

# ***Ag Leader***<sup>®</sup>

## QUICK START GUIDE

*for ETS SoilWarrior<sup>®</sup>*



ENVIRONMENTAL  
TILLAGE SYSTEMS



# INTRODUCTION



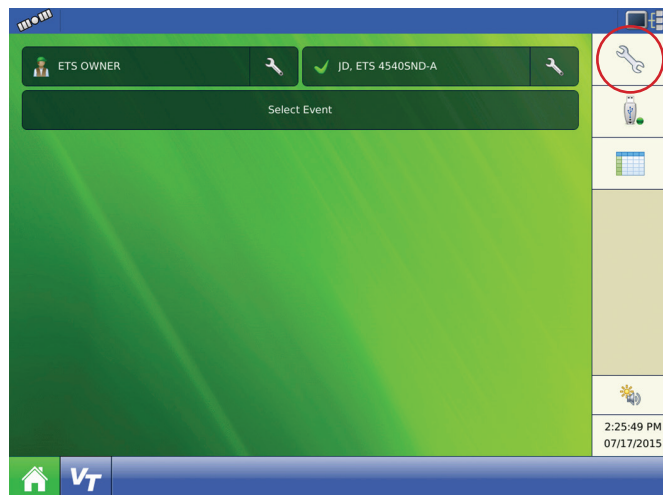
*This quick start guide will lead you through Grower/Farm/Field, Implement, Product, Guidance, and Mapping setup.*

## AgLeader Main Setup

The home screen shows the active grower, active implement and any active events.



Select the *wrench icon* on the far right to adjust each individual parameter.



When the SoilWarrior® is configured, an event is created, and products are assigned, the home screen will look similar to the image shown.



**NOTE:** If any questions are not answered with this guide, please refer to your AgLeader Operator Manual.



# 1 IMPLEMENT SETUP

**IMPORTANT :** Do not fill with fertilizer until setup of the **Direct Command Strip-Till** module is complete and a test **CFR** and **PWM Calibration** has been completed.

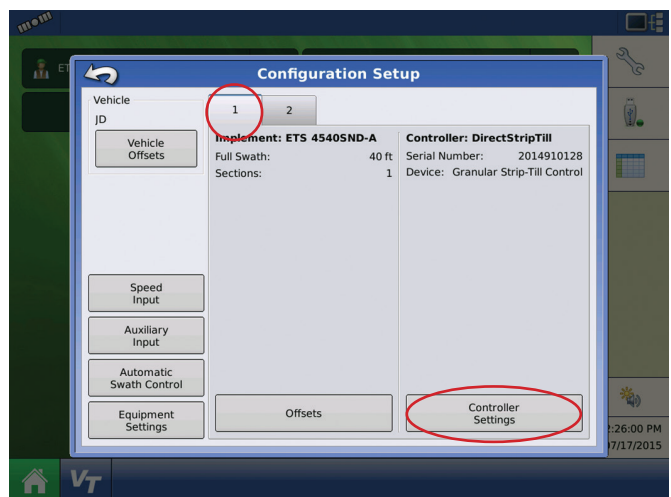
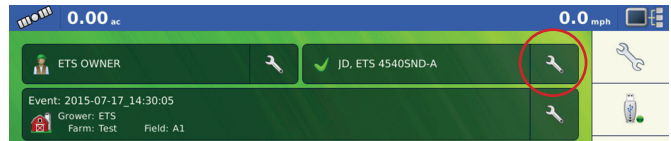


From the home screen, select the wrench icon next to the implement.

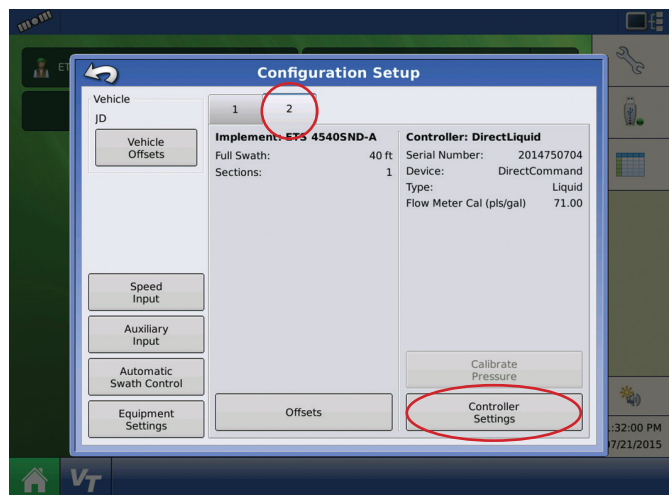
This will open the **Configuration Setup** screen, where you will be able to adjust vehicle offsets, speed inputs, auxiliary input, swath control, and equipment settings.

Select **Controller Settings** to begin setting up the **DirectStripTill** controller for the SoilWarrior®.

Depending on how your SoilWarrior® is equipped, you could have 1–4 channels that need to be set up (1–3 channels for dry, 1 channel for liquid). Refer to the 2015 SoilWarrior® Operator's Manual for your questions.



Dry Product Setup



Liquid Product Setup

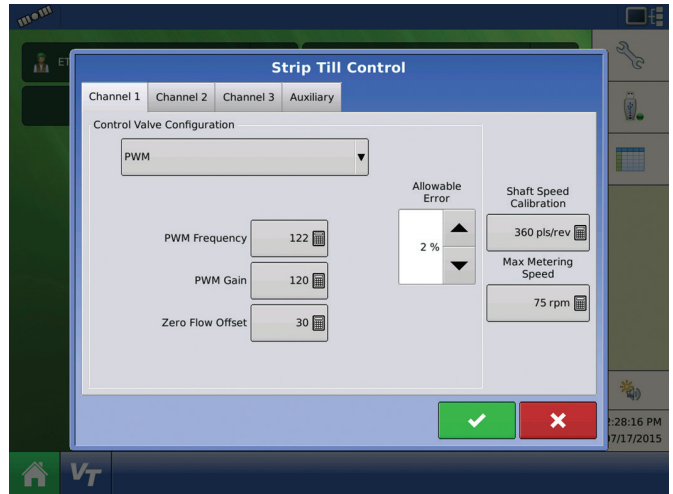


# 1 IMPLEMENT SETUP

To setup **Dry Product Control**, navigate to the **Configuration Setup > Tab 1 > DirectStripTill** module, then select **Controller Settings** — this will open the **Strip Till Control** settings. Select the **Channel 1** tab to setup the first channel/tank.

From the drop down menu under **Control Valve Configuration**, select **PWM** and complete the following:

- **PWM Frequency:** input 122
- **PWM Gain:** input 120.
- **Zero Flow Offset :** input 30
- **Shaft Speed Calibration:** input 360
- **Max Metering Speed:** input 75
- **Allowable Error:** input 2%

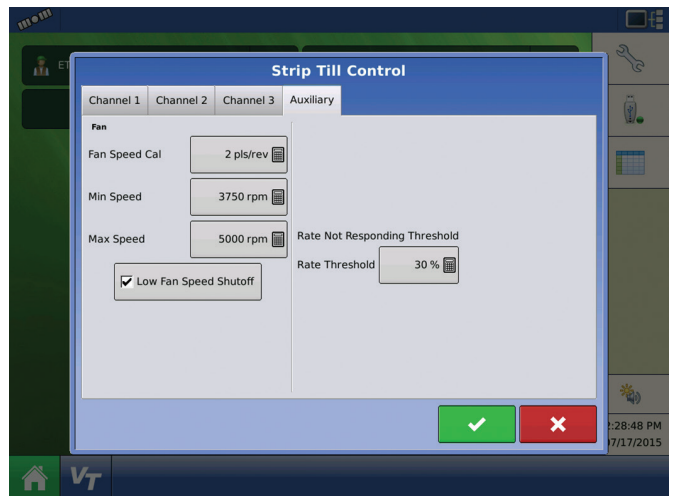


**NOTE:** Repeat these steps for each Channel/Tank your SoilWarrior® is equipped with.

Select the **Auxiliary** tab and input the following to configure the fan:

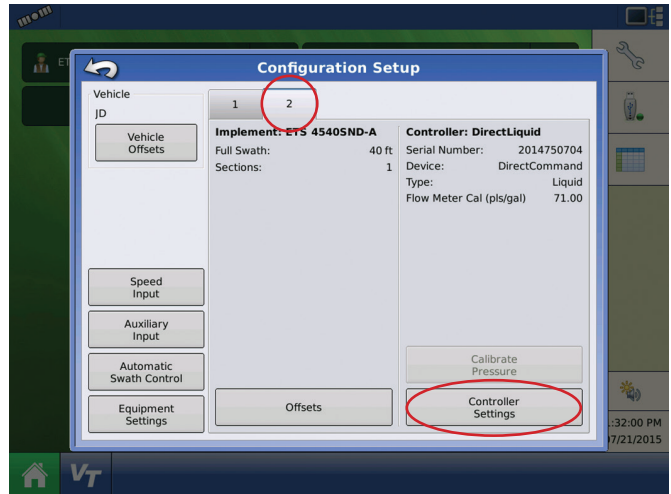
- **Fan Speed Cal:** input 2pls/rev
- **Min Speed :** input 3750 rpm
- **Max Speed:** input 5000 rpm
- **Low Fan Speed Shutoff:** check mark the box
- **Rate Threshold:** input 30%

Once *all* channels have been setup, and auxiliary setup is complete, select the green check mark at the bottom right to save the configuration.



# 1 IMPLEMENT SETUP

To setup **Liquid Product Control**, navigate to the **Configuration Setup > Tab 2 > DirectLiquid** module, then select **Controller Settings** — this will open the **Liquid Control settings**.



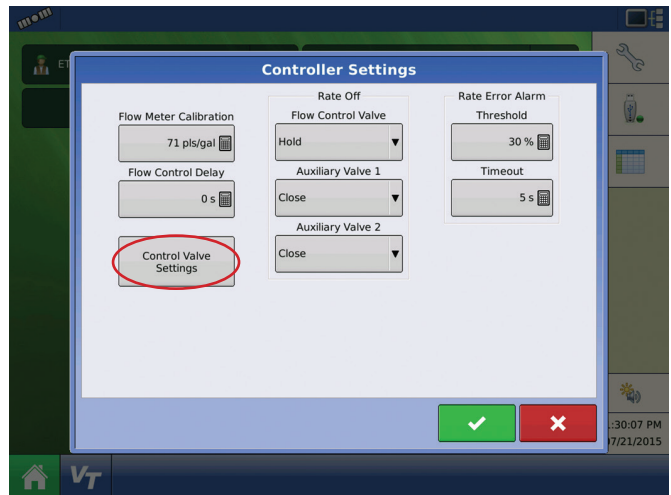
To determine the **Flow Meter Calibration** inspect the tag on the flow meter (found on the liquid flow panel or the NH3 cooler) for pulses per gallon. *Be sure to divide this number by 10 when entering into the AgLeader monitor.*

## EXAMPLE

The label will state 710 pulses per gallon.  
Flow meter calibration to be entered is the number divided by ten.

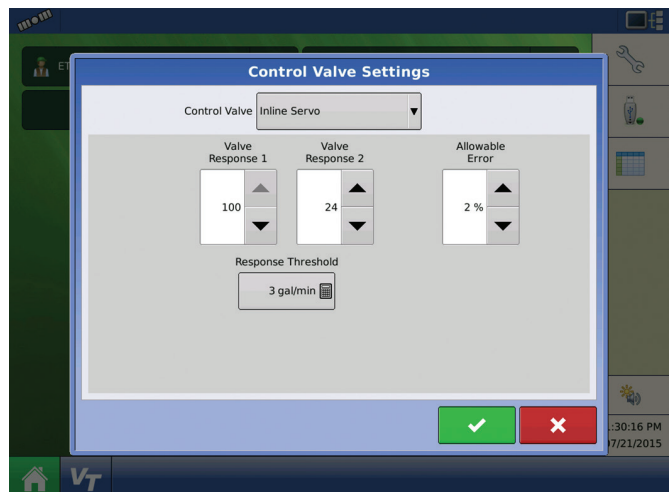
$$\gg 710 / 10 = 71$$

Select **Control Valve Settings**.



From the drop down menu under **Control Valve Type**, select **Inline Servo**.

**NOTE:** All other settings are default from AgLeader.

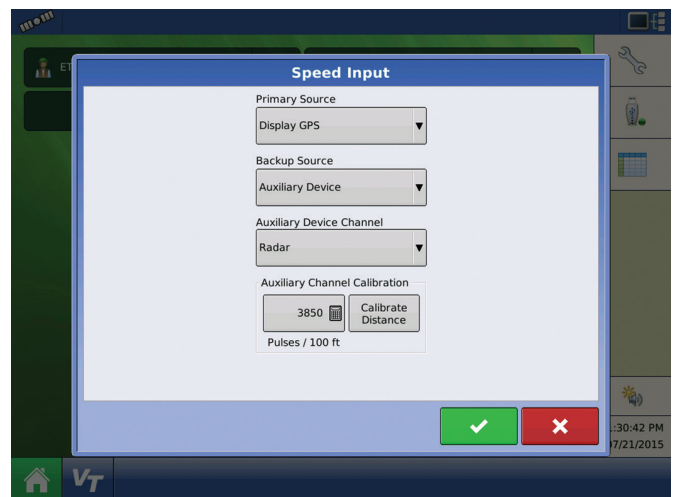
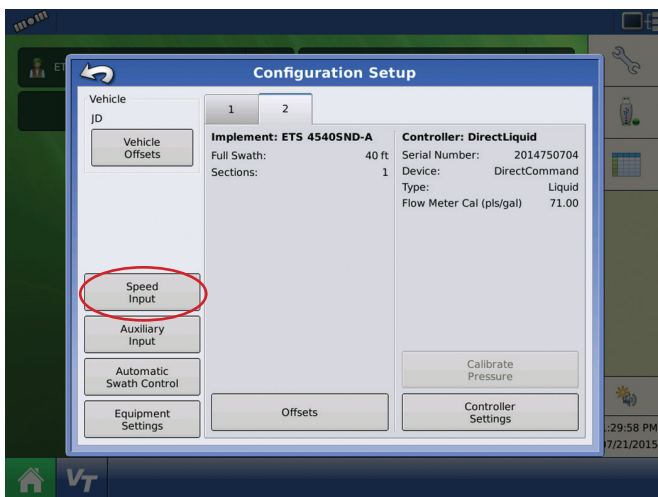


# 1 IMPLEMENT SETUP

To configure the speed source, select the **Speed Input** button on the left side of the window.

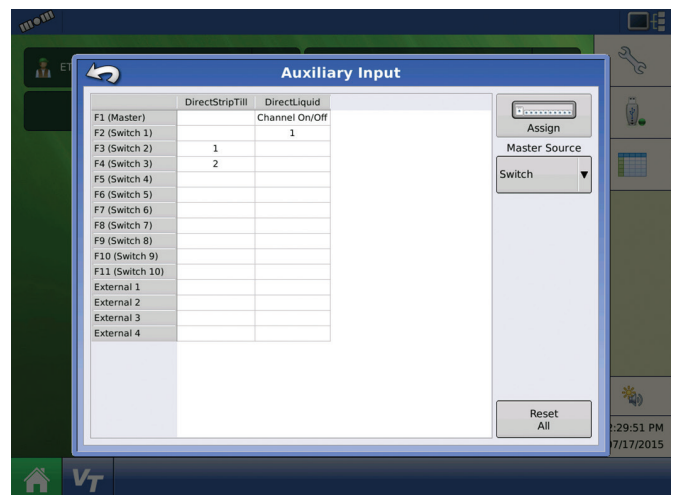
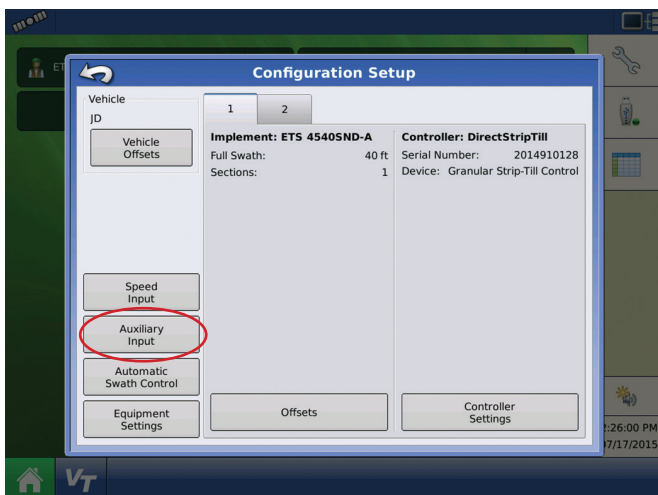
From the drop down menu under **Primary Source**, select the speed source you are using. There are 3 options:

- **Manual:** static speed setting defined by the user.
- **Auxiliary Device:** utilize setting if using Radar as a speed source. *ETS supplied radar calibration is 3850.*
- **GPS:** utilize setting if using GPS to map and do VRT.



**Auxiliary Input** configurations allows the user to customize the switchbox toggles. Under the **Assign** button, you can configure what each individual toggle function does. You

can also assign the master toggle and each individual toggle to a specific Channel/Tank.

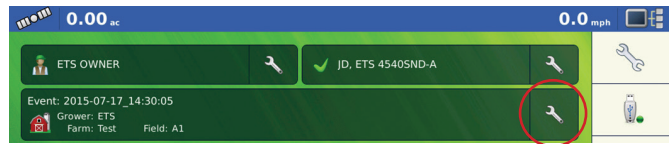


## 2 EVENT SETUP



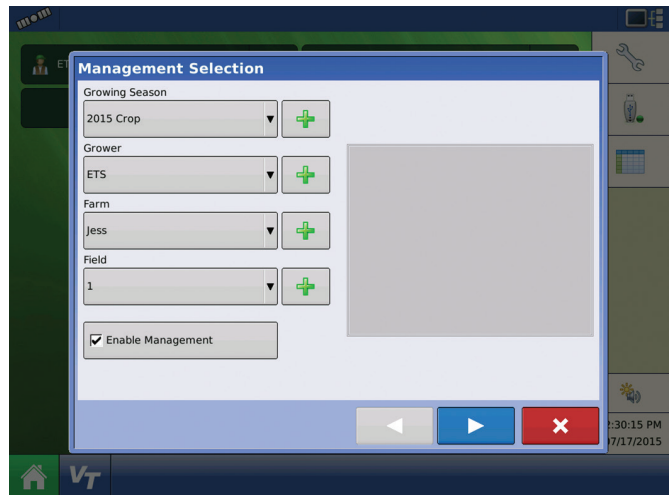
From the main screen, select the *wrench icon* next to **Event**.

This will open a new window and guide you through the remaining process.



### Management Selection

Use the drop down menu to select an option under **Growing Season**, **Grower**, **Farm** and **Field**. If a desired selection does not appear in the drop down menu, select the *plus sign* to add content.

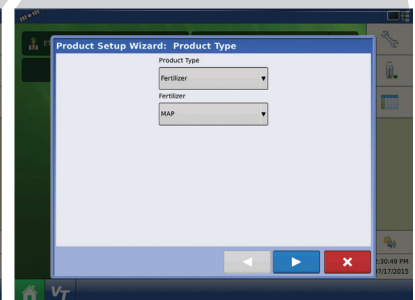
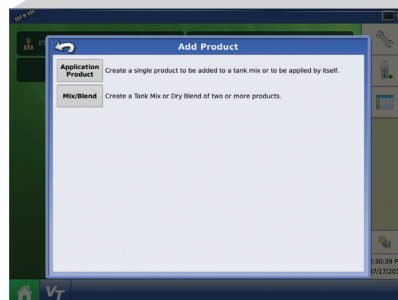
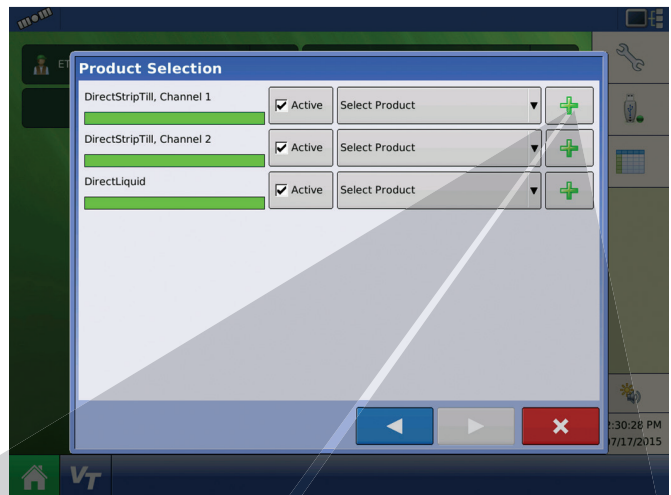


### Product Selection

**Product Selection** will show each channel that you have already set up.

1. Make sure to checkmark **Active** beside each channel you intend to use.
2. Use the drop down menu to select the appropriate product for each channel.
3. If a product does not appear in the drop down menu, select the *plus sign* to add a new product.

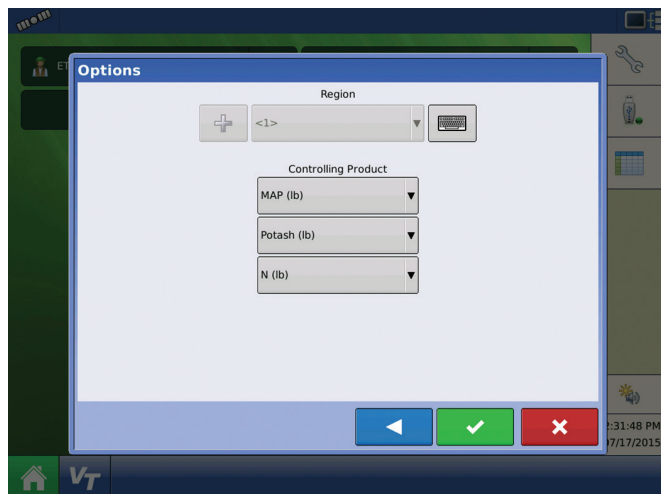
*continued ...*



## 2 EVENT SETUP

### *Product Selection (continued)*

Select the **Options** window to set the controlling products. Once verified, select the *green check mark* to complete the **Event** setup.



Your AgLeader Integra/Versa will look similar to the image shown when complete.



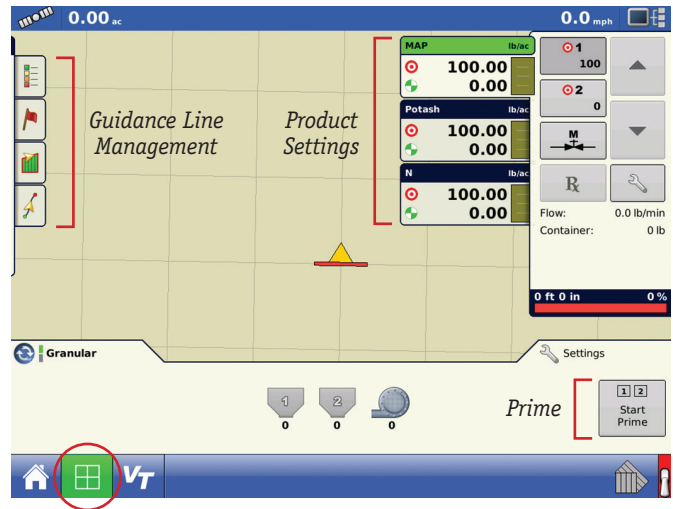
# 3 MAPPING/RUN-TIME



From the main screen, select the *grid* icon on the bottom left..

This will open the **Mapping** screen where you can set the product amounts you wish to apply, assign a prescription file to each product/channel, and create/edit guidance lines.

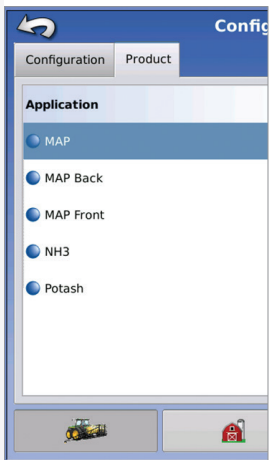
**NOTE:** Be sure to prime select **Start Prime** when beginning to operate the SoilWarrior® for the first time. This will ensure product gets applied immediately when starting. Be sure to have the collector bottom off or the fan operating to reduce the chance of plugging.



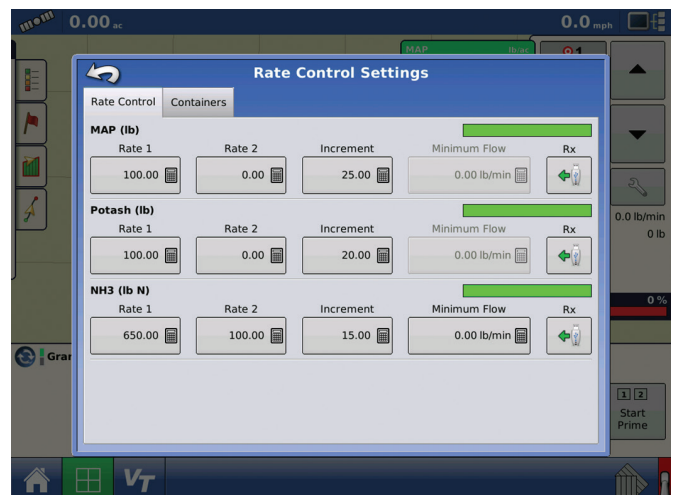
## Product Settings

To adjust product rates, containers or load a prescription, touch on one of the channels that is already set up. This will open the **Rate Control Settings**.

Under the first tab, **Rate Control**, you can adjust the static rates for each channel, adjust the rate increment and load a prescription.



**NOTE:** When using a prescription, you must load a specific prescription for each channel. If applying the same product in 2 bins and using a prescription, remember to create two products and two prescriptions at 50% rate for each prescription. Also, AgLeader will not allow the same product in multiple channels/tanks. One solution is to label "Product A Front" and "Product A Back".

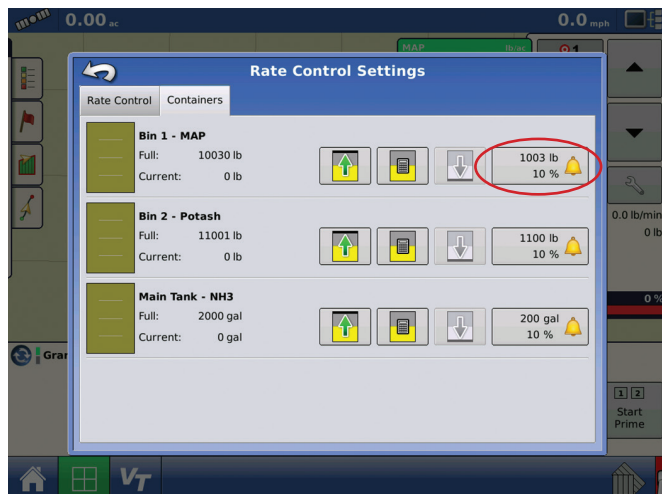


# 3 MAPPING/RUN-TIME

## Product Settings (continued)

To adjust the containers/tanks, select the **Containers** tab.

From here, you can set to fill the container to 100%, or a select amount. Alarm settings can be specified for the tank by selecting the *bell icon* on the far right.

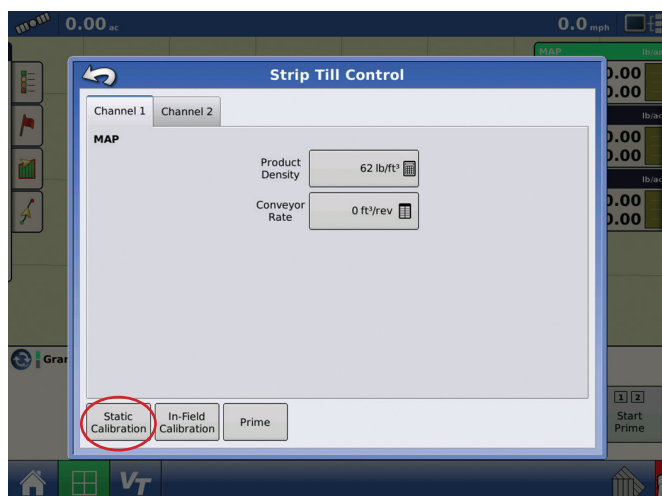


## Calibrations

To adjust calibrations, touch on one of the channels that is already set up to open **Rate Control Settings**, then select the *wrench icon*.

Enter in the **Product Density** of the assigned product for each channel. Once the density is inputted, enter in the **Conveyor Rate** (CFR value) — find the default CFR value using the supplied chart (also found in the *ETS Operators Manual*). Refer to the *2015 SoilWarrior® Operator's Manual* for guidance with this setup procedure.

After **Product Density** and **Conveyor Rates** have been entered, select **Static Calibration** to calibrate each product/tank.



## CFR Settings for Ag Leader & John Deere Systems

No. of Rolls	Roll Size 7	Roll Size 10
1	0.005	0.006
2	0.009	0.013
3	0.014	0.019
4	0.018	0.026
6	0.028	0.039
8	0.037	0.051
12	0.055	0.077

**NOTE:** It is recommended to calibrate each product/tank individually to ensure proper application rates.

# 3 MAPPING/RUN-TIME

## Calibrations (continued)

For CFR Calibration (**Catch Test**) complete the following:

**NOTE:** Product will be dispensed.

1. Choose the channel you want to calibrate.
2. Enter in the desired amount of product you want to catch.
3. Enter in the **Target Rate** — this is how fast the desired rate will be dispensed. Enter in an amount that is average for your overall rates.

4. Select **Start** — product will begin to be dispensed.

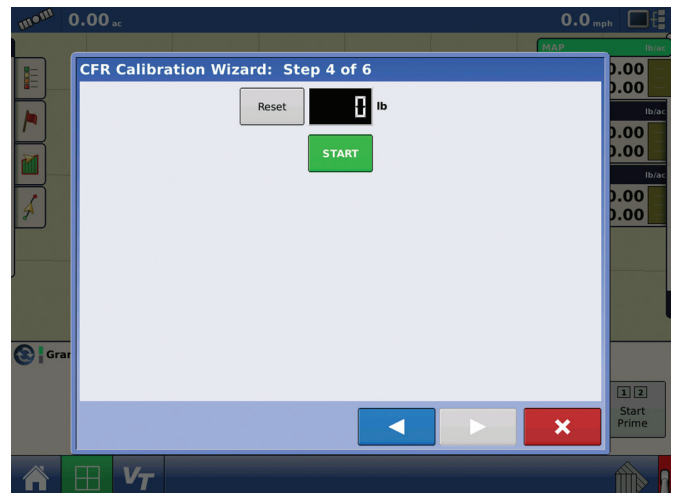
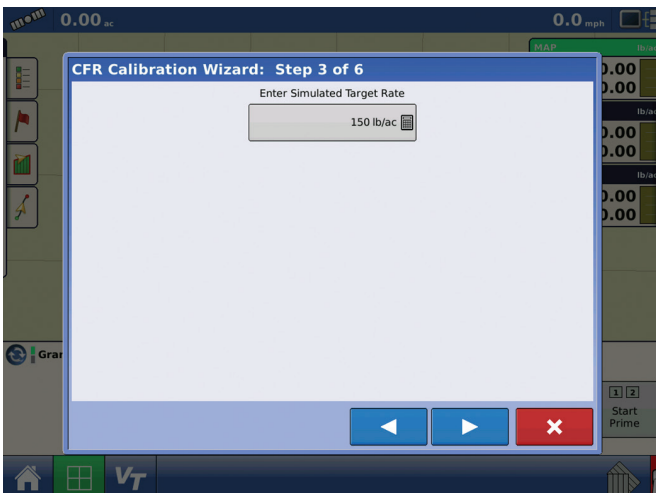
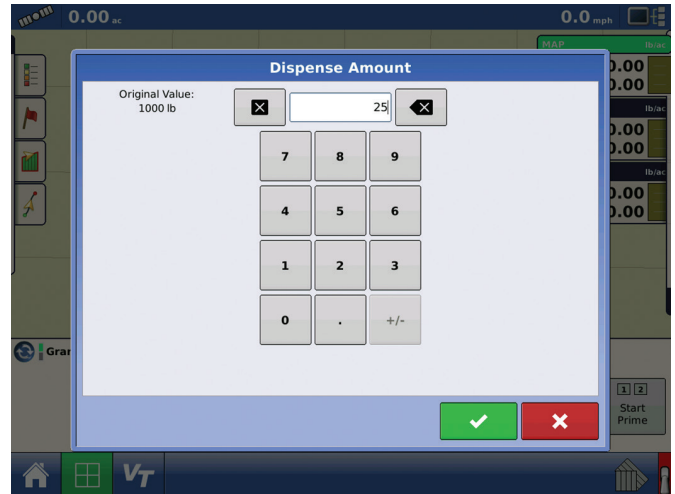
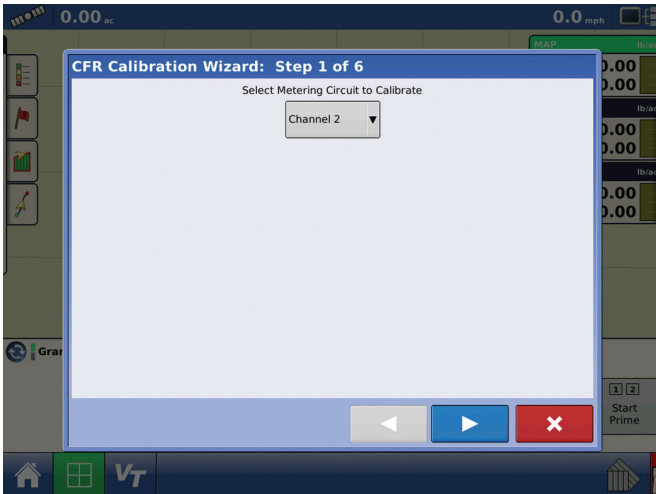
**NOTE:** Use the supplied catch bags.

5. Weigh the product that was dispensed — enter the actual rate dispensed.

**NOTE:** Use the supplied weigh scale.

6. Press **Calibrate** — the CFR is now calibrated.

Repeat steps 1-6 for each channel.



# 4 ISOBUS RUN-BLOCK SETUP

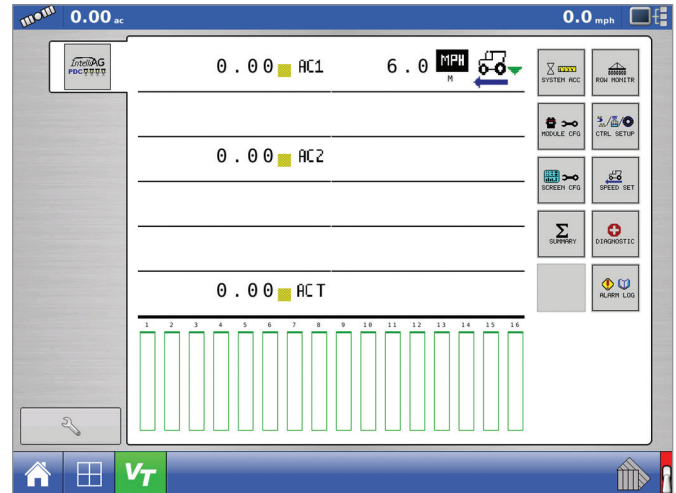
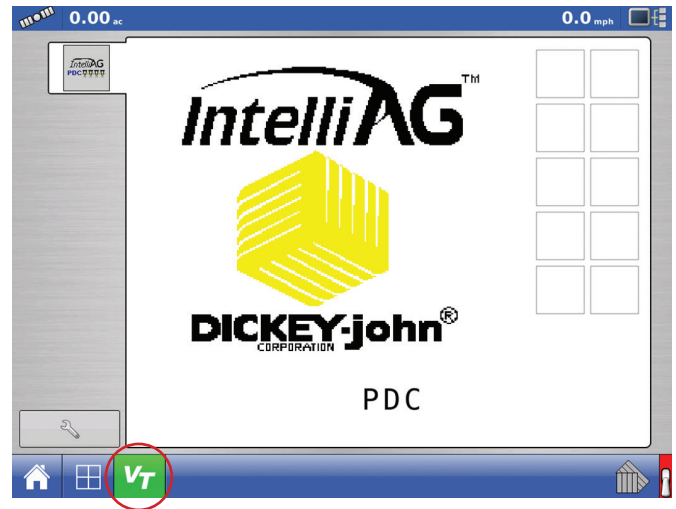


From the main screen, select the VT icon on the bottom left (only accessible if Virtual Terminal is equipped).

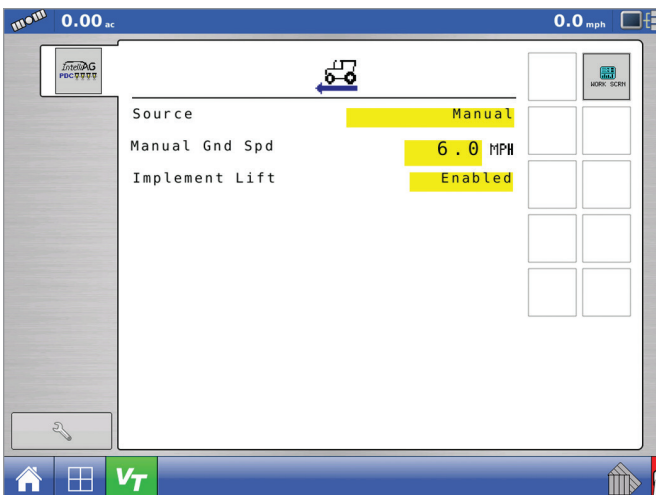
Configuration of the **PDC Controller** consists of a module, row, and alarm setup.

Once in the **IntelliAG** menu, the program buttons are found on the right. The PDC is pre-programmed for your SoilWarrior®. The following is a check of the functions to assure your SoilWarrior® is communicating with the system correctly.

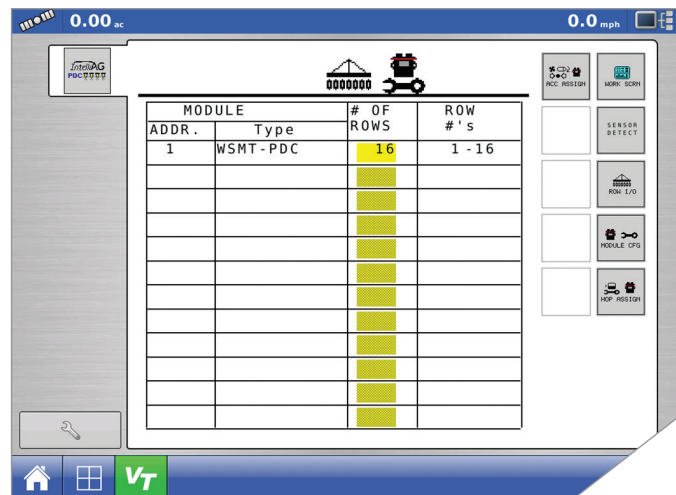
**IMPORTANT:** DO NOT press Auto Sort or Auto Config.



Work Scan Screen

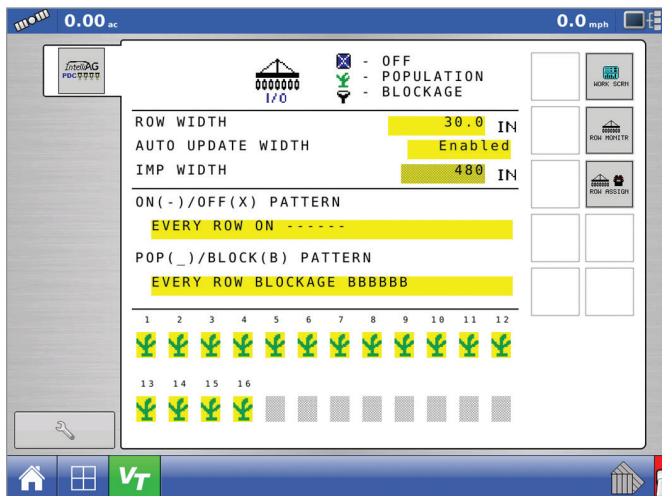


Speed Set Screen

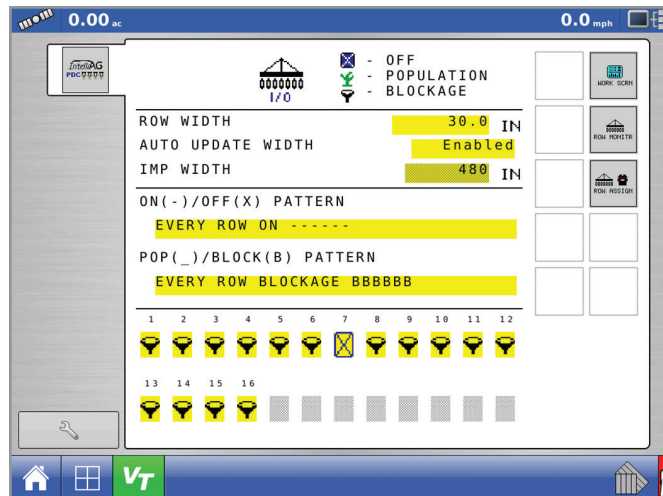


Module Assignment Screen

# 4 ISOBUS RUN-BLOCK SETUP

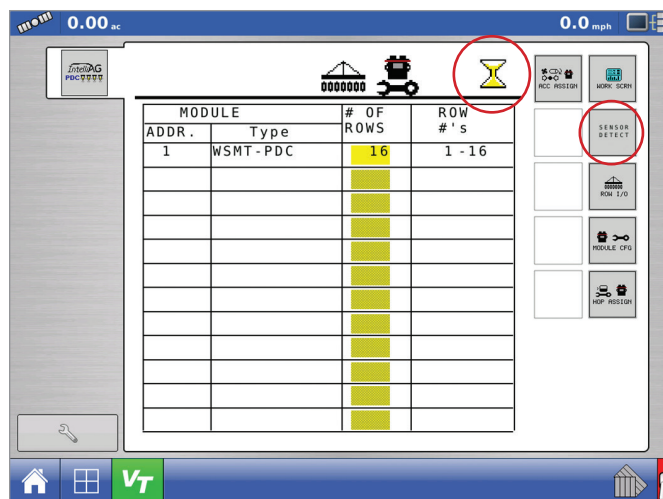


Sensor reading type



Disable function

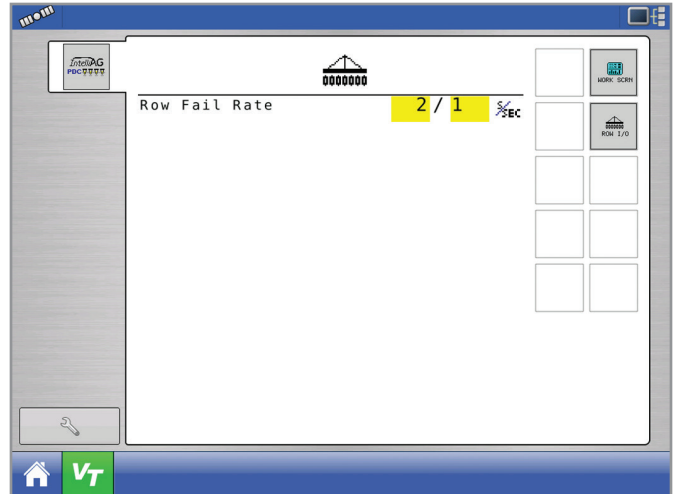
Press the **Sensor Detect** button to allow the PDC to check the presents of each sensor. The *hour glass icon* will indicate the test is in process. When the hour glass disappears, all sensors were detected. In the event that the system does not see all sensors, the sensor number not detected will appear for service.



# 4 ISOBUS RUN-BLOCK SETUP

When applying low rates (less than 60 pounds total), you may have to adjust the **Row Fail Rate** to allow the system to read the particles at a less frequent rate. Field settings of 1/5 seconds on 30 pounds per acre have allowed the system to function correctly.

**IMPORTANT:** Be sure to reset back to 2/1 when rates above 75 total pounds per acre are applied.



The main **Work Scan** screen will be the only screen you will need to monitor for run blockage while in the field. A *green outline bar* will show all the sensors turned on or present. If a run plugs, a *stop sign* will appear versus a *solid green bar* when product is flowing.

The PDC has an implement switch that allows the system to know when you turn around with the toolbar up and there is no product flow — this signal allows the alarms to be deactivated. Note the *red triangle* pointing up on the **Work Scan** screen showing the switched position.

When the toolbar is lowered, the triangle will turn down and be green — showing that the system is currently monitoring the product flow.

