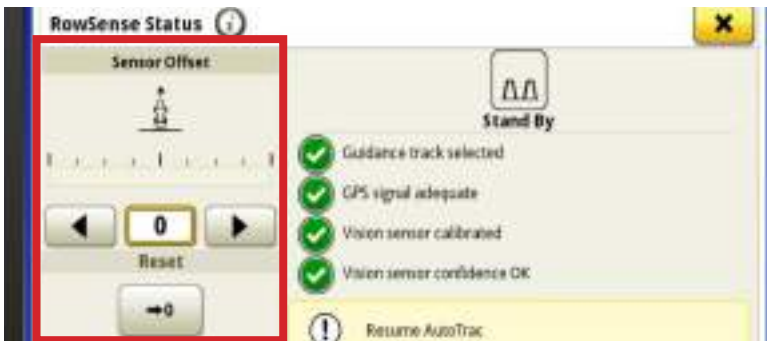
g – Sprays without pulsing, automatically switching between the front, rear, or both nozzles within an operator set pressure range.

Autotrac Vision

From Autotrac guidance page choose the advanced settings ⓘ Enable RowSense, choose row entry mode, and select sensors. . Manual steer mode is recommended if not using AB from planter.



Press Status button to go to RowSense status. Enter sensor offsets if needed and calibrate camera. For best results, complete accurate TCM calibration for receiver. Vision camera may require multiple calibrations due to changing conditions.



Autotrac Vision

Press the Calibration button from the Rowsense Status page. Follow on screen prompts be sure to have accurate row spacing.



RowSense Vision Sensor Calibration

CAL
▼

Step 1: Meet the Calibration Prerequisites

In order to perform a successful calibration, please ensure the following prerequisites have been met:

- RowSense Vision camera installed and available
- Machine positioned in standing crop
- Machine aligned parallel to row crop
- Wheels centered in middle of row

RowSense Vision Sensor Calibration

CAL
▼

Step 2: Provide Crop Details

Provide crop details to improve sensor accuracy.

Camera Height

Row Spacing

X Cancel Step 2 of 7 **Next >>**



System Active operating with both RowSensor and GPS.



No GPS signal. Operating with RowSensor data only.



No RowSensor signal. Operating with GPS only.

NEED ASSISTANCE? CONTACT US!

Belle Plaine, MN	952-873-2224
Bird Island, MN	320-365-3445
Blue Earth, MN	507-526-2714
Brookings, SD	605-693-3514
Garretson, SD	605-594-3476
Hollandale, MN	507-889-4221
Huron, SD	605-352-8519
Madison, SD	605-256-4575
Mankato, MN	507-387-8201
Marshall, MN	507-537-1523
Milbank, SD	605-432-5523
Minnesota Lake, MN	507-462-3828
Montevideo, MN	320-269-6466
Northwood, IA	641-324-1154
Osage, IA	641-732-3719
Owatonna, MN	507-451-4054
Redwood Falls, MN	507-644-3571
Sleepy Eye, MN	507-794-5381
Tyler, MN	507-247-5572
Wabasso, MN	507-342-5171
Watertown, SD	605-886-3545
Wheaton, MN	320-563-8112