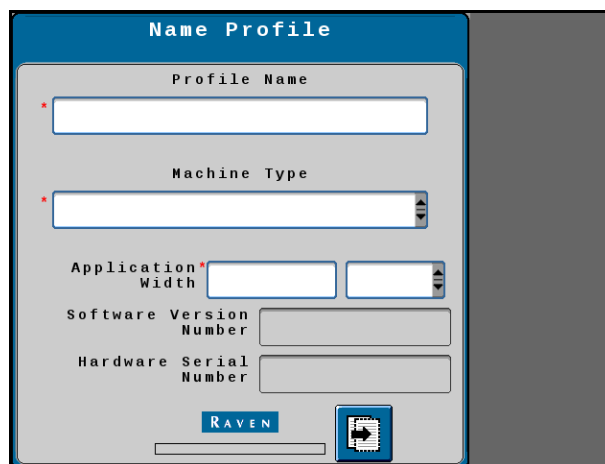# NIR SENSOR CALIBRATION WIZARD NOTES

NOTE: Complete the following calibration steps to setup an RCM for liquid manure applications using the Dinamica Generale NIR sensor. Refer to the RCM Operation Manual (P/N 016-0171-637) for assistance with setting up or operating the RCM in a liquid slurry application.

1. Enter the profile name for the implement.

FIGURE 1. Name Profile Page

2. From the Machine Type drop-down options, select Liquid Fert. Tool.
3. Select the Next button in the lower, right corner of the page to proceed with the initial calibration until prompted to set the application mode.
4. Use the Application Mode drop-down list to select either Liquid Slurry or Liquid Slurry Dragline as the application type to be controlled by the RCM.

FIGURE 2. Setup Application Type Page

5. Select the Next button in the lower, right corner of the page to proceed until prompted to setup the NIR sensor.
6. To use near infrared (NIR) sensor data, select the NIR Sensor Enabled check box option.

NOTE: The NIR unlock (P/N 077-0180-332) for the RCM-U is required to enable the NIR sensor features.

FIGURE 3. NIR Setup Page

7. Use the Task Controller Documentation Type drop-down to select one of the following options.

Advanced ISOBUS NPK. Nitrogen (N), Phosphorus (P2O5), and Potassium (K2O) mode uses a specific structure for manure application reports and documentation. This option may not be compatible with all task controllers and may not be preferable for all application reporting requirements.

Generic ISOBUS Compatibility. This mode uses a generic multi-product documentation format. This mode should be compatible with any multi-product task controller.

Automatic. This mode will set the task controller interaction to the Advanced NPK type when a CNHi task controller is detected and to Generic Compatibility for all other task controllers.

8. Select the Next button in the lower, right corner of the page and complete the remainder of the calibration wizard.

OPERATION NOTES

When configured for NIR operation, the RCM Home page provides much of the same functionality and navigation as a conventional multi-product Home page, but with a few differences based upon the nature of slurry and slurry dragline applications.

• The RCM is only capable of controlling one of the slurry nutrients. Application of the remaining nutrients is logged at the rate which is being applied based upon the given ratios available in the slurry.

• The nutrient or product to which RCM is controlling rate is shown as the highlighted tab (for example, PR1 as shown below).

FIGURE 4. Product 1 Active
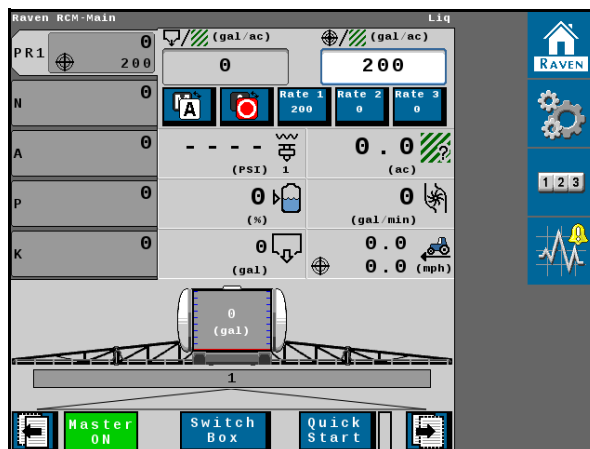
- When controlling nutrients or products in NIR mode, the smaller number on each nutrient tab is the percent of that nutrient in the total product flow.
- To change the active nutrient or product, tap the product tabs along the left of the home page to view the Setup Rates page. Next, use the Nutrient Selection drop-down to set the desired nutrient to which the RCM will control rate.

NOTE: It is only possible to change nutrient selections while not actively applying or in a job or task.
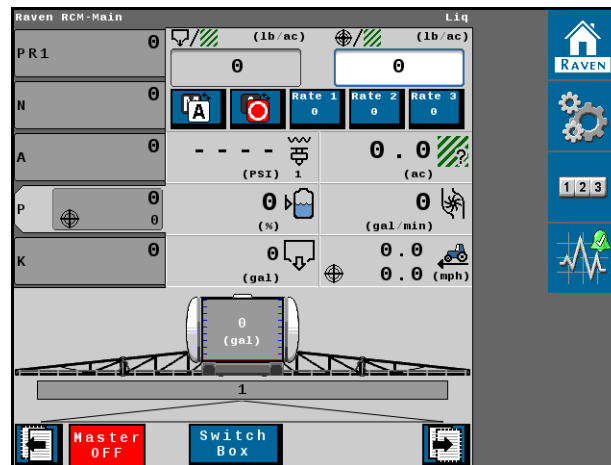
FIGURE 5. Setup Rates Page
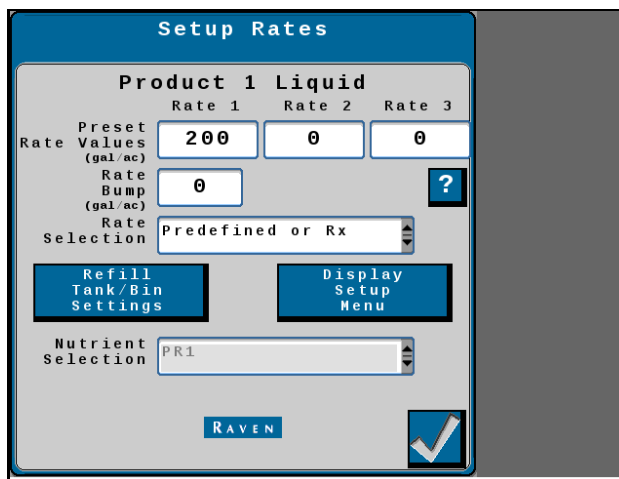
- The following image is an example using P (Phosphorus) as the active nutrient which RCM will control rate.
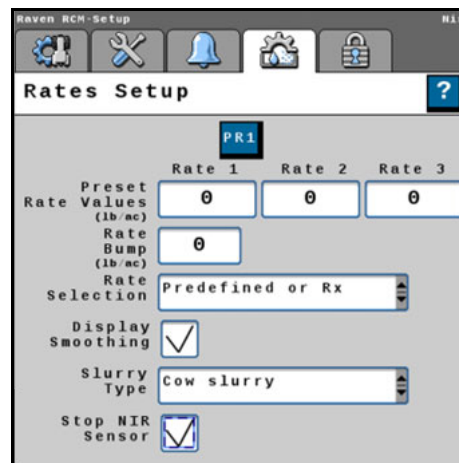
FIGURE 6. P as Active Nutrient

RATES SETUP PAGE NOTES

FIGURE 7. P as Active Nutrient

- Stop logging of the NIR sensor data by selecting the Stop NIR Sensor check box on the Rates Setup page.

NOTE: It is only possible to stop sensor logging while not actively applying with the master switch in the OFF position and with no active job or task on the display or field computer.

- Use the Slurry Type drop-down to calibrate the NIR sensor. Select the option which best describes the slurry being applied:
  - pig slurry
  - cow slurry
  - digester
  - slurry
  - mixed