



## SENTINEL QUICK START

396-3629Y1

Software Version 1.0.4

**BEFORE TURNING ON SYSTEM** the first time, make sure that all flow meter modules are disconnected.

### MODULE ADDRESSING:

1. Power on system with all 4 row flow modules disconnected
2. Connect flow module with row #1, wait for about 30 seconds
3. Connect next flow module in order, wait for about 30 seconds
4. Repeat until all modules have been connected



Figure 1: Front of 4 Row Sentinel Flow Module

Figure 2: Plug in CAN DEVICE connector here.

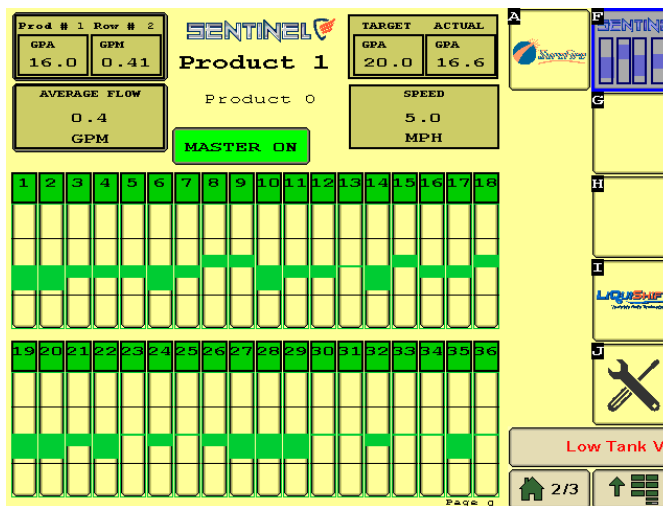
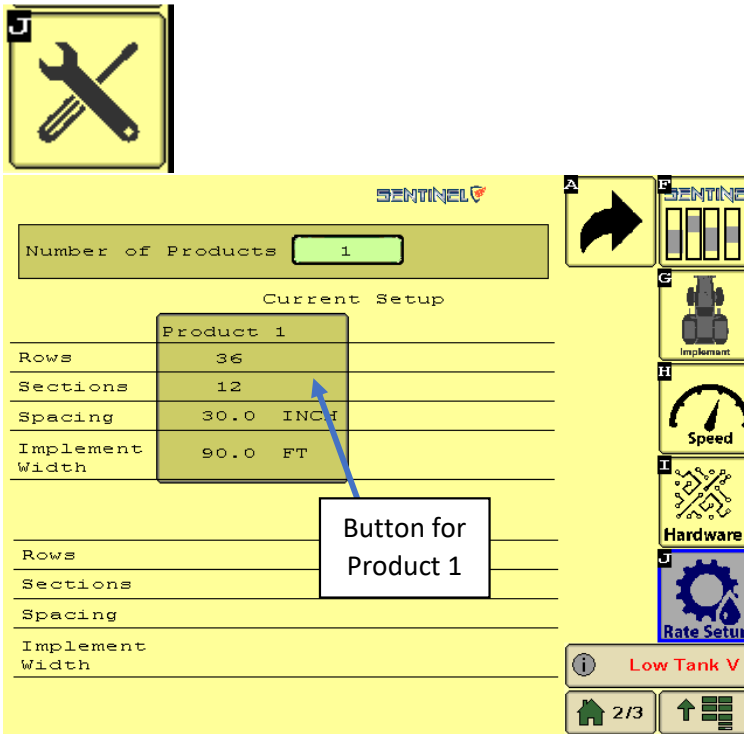


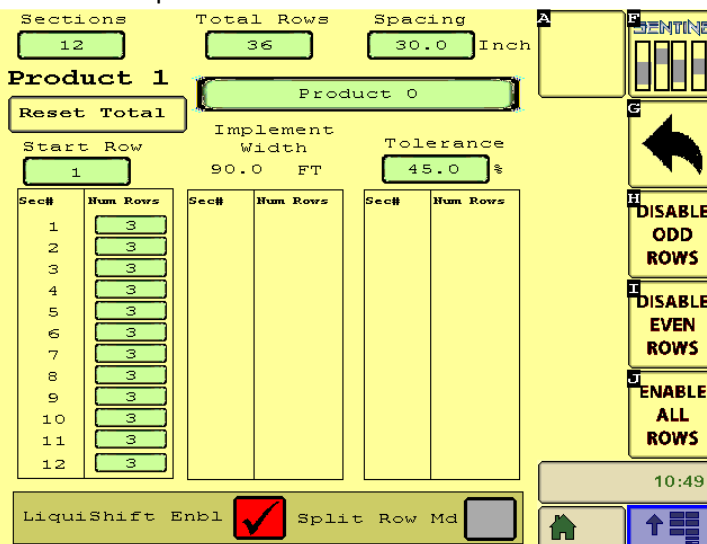
Figure 3: Run Screen

## CONFIGURING ISO SENTINEL:

1. Press Tool Button to get to setup



2. Setup Number of products (1 - 3)
3. Press the Product1, Product2, or Product3 brown box button in the middle of the screen to get into the Product Setup



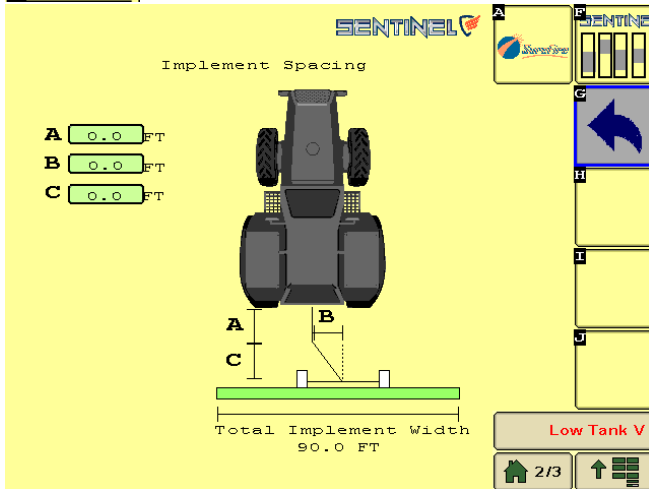
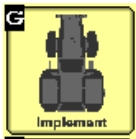
- a. Section setup is important when using Task Controller or Intellisecton
- b. Set the Total Rows
- c. Set the Spacing
- d. Set product name if desired
- e. Tolerance sets the high and low alarm levels when operating in the field
- f. Check the box for LiquiShift Enable if using LiquiShift on this product

**OTHER NOTES:**

1. The Sentinel Button always takes you back to the main run screen



2. The Implement button is used when Task Control is enabled to tell the system where your implement is in relation to the tractor.

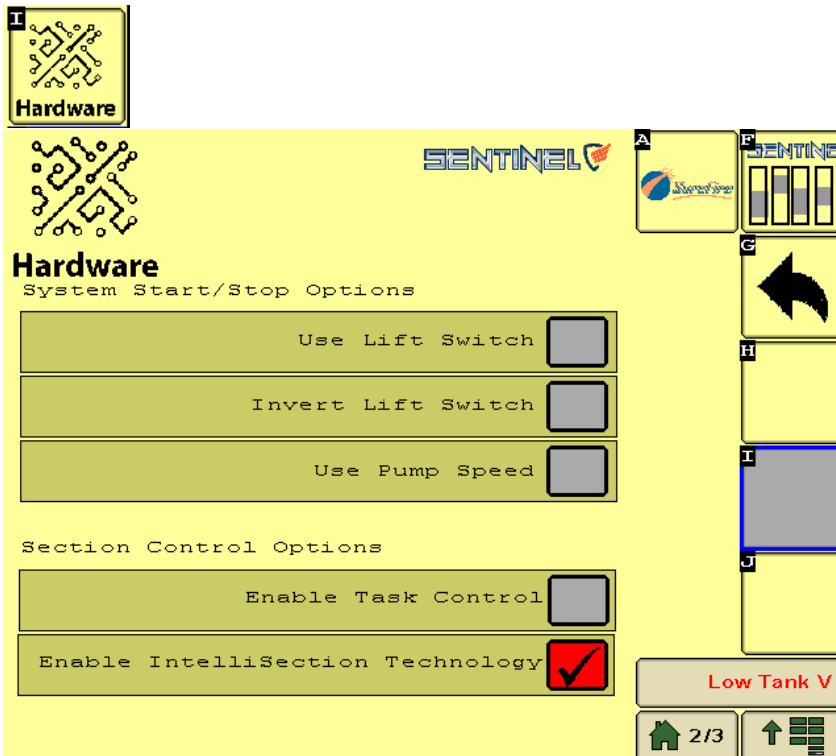


3. The Following button contains the Speed Setup information.



- a. The top button lets you switch between which speed information the Sentinel will operate off of. The choices are Simulated Speed, Ground Speed, Wheel Speed, Machine Selected Speed, ECU Input Speed.
  - i. Simulated Speed will cause the Sentinel to operate at the set speed
  - ii. Ground Speed, Wheel Speed, and Machine Selected speeds are all bus-based speeds. Your tractor may use only one or all of these options may be available.
  - iii. ECU input speed is a physical sensor input to the Sentinel ECU. Use a GPS pulse speed output to send a speed to this input. Then use the ECU speed calibration to adjust the speed to match actual tractor speed.

4. The Following Button contains the Hardware settings and section control options



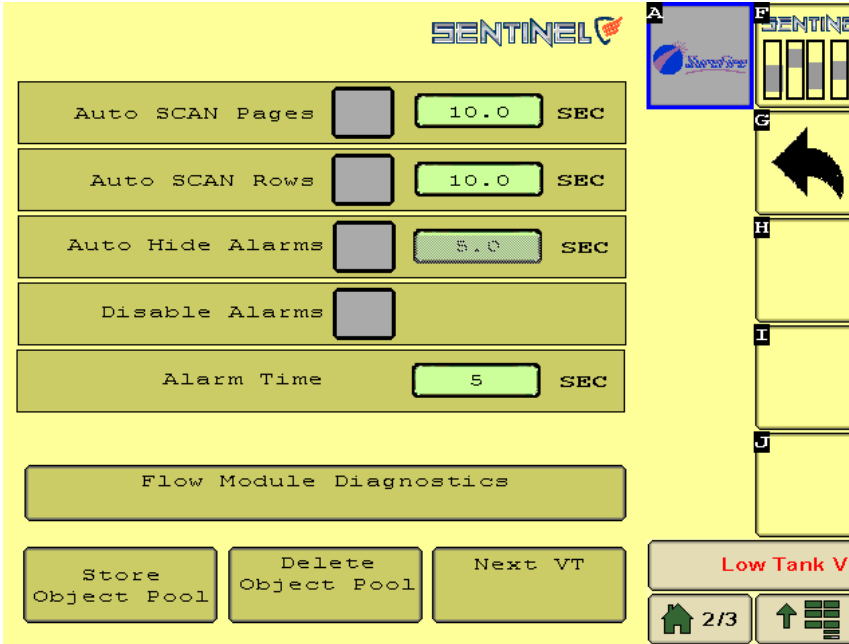
- a. Checking Use Lift Switch will use the physical lift/height switch input to the Sentinel to enable/disable rows and alarms.
- b. Checking Invert Lift Switch allows the logic of implement up and down to be switched if you are showing implement up when it is actually down
- c. Checking use pump speed allows the Sentinel ECU to enable/disable rows based upon the speed signal being sent to the pump. This requires extra harnessing if LiquiShift not enabled
- d. Checking Enable Task Control tells the Sentinel to connect to the display as a Task Control client. Then the display can send the Sentinel section commands and Rate commands.
- e. Checking Enable IntelliSection Technology tells the Sentinel to use smart sensing to determine if sections are on or off based upon flows of the rows in that section.

5. The Following Button contains the Flow and Rate setup box that sets up rate options.

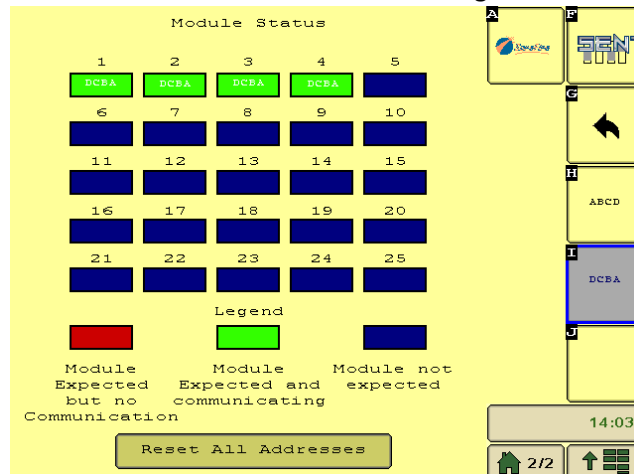


- a. Use the top button to set the flow mode. The choices are Manual Rate, Auto Rate, and Prescription Rate.
  - a. Manual Rate – Type in the rate you want to run at
  - b. Auto Rate – AutoCalculates the rate based upon the average flow of all the rows.
  - c. Prescription Rate is only available if Task Control has been enabled, display will send expected prescription rate to the Sentinel
- b. Simulate Flow is used for demoing and shows flows on the run screen when speed and section conditions are met.
- c. Flow Adjustment – Use this to adjust the flow reading on the screen to match your rate controller reading if there is some variation between the two flow meters.

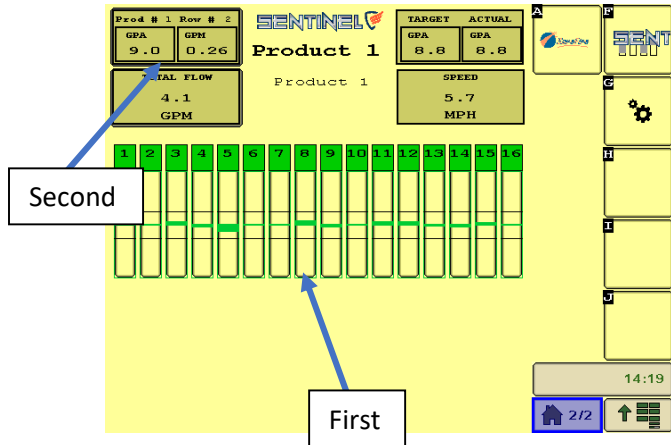
6. The next page button takes you to the settings and alarms screen



- Checking the box for Auto Scan will cause the Sentinel to switch pages automatically based on the time delay entered.
- Checking the box for Auto Scan rows will cause the Sentinel to switch the currently displayed row automatically to the next row based on the time delay entered.
- Checking the box for Auto Hide alarms will cause alarms to popup and then be hidden automatically upon reaching the time delay set
- Checking the box for Disable alarms disables all alarms from the Sentinel
- Alarm Time sets how long an alarm has to be in alarm before it is shown on the screen.
- Pressing the Flow Module Diagnostic button shows active module screen to see with Sentinel Flow modules are communicating with the ECU.



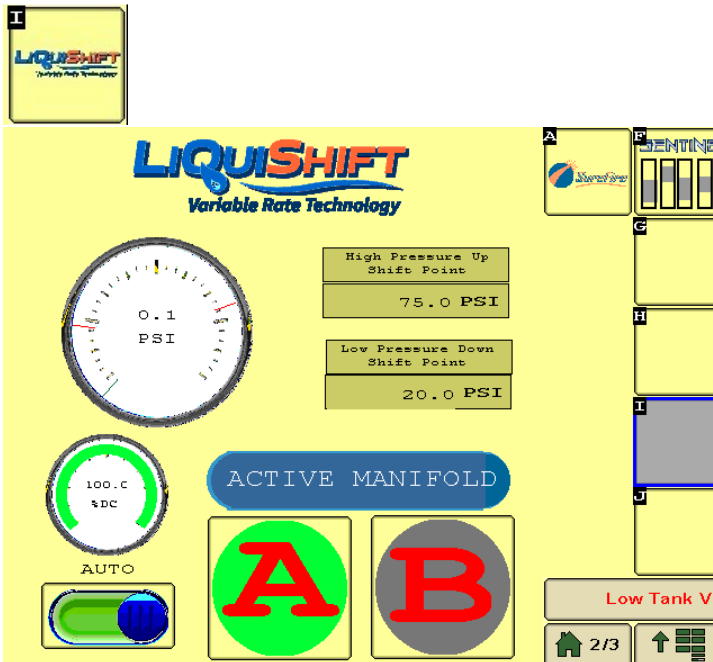
7. To see row detail, click row to view and then press row view button in upper right corner.



8. Alarms will activate even if the Sentinel Screens are not currently display and will look like the following



9. LiquiShift Control, If LiquiShift is enabled on the product setup page, then the following Icon is available from the run screen



- The high and low pressure shift points can be adjusted by clicking on the setpoint and adjusting the value. This will move the red targets on the pressure gauge accordingly.
- The %DC shows the current pump speed duty cycle.
- The Auto/Manual switch allows for manual operation of sections. Putting the slider to manual and then tapping on A or B will toggle A or B each time the button is pressed.