



This document is designed to provide basic support for implementing variable rate seeding in common precision ag equipment. It is neither an operating manual nor a set-up guide for the monitor. Rather, it is a general set of principles designed to provide help with trouble shooting while preparing for a VRS operation.

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Updated: 3/29/2016

Prescription File Management



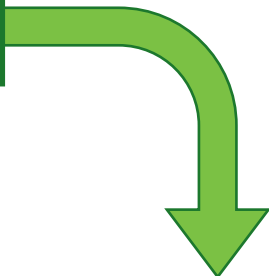
Prescription File Management

Ag Leader InCommand 1200

1

When using shapefiles for VRS Prescriptions, there will typically be 4 unique file types (*.shp, *.shx, *.dbf, and *.prj) for each prescription generated.

Prescription units must be in **seeds per acre**.

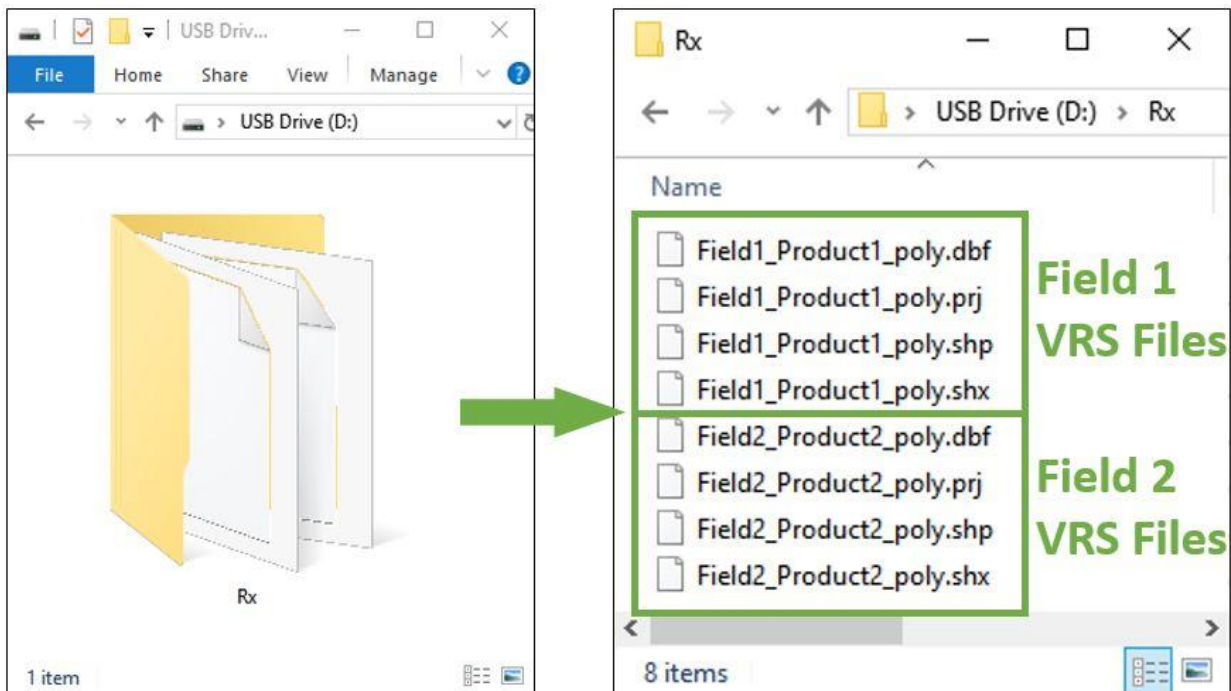


2

On a blank USB thumb drive, create a folder named "Rx" at the highest level of the drive (i.e. D:Rx).

Using Windows Copy/Paste tools, copy all the individual shapefiles into this folder. There are four files per field, so for a customer with more than one prescription per field, there will be several files in this new Rx folder.

Multiple VRS shapefiles can be in the same folder. To help identify the correct shapefile to use in the field, use the field name and product name to name the shapefile.



Importing and Planting with a VRS Prescription Map



Importing and Planting with VRS Prescription Files Ag Leader InCommand 1200

1

Insert the USB drive into the right side of the InCommand display.



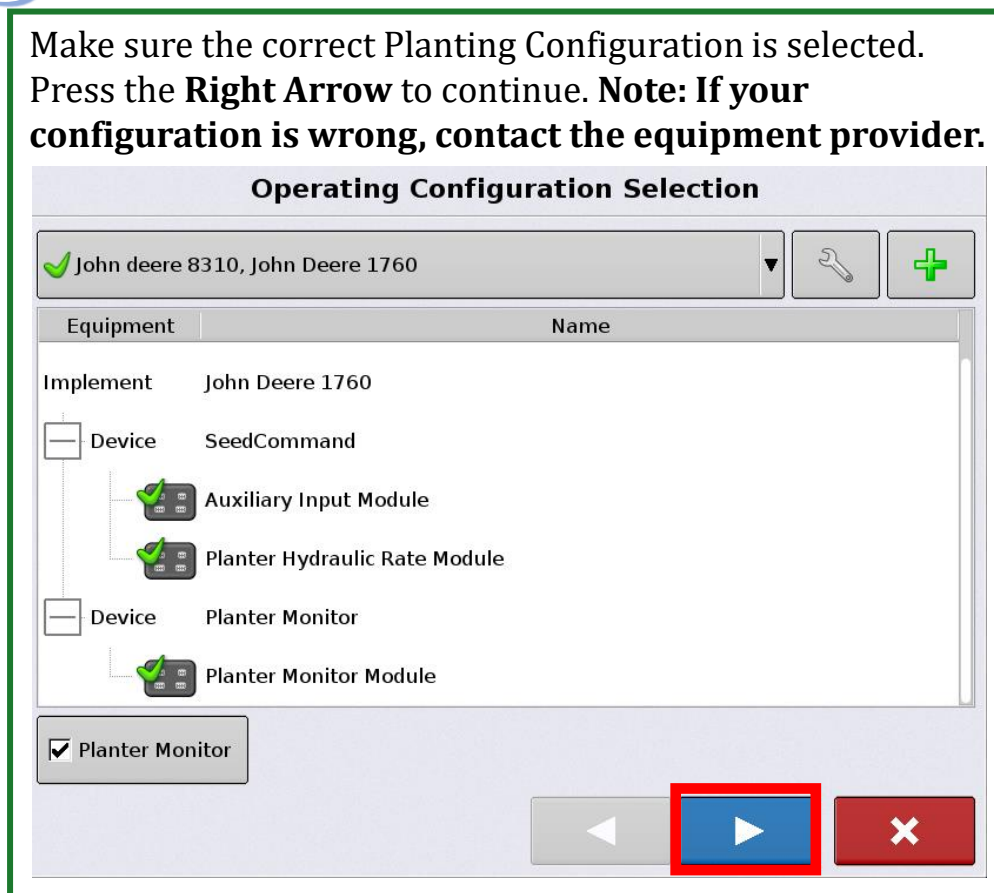
2

Press **Planting** to start the event.



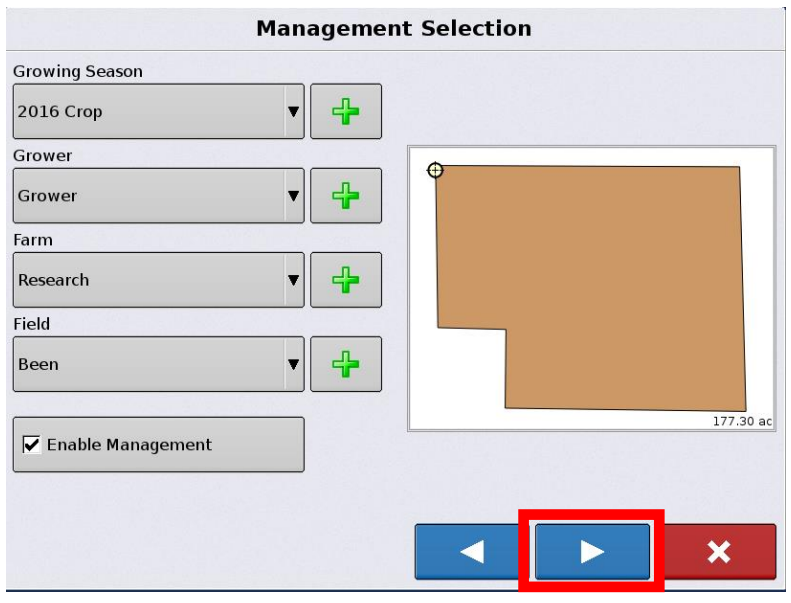
3

Make sure the correct Planting Configuration is selected. Press the **Right Arrow** to continue. **Note: If your configuration is wrong, contact the equipment provider.**



4

Make sure to select the current Grower, Farm, and Field you are working with. Press the **Right Arrow** to continue.



The screenshot shows the 'Management Selection' screen. It features several dropdown menus: 'Growing Season' (2016 Crop), 'Grower' (Grower), 'Farm' (Research), and 'Field' (Been). Each dropdown has a green plus sign button to its right. Below these is a checkbox labeled 'Enable Management' which is checked. To the right of the dropdowns is a map showing a brown field area with a small circle at the top left corner and the text '177.30 ac' at the bottom right. At the bottom of the screen are three buttons: a blue left arrow, a blue right arrow (highlighted with a red box), and a red 'X' button.

5

Select the current product you're applying by pressing on the button with the **Down Arrow**. Once the product is selected, press the **Right Arrow** on the screen.

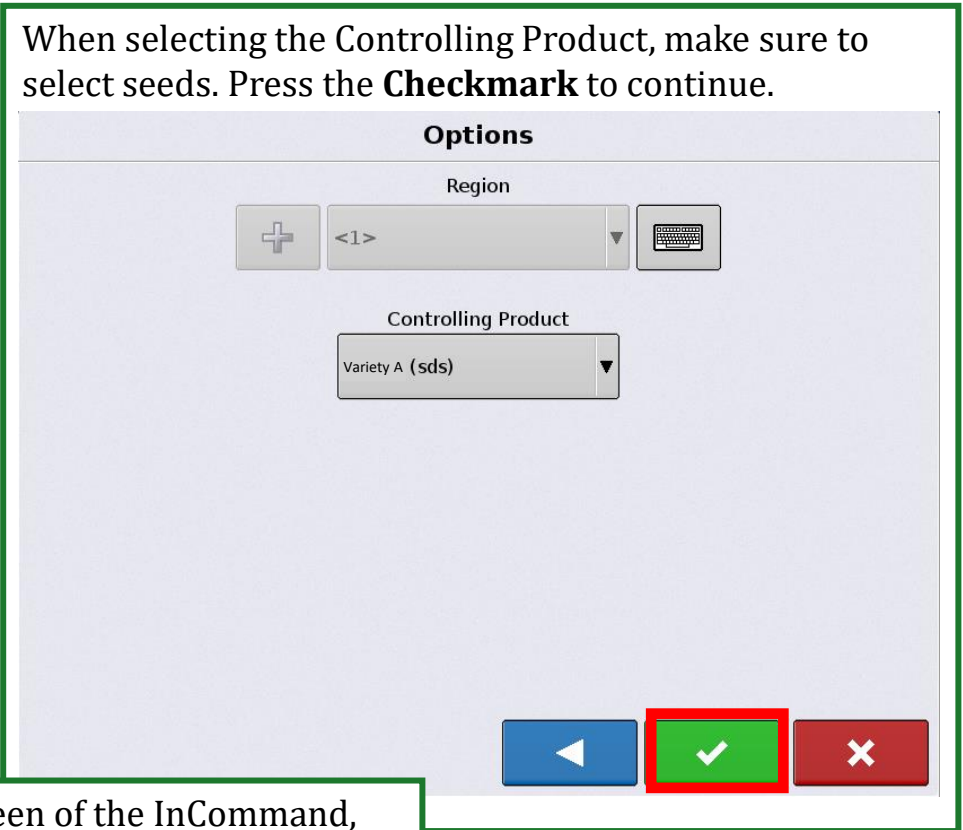


The screenshot shows the 'Product Selection' screen. It features a 'SeedCommand' section with a green progress bar. To the right is a dropdown menu showing 'Variety A' (highlighted with a red box) and a green plus sign button. At the bottom of the screen are three buttons: a blue left arrow, a blue right arrow (highlighted with a red box), and a red 'X' button.

Importing and Planting with VRS Prescription Files Ag Leader InCommand 1200

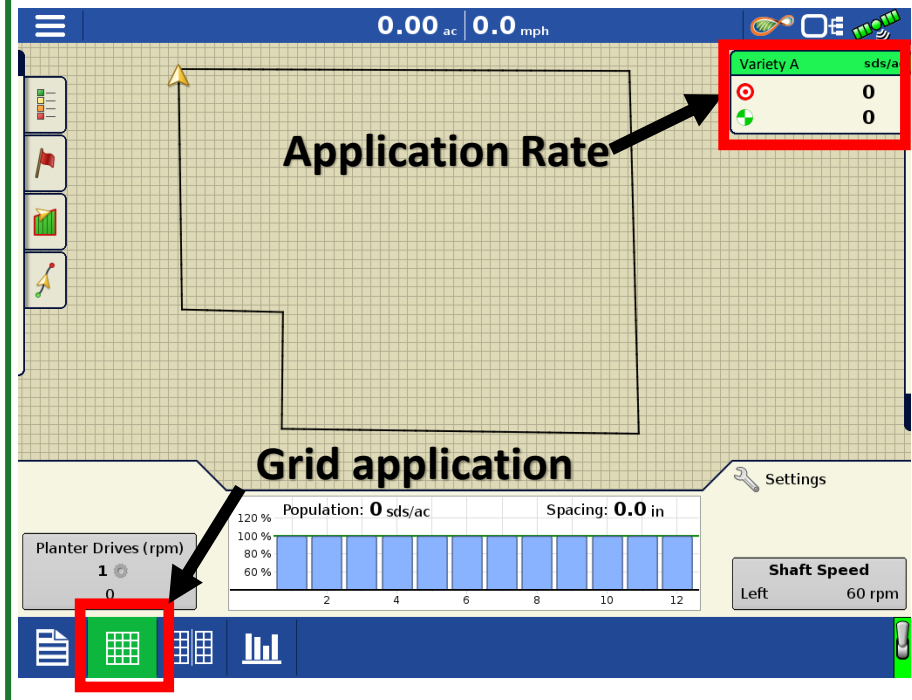
6

When selecting the Controlling Product, make sure to select seeds. Press the **Checkmark** to continue.



7

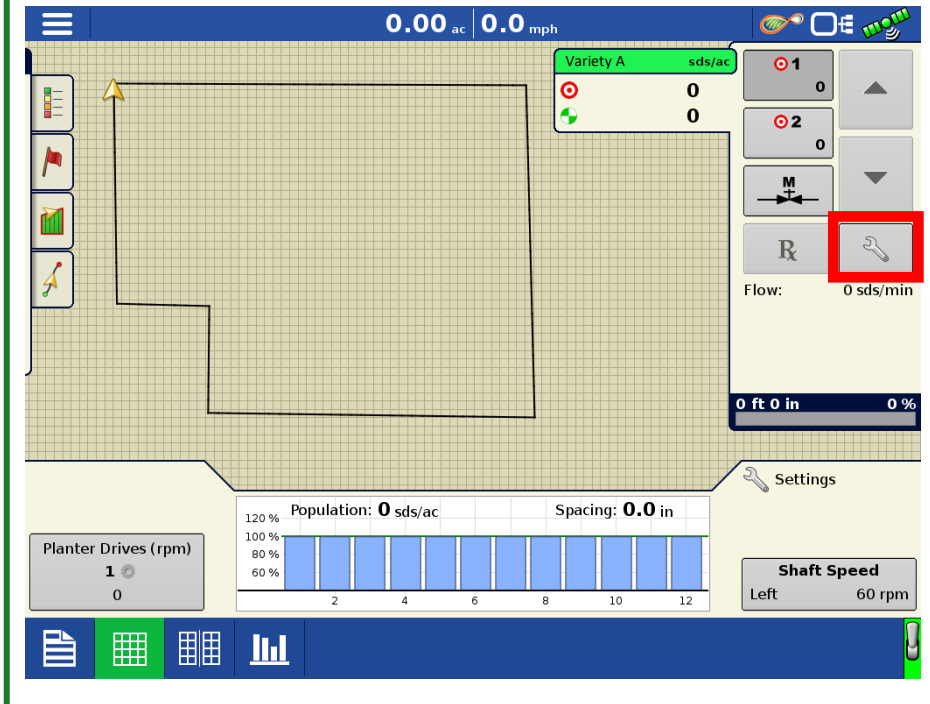
From the grid application screen of the InCommand, press the Application Rate tab to expand the window. **If the grid application screen is not available, please consult with the equipment provider.**



Importing and Planting with VRS Prescription Files Ag Leader InCommand 1200

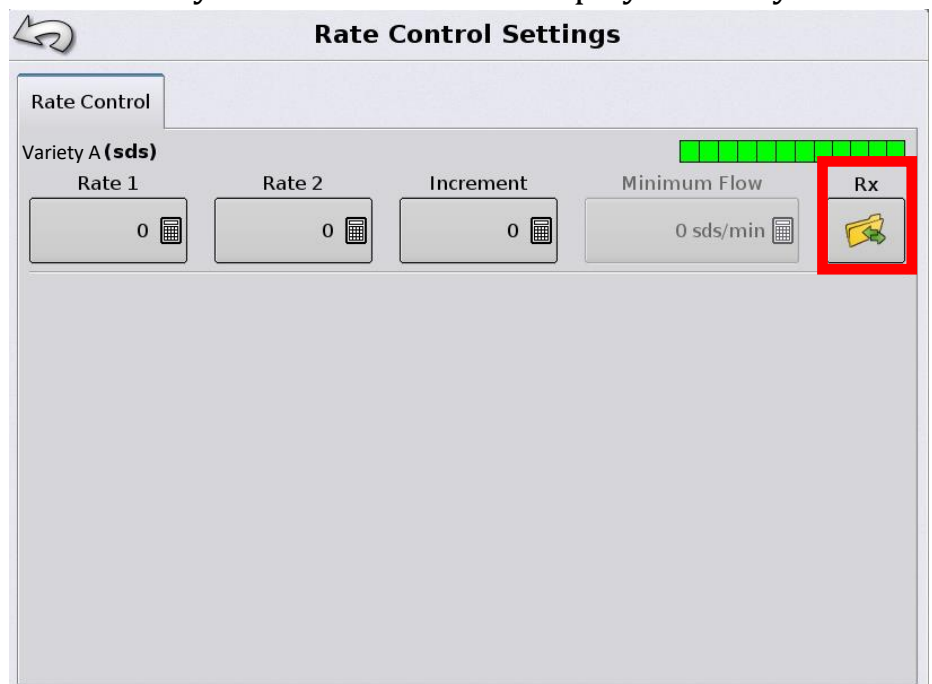
Press the **Wrench** button on the right side. If the wrench is not available, you may need to press the Application Rate button to make this visible.

8



9

On the Rate Control Screen, press the **Folder** icon under the Rx label. If the icon is not shown or active, the USB drive is likely not installed in the display correctly.

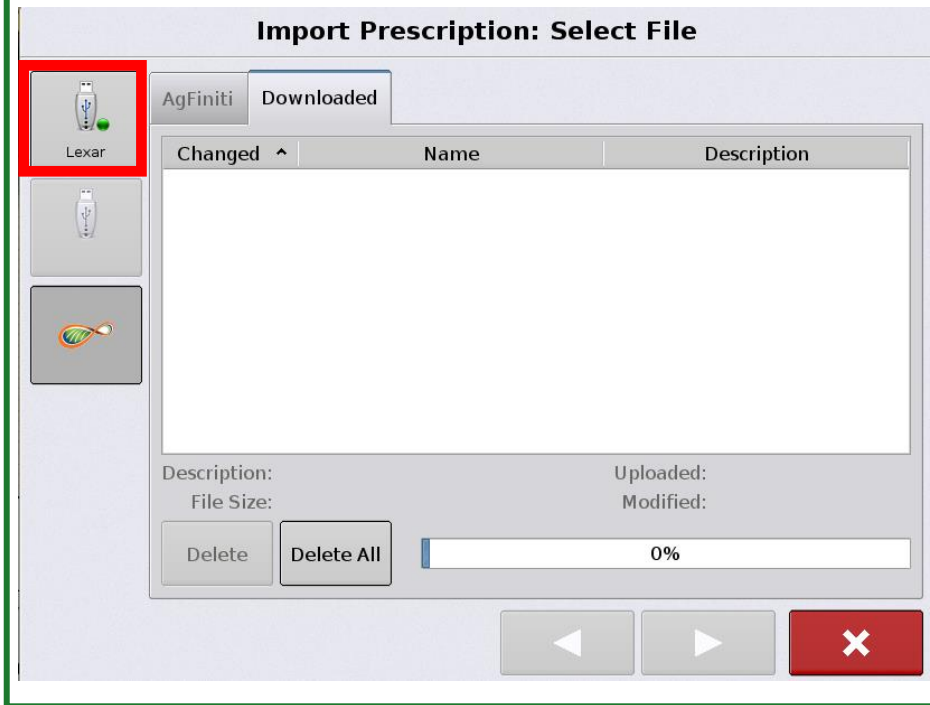


Importing and Planting with VRS Prescription Files

Ag Leader InCommand 1200

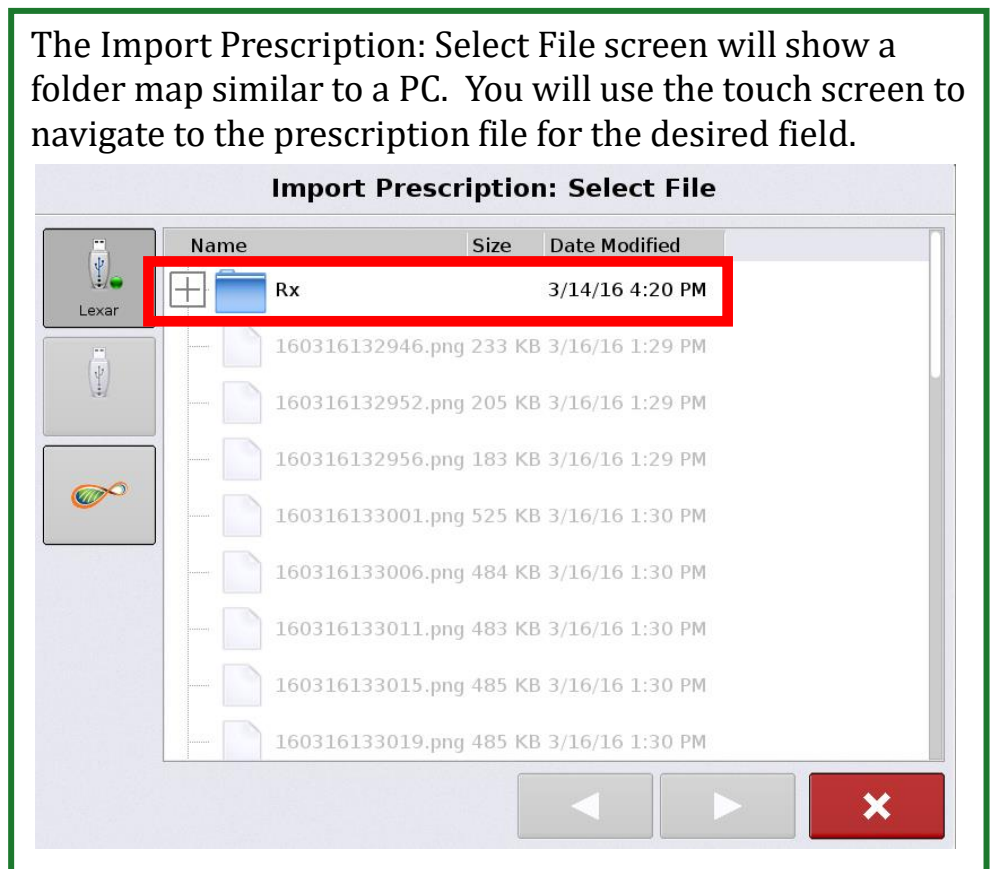
Press the **USB** drive to load the prescription from the USB. When using **AgFiniti** or **AgSetup**, you can save the files to the display.

10



11

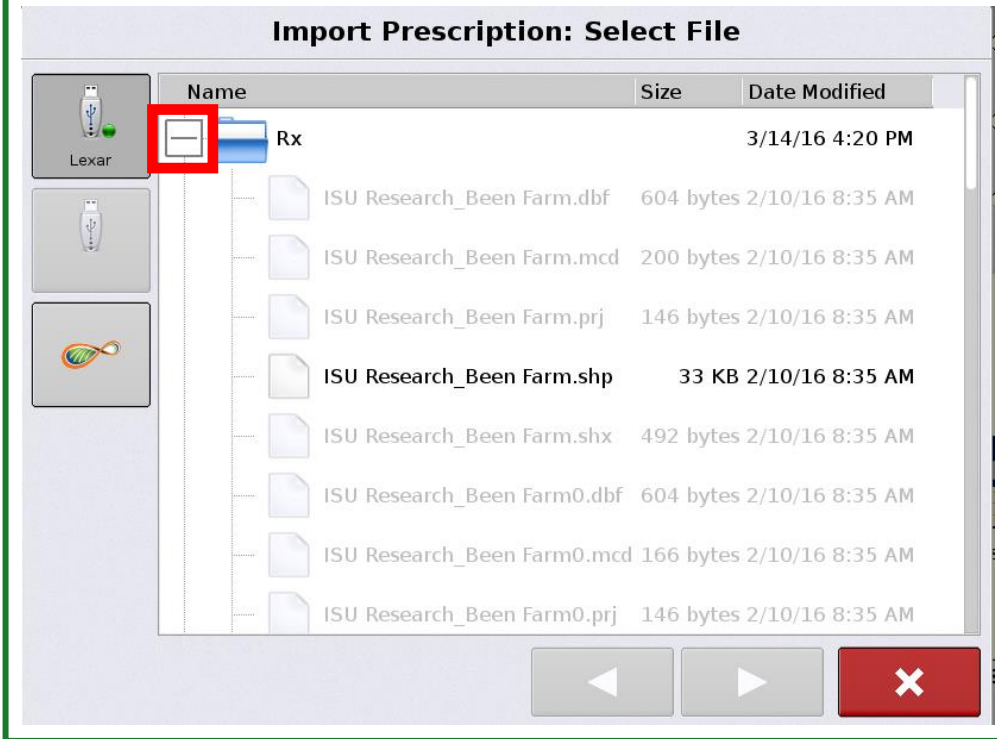
The Import Prescription: Select File screen will show a folder map similar to a PC. You will use the touch screen to navigate to the prescription file for the desired field.



Importing and Planting with VRS Prescription Files Ag Leader InCommand 1200

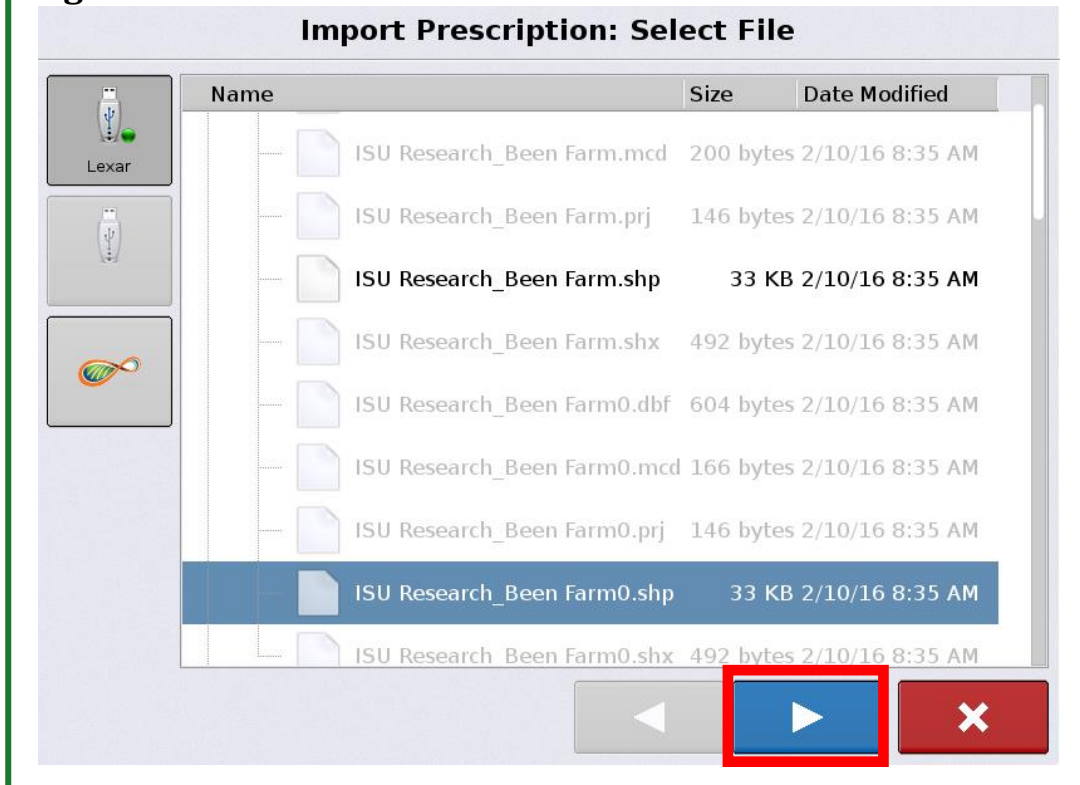
12

Press the **Plus** sign next to the Rx folder to see the files inside the folder.



13

Press to highlight the **shapefile** for the desired field. Press the **Right Arrow** to continue.



In the Import Prescription window, make sure the Column is set to the variety for the current field. This is typically not the default.

Other tags for this are Tgt_Rate, Target_Rate, or Seeding_Rate among others.

When the correct Column is selected you will see a series of values in the Column Preview window that will be very close to the seeding rates prescribed for the field.

Do not proceed until the column preview shows valid seeding values.

14

Import Prescription: Select Column

Column: Variety A

Column Preview

32000

32000

30000

34000

34000

32000

33000

32000

34000

Product: Variety A

Units: seeds

Default Rate: 33000

Navigation buttons: Back, Checkmark, Cancel

Change Units to **seeds** by pressing on the drop down.

Make sure there is a default rate entered. This will ensure application if GPS signal is lost during operation. Press the **Checkmark** to accept the prescription.

15

Import Prescription: Select Column

Column: Variety A

Column Preview

32000

32000

30000

34000

34000

32000

33000

32000

34000

Product: Variety A

Units: seeds

Default Rate: 33000

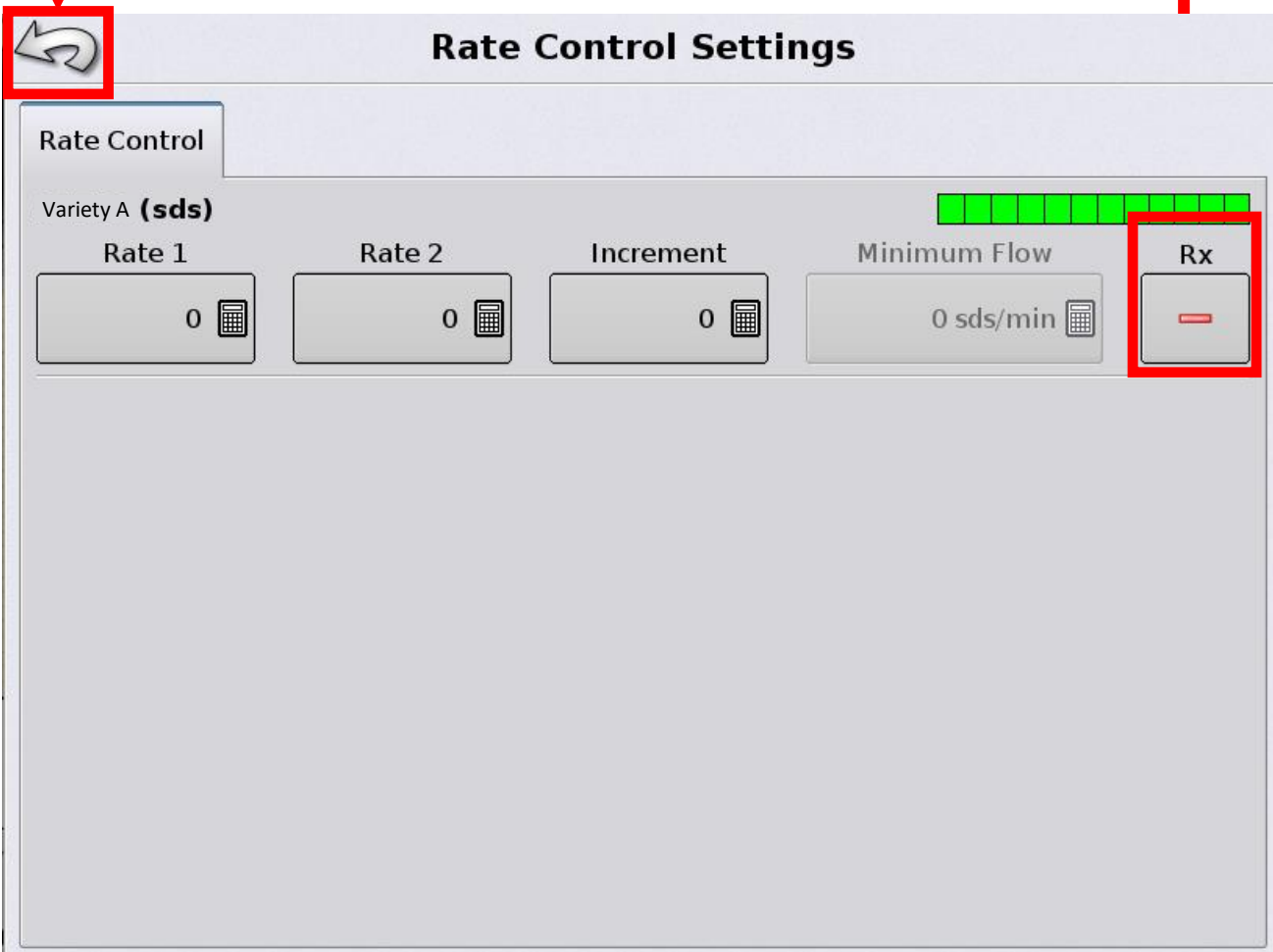
Navigation buttons: Back, Checkmark, Cancel

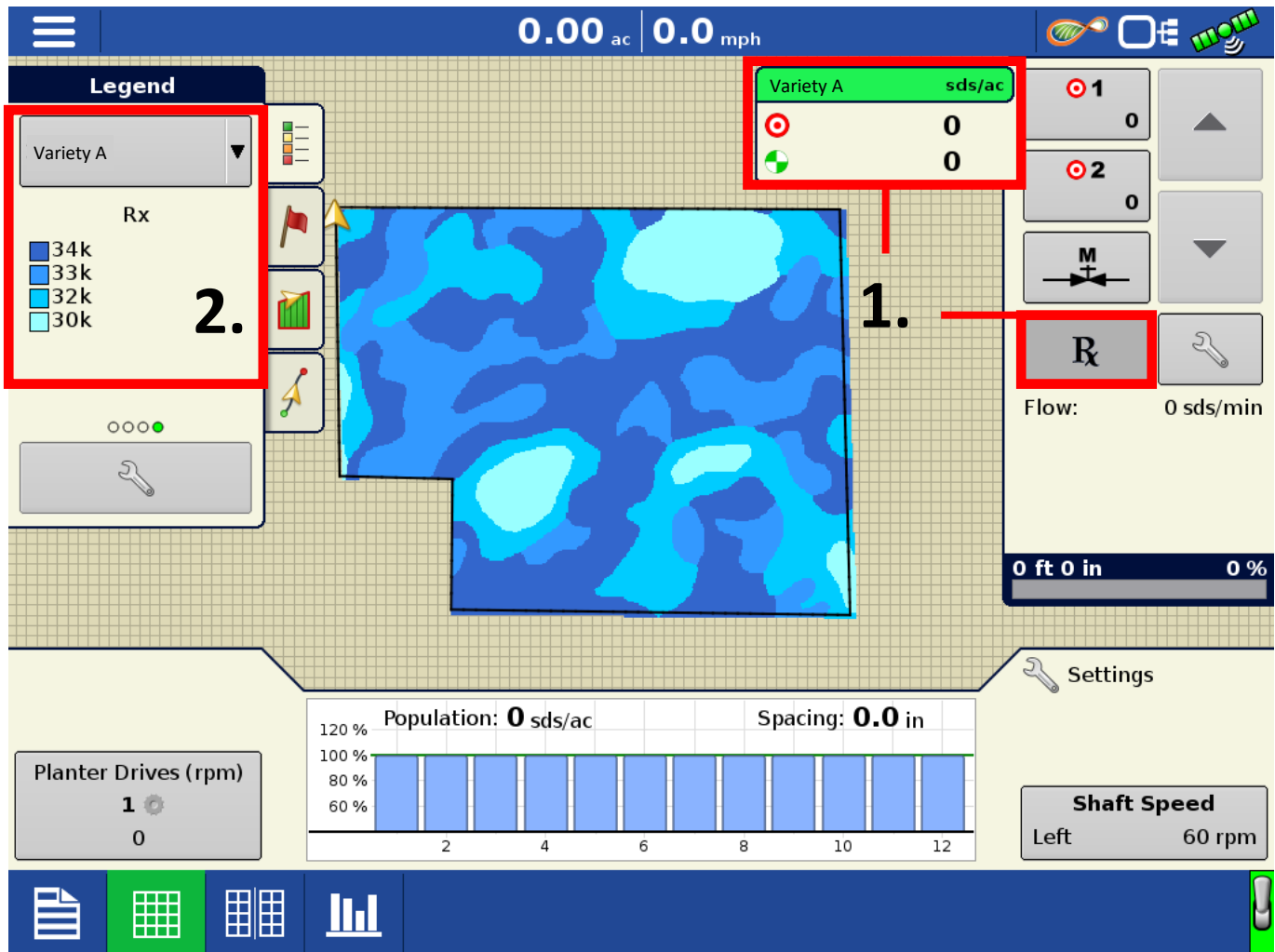
16

After accepting the VRS prescription shapefile, you'll return to the Rate Control Settings window.

Notice that the USB drive icon has been replaced with a red negative bar (**do not press**). This indicates that a VRS map is loaded. To change maps, you first need to delete the current map by pressing the red button. Then repeat the VRS process from Step 9 (selecting the Rx folder).

To return to the main run screen and execute the VRS prescription map, simply press the back arrow return button at the top left of the active window.





Confirm that the VRS map was properly loaded by reviewing the following check list:

1. Make sure the Rx seeding rate is selected, and the Target rate matches the current VRS zone.
2. Review the Rx rates on the reference map, and confirm they match the seeding plan.

Cleaning up Prescriptions

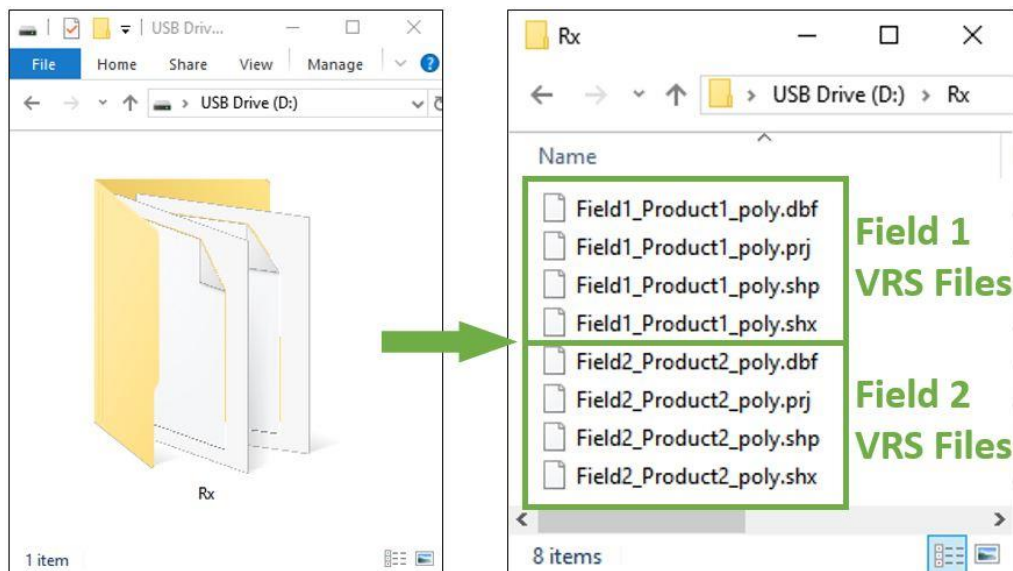


1

To clean up the Prescription files, the USB Drive will need to be connected to a computer. **Note: Prescription files cannot be saved directly to the monitor when using a USB drive with the following file types: AgSetup, Shapefiles or *.irx.**

2

When in the Rx Folder, **delete** the previous shapefiles from the past year. The folder can be left on the USB for later use.

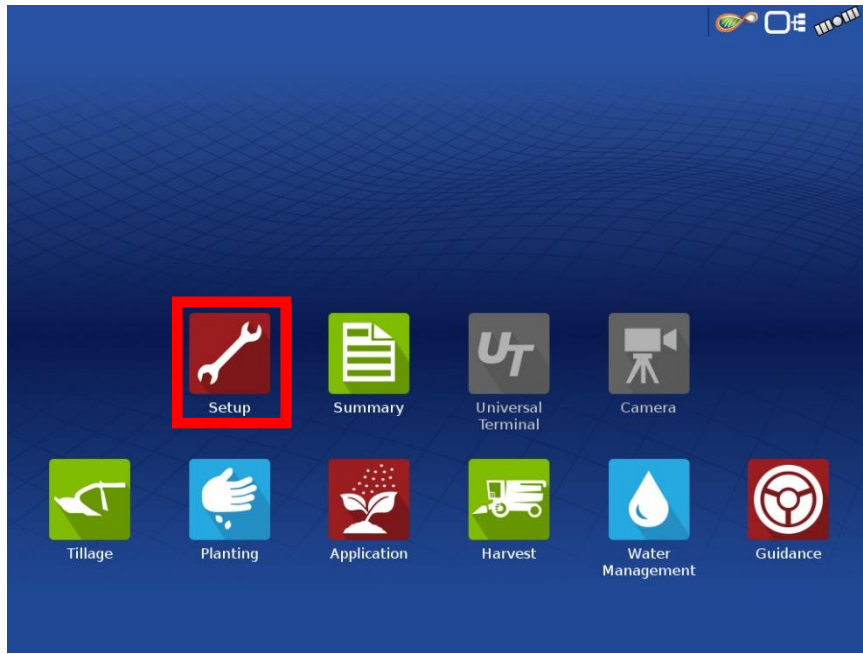


Creating Varieties for Planting



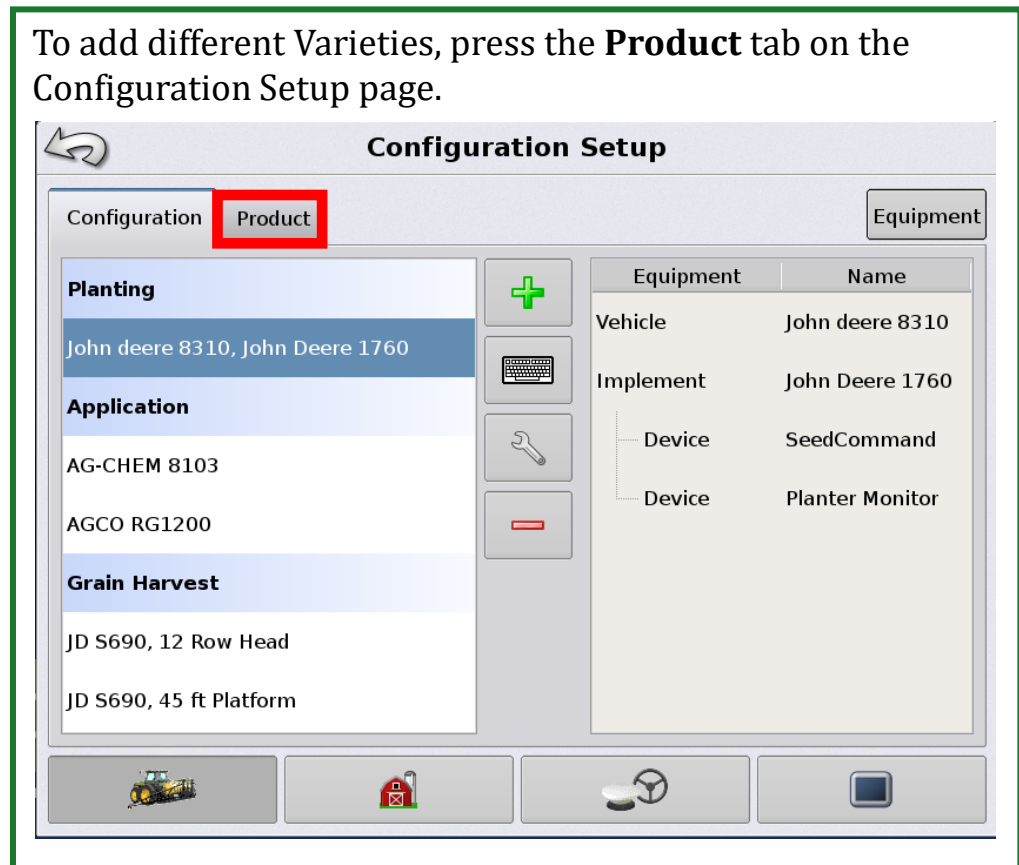
1

Press **Setup** to create a new product.



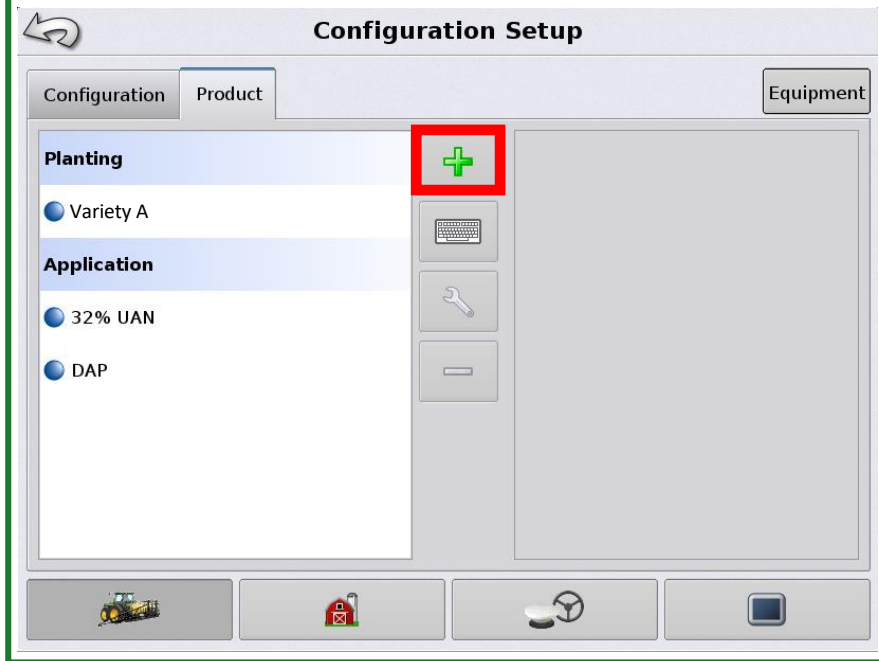
2

To add different Varieties, press the **Product** tab on the Configuration Setup page.



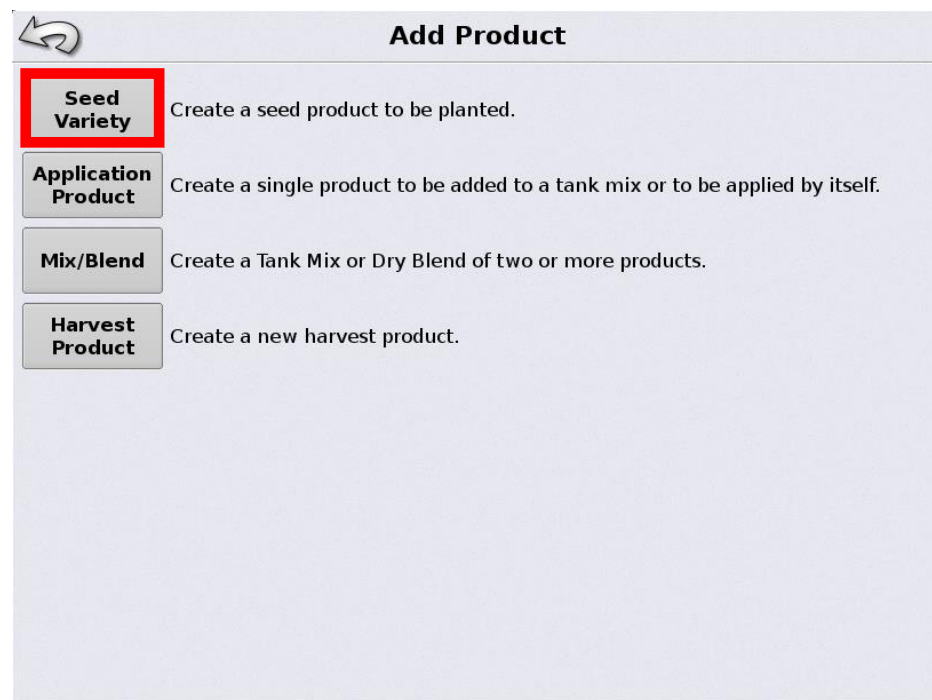
3

Review the current product list. If there are additional products to add, press the **Plus** icon to add a new product.



4

Press the **Seed Variety** icon on the Add Product page. This creates a new Variety to be planted.



5

To change the Crop, press the box under the text. **Example: Corn.** Press the right arrow to continue.

Variety Setup Wizard: Crop Type

Enter Crop and Units

Crop
Corn

Units as Planted
seeds

Navigation buttons: Left arrow, Right arrow (highlighted), and X.

On the Variety Setup Wizard: Variety Name page press the **Wrench** icon to create a new Variety or Hybrid Brand.

6

If all manufactures have been created, press the down arrow that says None and choose the correct Brand, example Pioneer. Proceed to step 10 (variety name)

Variety Setup Wizard: Variety Name

Enter Variety Manufacturer and Name

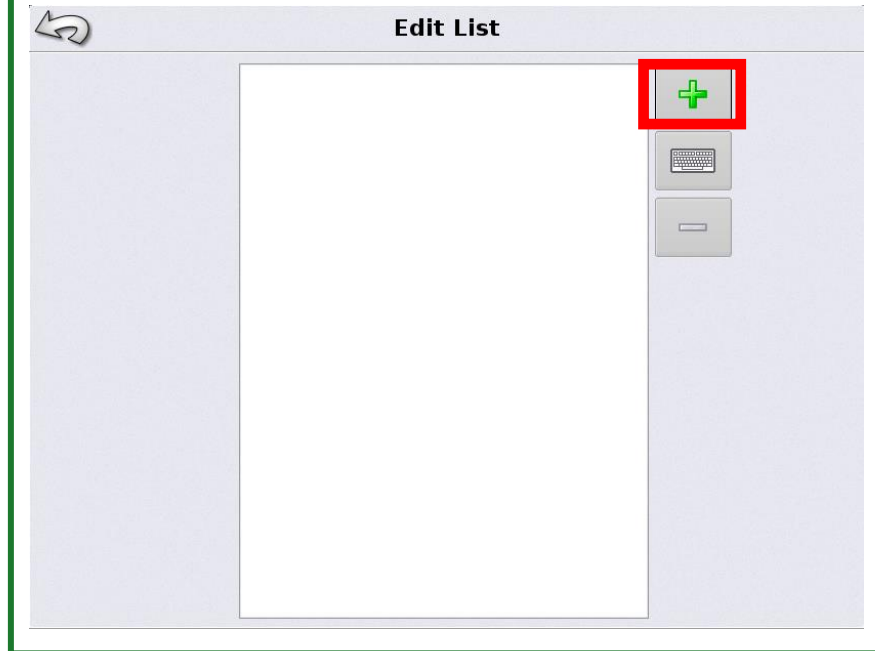
Variety or Hybrid Manufacturer
None

Variety or Hybrid Name

Navigation buttons: Left arrow, Checkmark, and X.

7

On the Edit List screen, press the **plus** icon to add a new Brand.



8

A pop up window will appear to Add Item. Use the key board to enter in the Brand name, **example Brand**. Press the **Checkmark** when the correct name is entered.



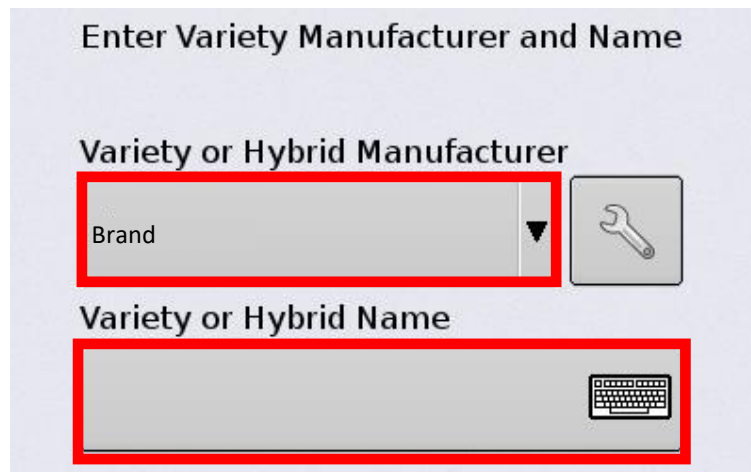
9

Press the **Back Arrow** after all of your seed manufactures have been entered.



10

When the manufactures are entered, press the drop down arrow to select the correct Brand, **Example: Brand**. To enter in the Variety or Hybrid Name, press the keyboard icon. Use the keyboard to enter in the Variety or Hybrid Name.



11

Use the Keyboard to enter in the Product Name. Press the **Checkmark** when you are finished.

Product Name

Variety A

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

✓ ✕

12

Press the **Checkmark** once the Brand and Variety name has been entered. To create more Varieties, repeat steps 3 to 6 to get to the Variety Setup Wizard. Then select the correct Brand and enter in the variety name.

Variety Setup Wizard: Variety Name

Enter Variety Manufacturer and Name

Variety or Hybrid Manufacturer

Brand

Variety or Hybrid Name

Variety A

← ✓ ✕

Cleaning up Products

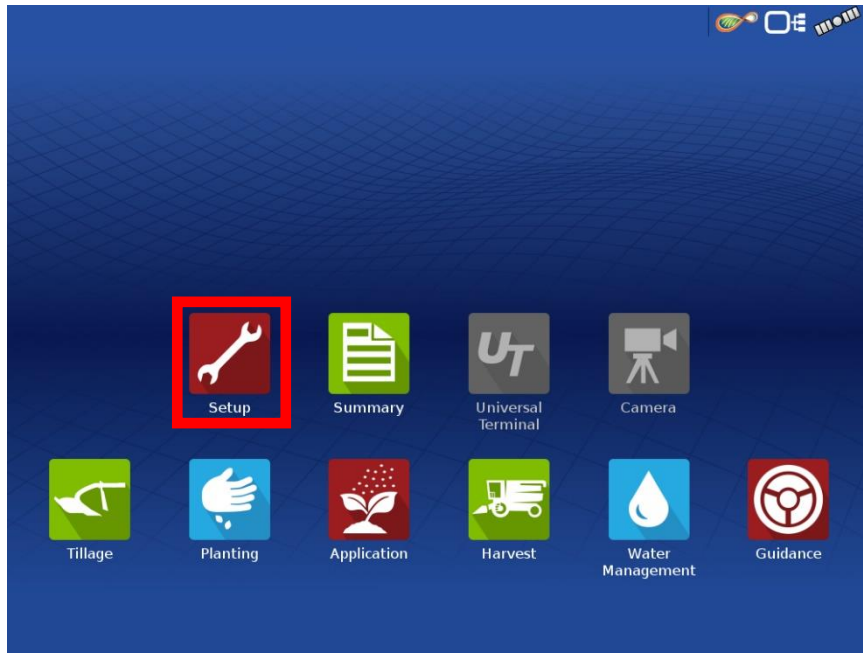


Cleaning up Products

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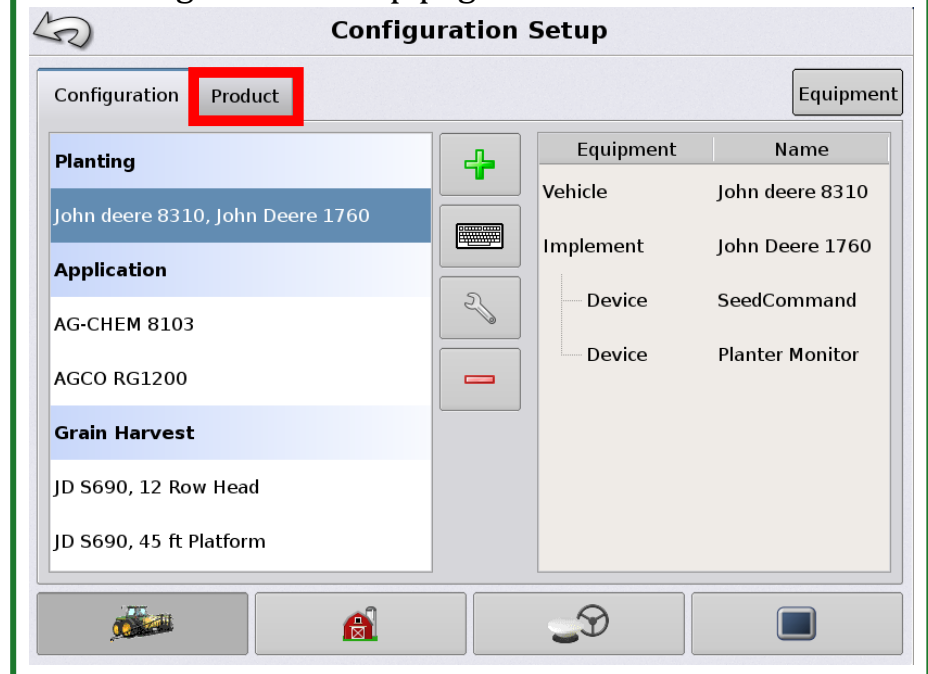
1

Press **Setup** to delete product.



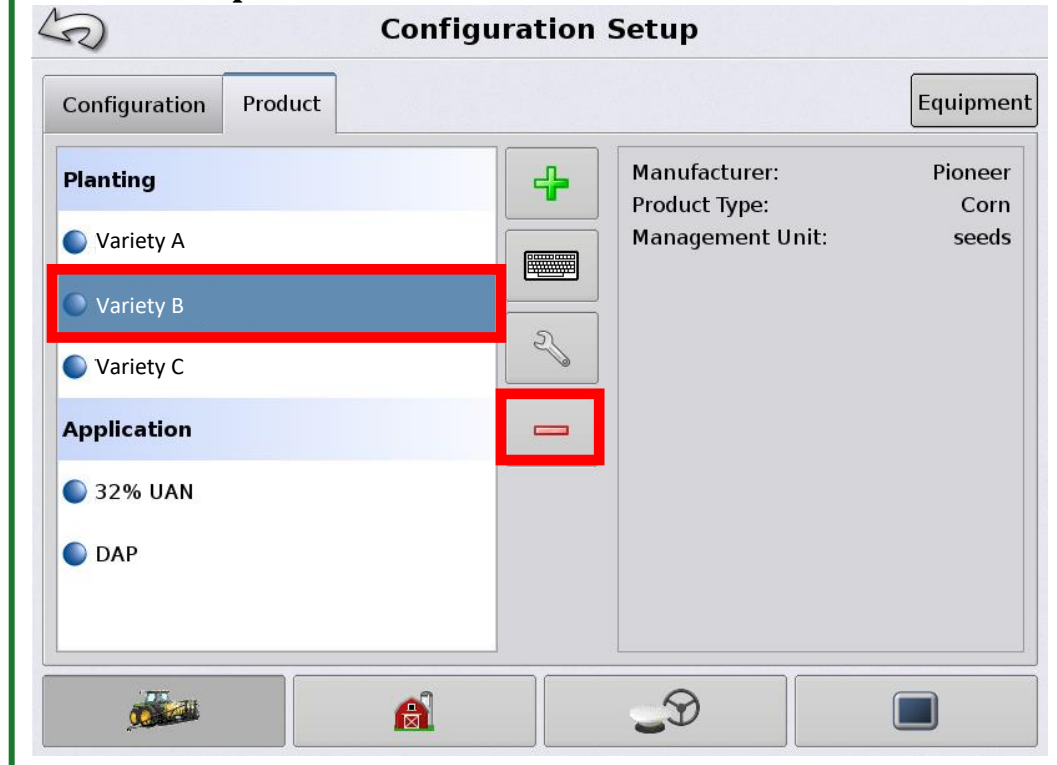
2

To delete Variety products, press the **Product** tab on the Configuration Setup page.



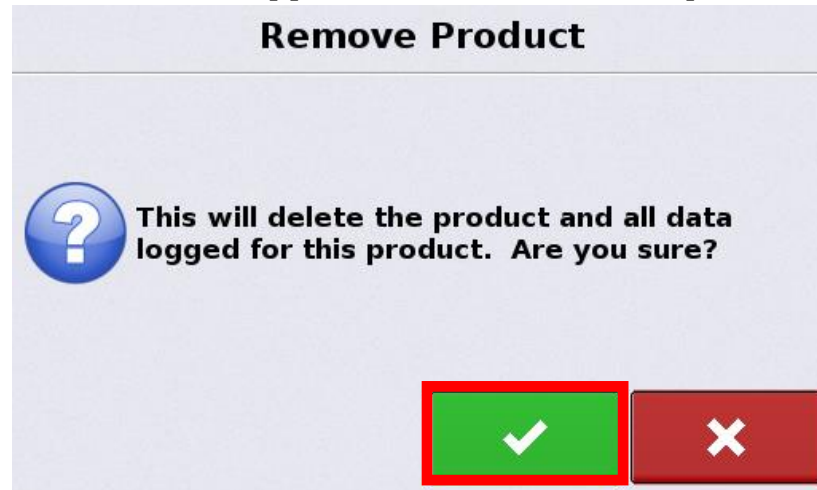
3

If there are old, unused products in the list, they can be deleted. Press on the product name; **example Variety B** to highlight the product. To delete the product, press on the **Red Minus** icon. **Be Cautious as this will delete all logging data associated with the deleted product!**



4

Be Cautious as this will delete all logging data associated with the deleted product! Press the **Checkmark** to approve the removal of the product.



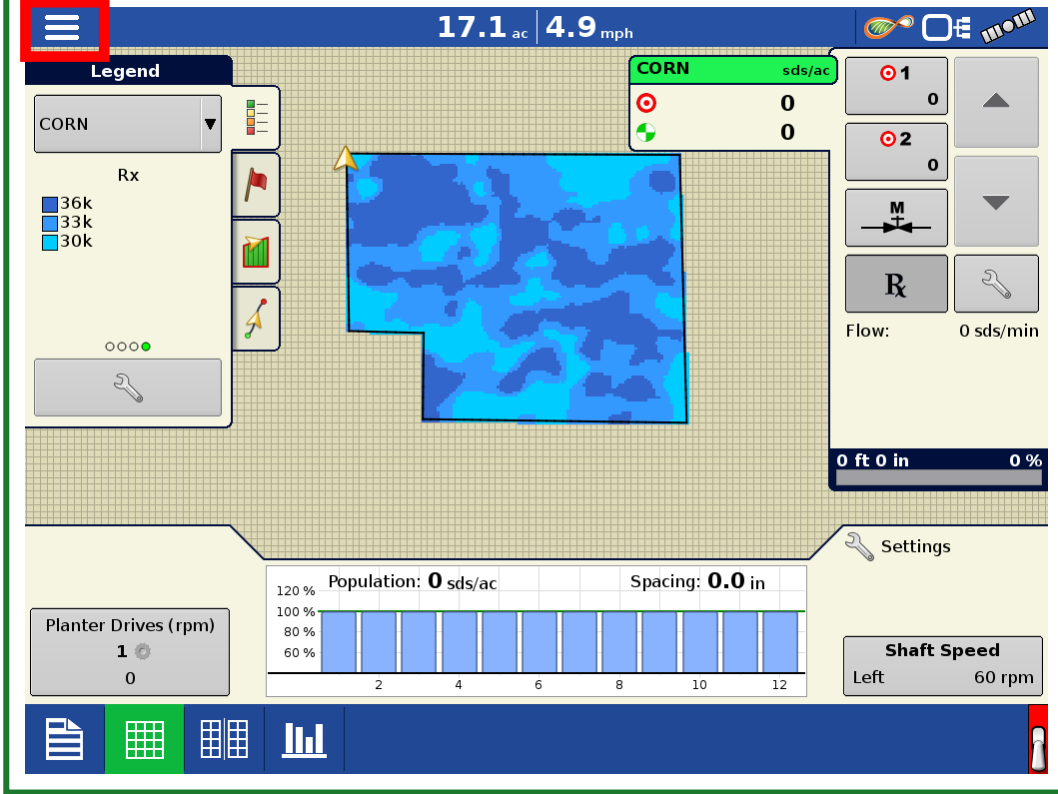
Changing Varieties Within a Field



Changing Varieties Within a Field Ag Leader InCommand 1200

1

From the grid screen or the summary screen, press on the **Menu** icon in the top left corner of the screen.



In the menu screen, press on **Product**.

2

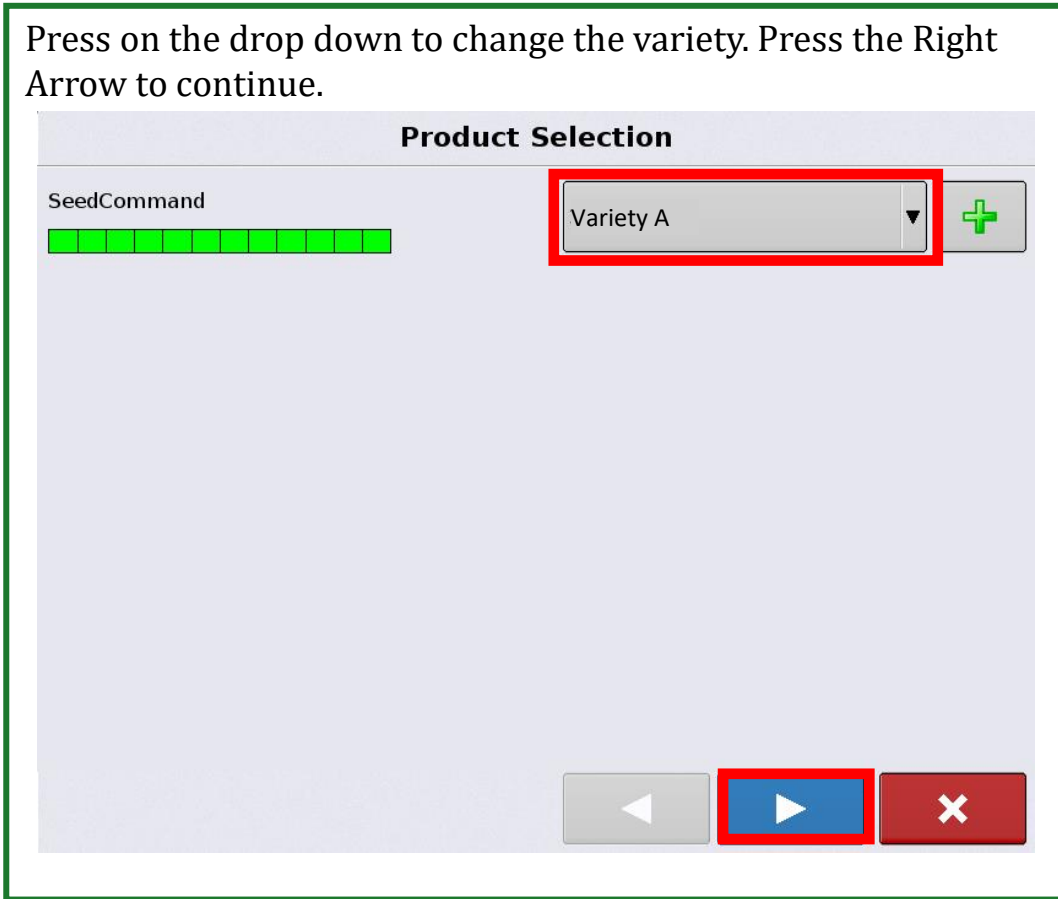


Changing Varieties Within a Field

Ag Leader InCommand 1200

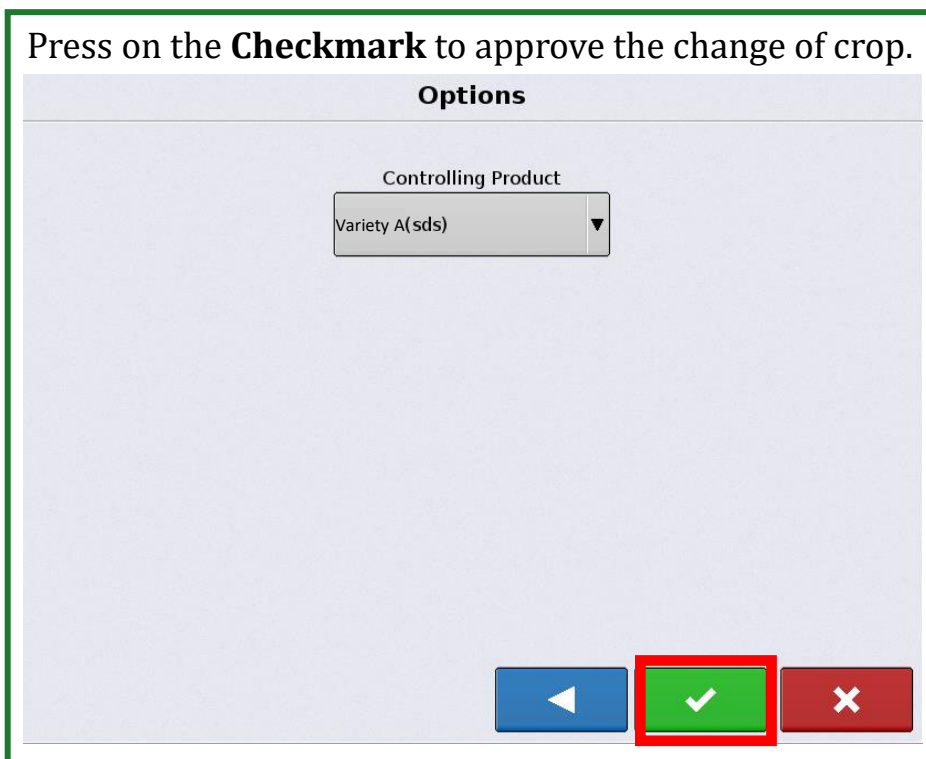
3

Press on the drop down to change the variety. Press the Right Arrow to continue.



Press on the **Checkmark** to approve the change of crop.

4



Setting up Split Planter Treatment Data



Setting up Split Planter Treatment Data Ag Leader InCommand 1200

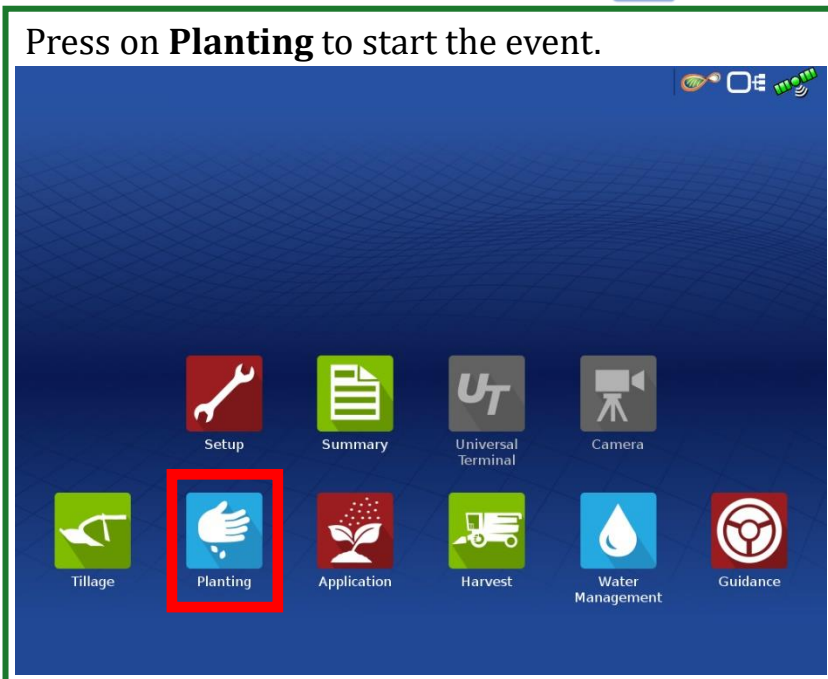
1

Insert the USB drive into the right side of the InCommand display.



2

Press on **Planting** to start the event.



3

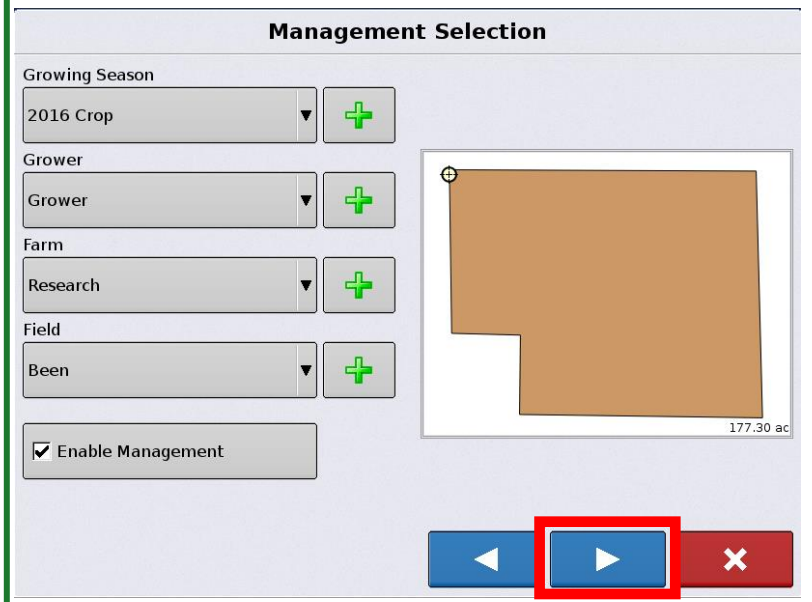
Make sure the correct Planting Configuration is selected. Press the **Right Arrow** to continue. **Note: If your configuration is wrong contact the equipment provider.**



Setting up Split Planter Treatment Data Ag Leader InCommand 1200

4

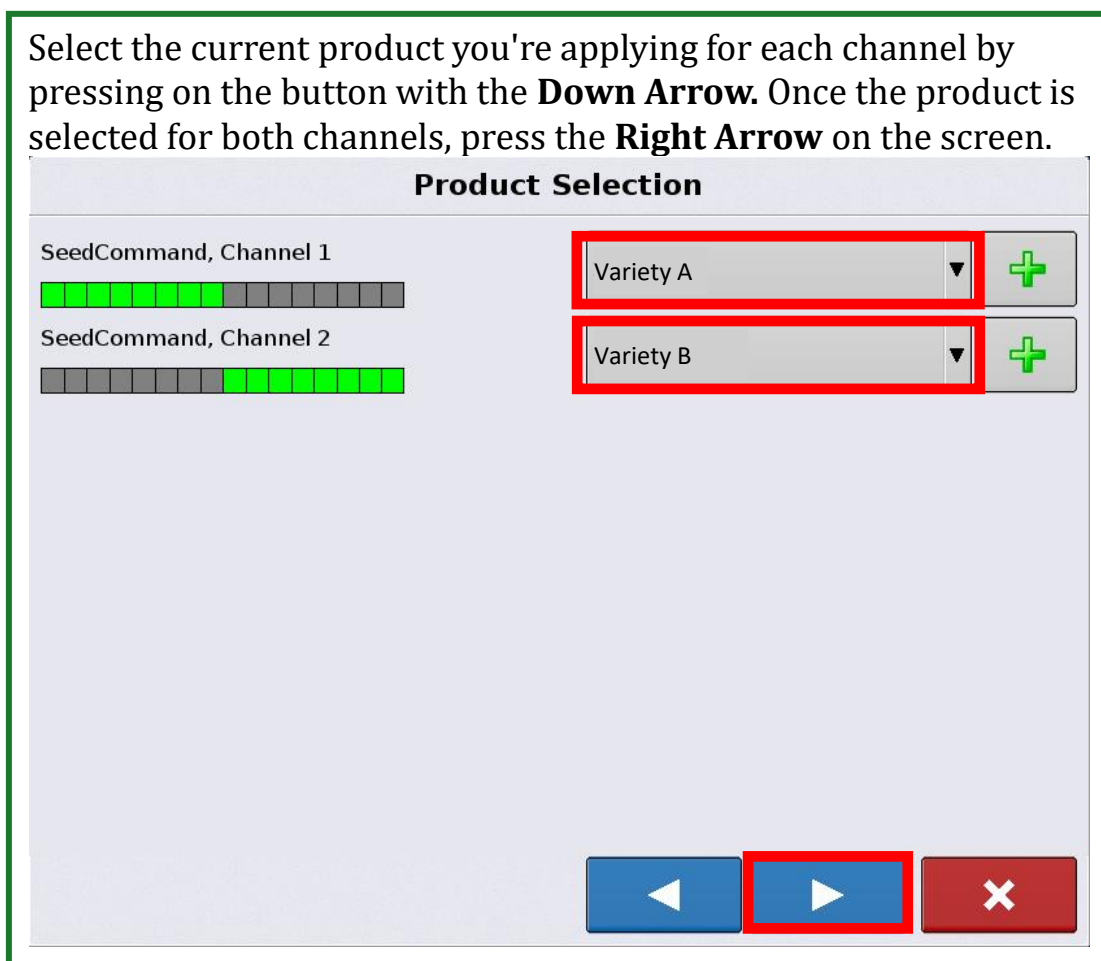
Make sure to select the current Grower, Farm, and Field you are working with. Press the **Right Arrow** to continue.



The Management Selection screen features several dropdown menus: Growing Season (2016 Crop), Grower (Grower), Farm (Research), and Field (Been). Each dropdown has a green plus icon to its right. Below these is a checkbox for 'Enable Management' which is checked. To the right is a field map showing a brown area with a small circle at the top left and the text '177.30 ac' at the bottom right. At the bottom are three navigation buttons: a blue left arrow, a blue right arrow (highlighted with a red box), and a red close button with a white 'X'.

5

Select the current product you're applying for each channel by pressing on the button with the **Down Arrow**. Once the product is selected for both channels, press the **Right Arrow** on the screen.



The Product Selection screen shows two channels: 'SeedCommand, Channel 1' and 'SeedCommand, Channel 2'. Each channel has a progress bar with green and grey segments. To the right of each channel is a dropdown menu with a green plus icon. The first dropdown is set to 'Variety A' and the second to 'Variety B'. Both dropdown menus are highlighted with red boxes. At the bottom are three navigation buttons: a blue left arrow, a blue right arrow (highlighted with a red box), and a red close button with a white 'X'.

Setting up Split Planter Treatment Data Ag Leader InCommand 1200

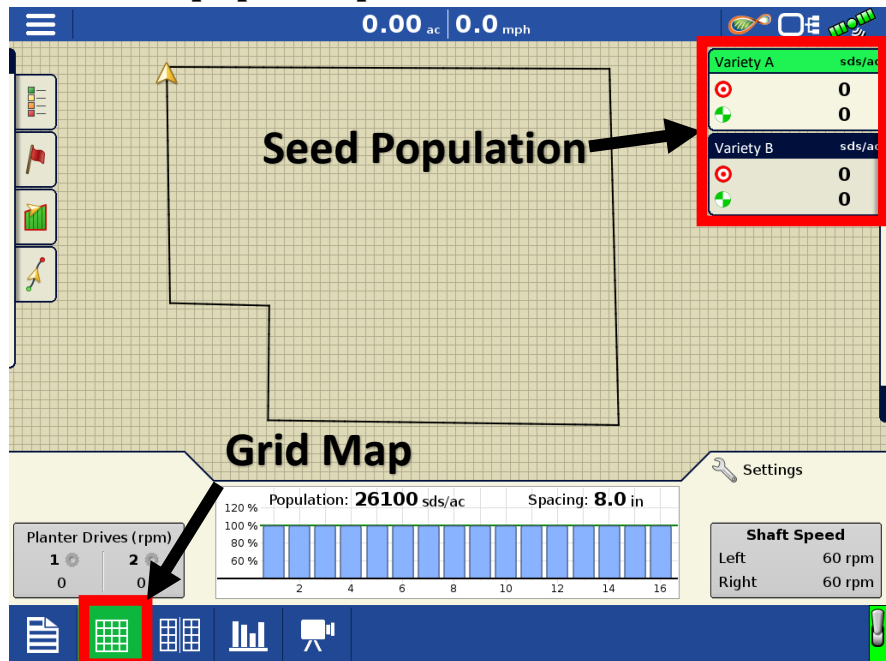
6

When selecting the Controlling Product, make sure to select seeds for both products. Press the **Checkmark** to continue.



7

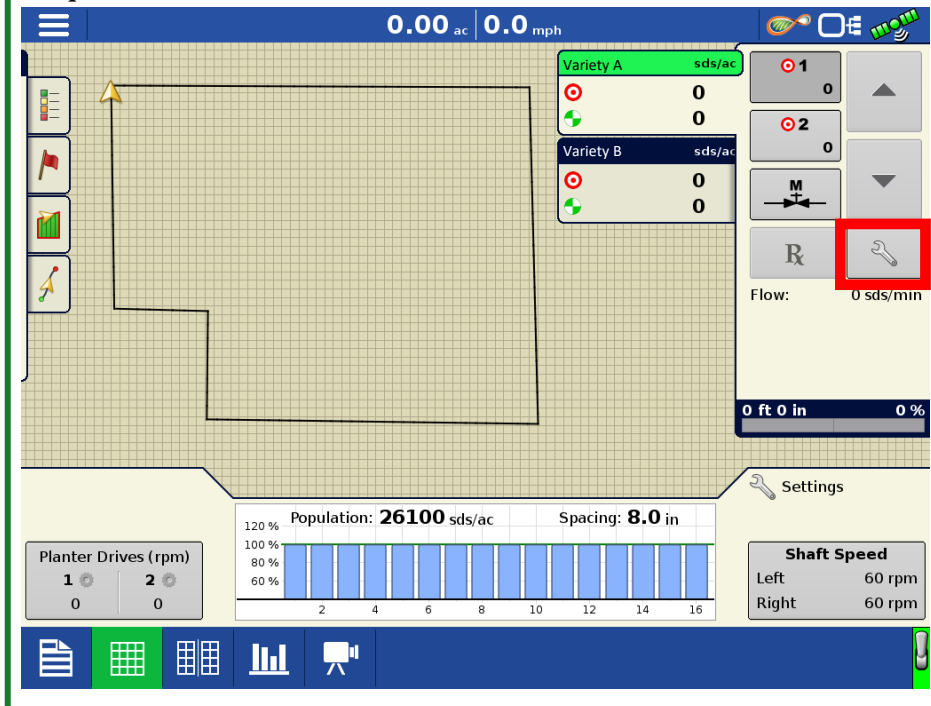
From the grid map screen of the InCommand, press the Seed Population tab to expand the window. **If the grid application screen is not available, please consult with the equipment provider.**



Setting up Split Planter Treatment Data Ag Leader InCommand 1200

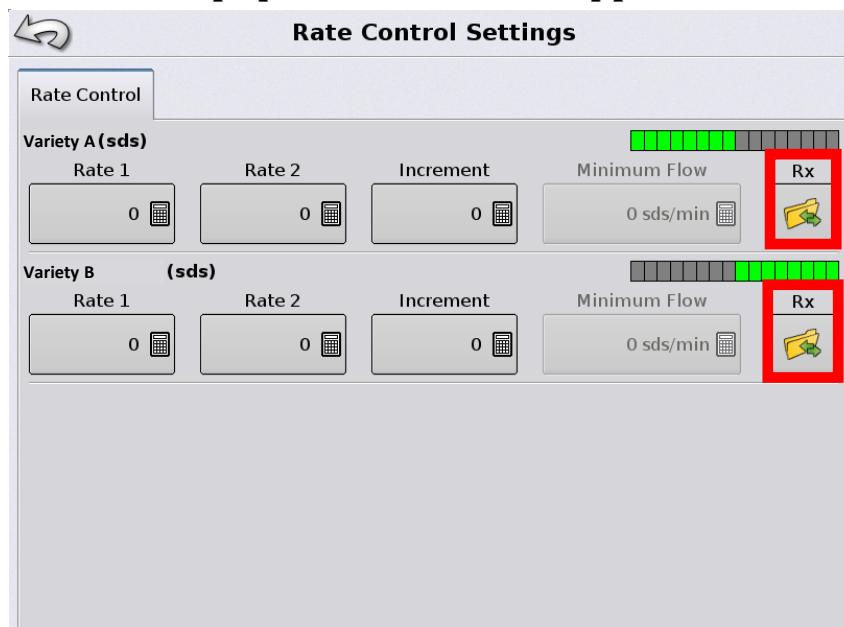
Press the **Wrench** button on the right side. If the wrench is not available, you may need to press the Seed Population button to make this visible.

8



On the Rate Control Screen, press the **Folder** icon under the Rx label. If the icon is not shown or active, the USB drive is likely not installed in the display correctly. This will need to be done **twice** for both sections. **Note: If the Sections don't show up on the screen this will need to be setup in the Seed Command window. Please contact the equipment Brand for support.**

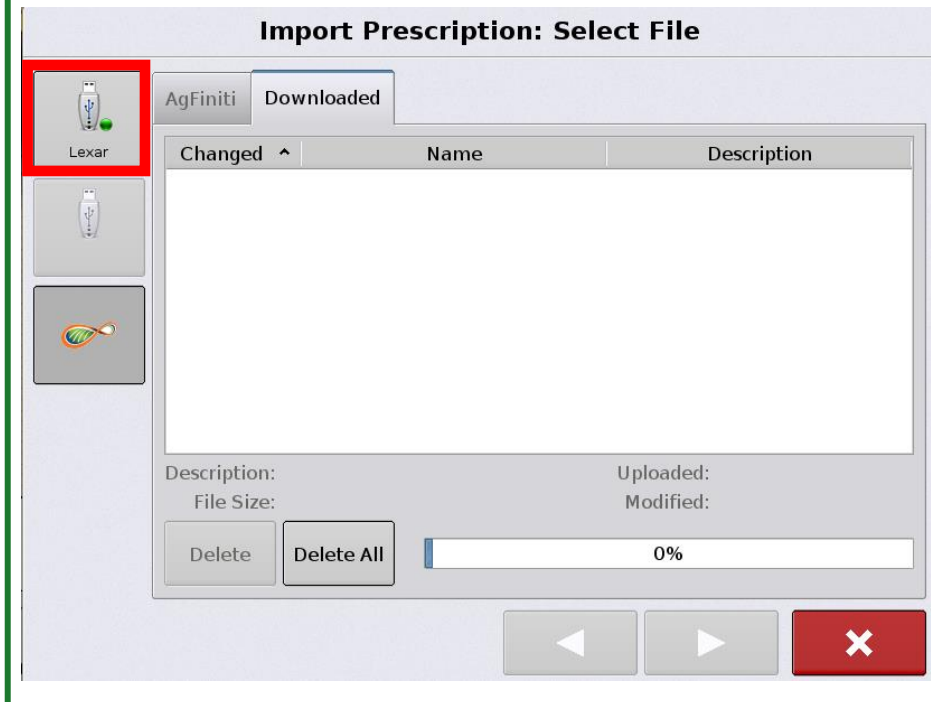
9



Setting up Split Planter Treatment Data Ag Leader InCommand 1200

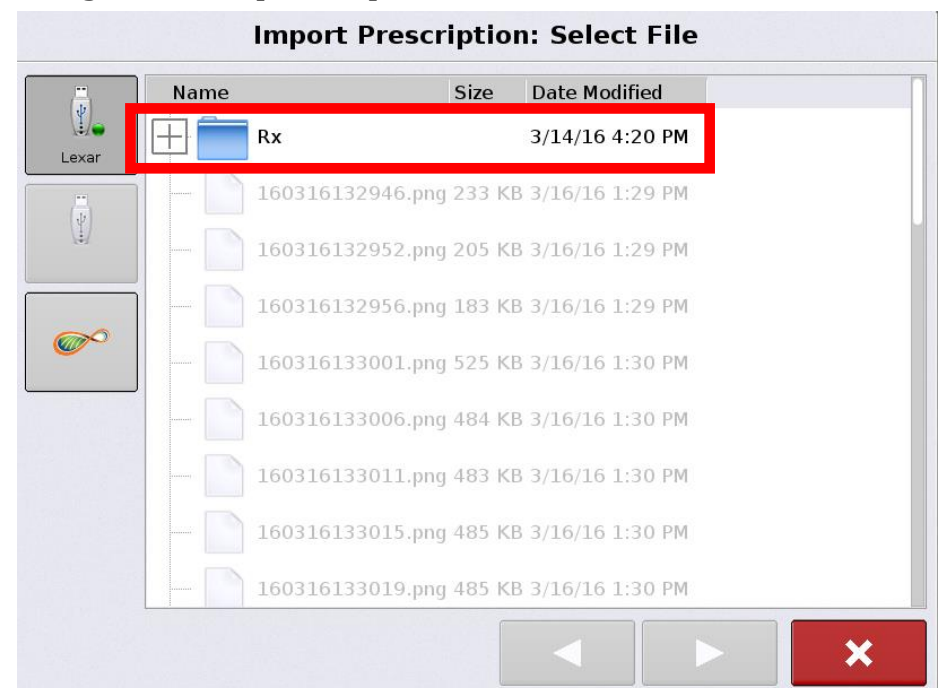
Press the **USB** drive to load the prescription from the USB. When using **AgFiniti** or **AgSetup**, you can save the files to the display.

10



11

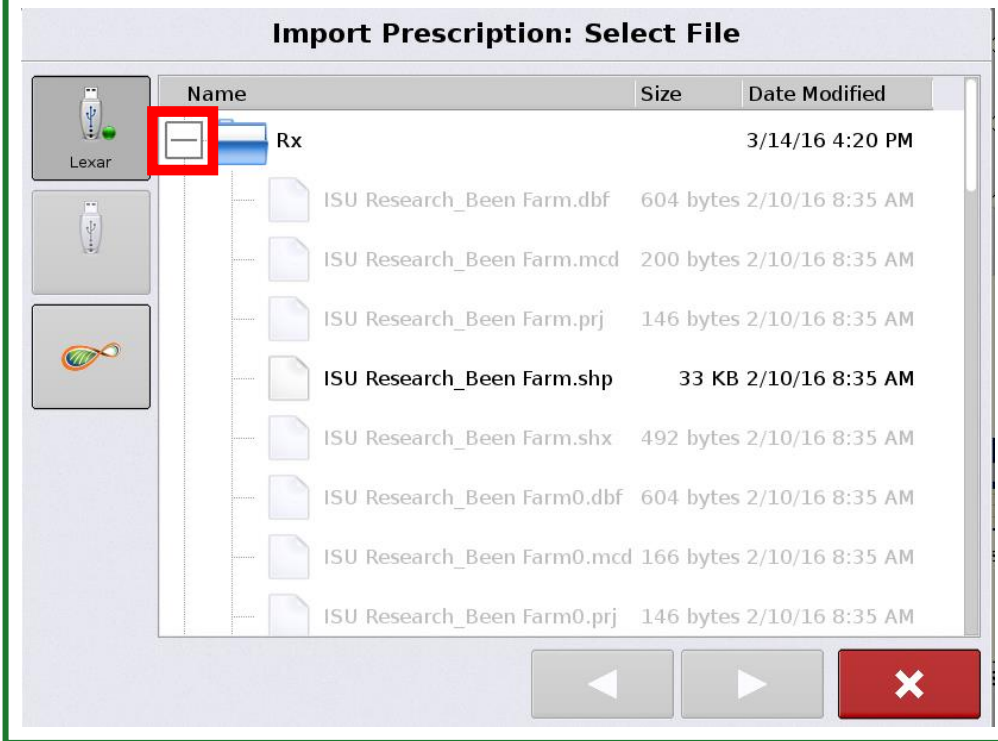
The Import Prescription: Select File screen will show a folder map similar to a PC. You will use the touch screen to navigate to the prescription file for the desired field.



Setting up Split Planter Treatment Data Ag Leader InCommand 1200

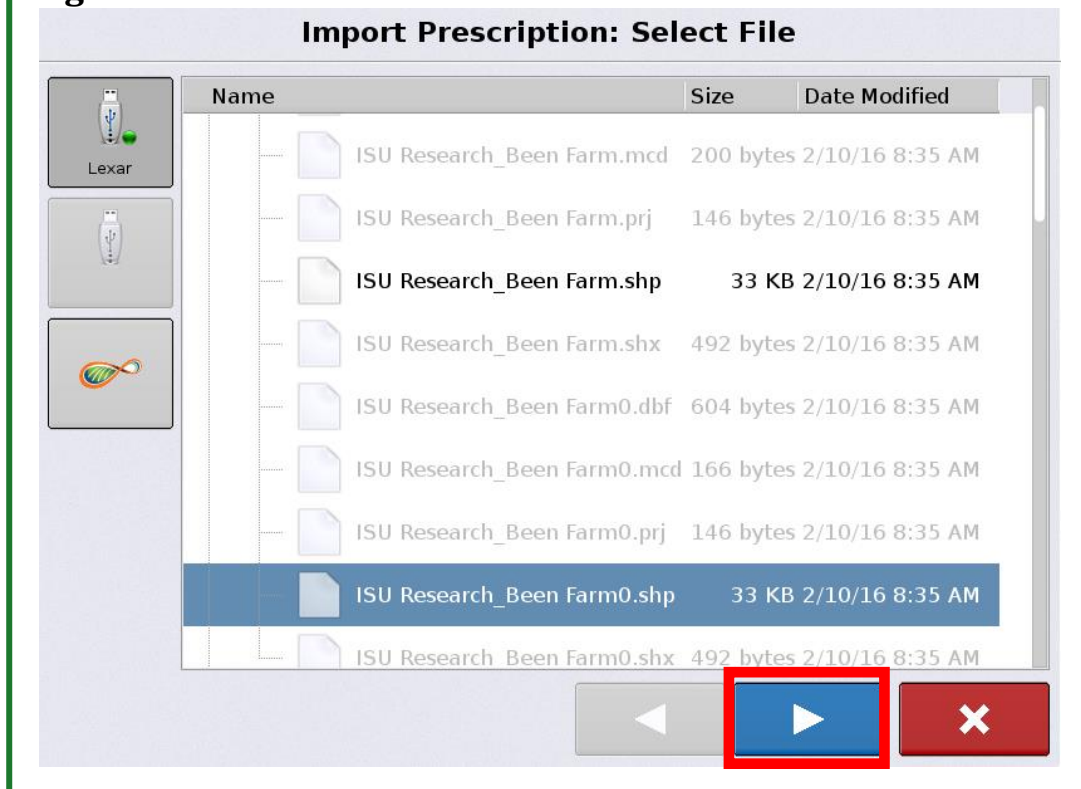
12

Press the **Plus** sign next to the Rx folder to see the files inside the folder.



13

Press to highlight the **shapefile** for the desired field. Press the **Right Arrow** to continue.



Setting up Split Planter Treatment Data Ag Leader InCommand 1200

14

In the Import Prescription window, make sure the Column is set to the variety for the current field. This is typically not the default. Your product should match the column. Product or the shapefile may need to change to do this.

Other tags for this are Tgt_Rate, Target_Rate, or Seeding_Rate among others.

When the correct Column is selected you will see a series of values in the Column Preview window that will be very close to the seeding rates prescribed for the field.

Import Prescription: Select Column

Column: Variety A

Product: Variety A

Units: seeds

Default Rate: 33000

Column Preview

32000
32000
30000
34000
34000
32000
33000
32000
34000

Change Units to **seeds** by pressing on the drop down.

Make sure there is a default rate entered. This will ensure application if GPS signal is lost during operation. Press the **Checkmark** to accept the prescription.

Repeat Steps 9 to 15 (selecting the Rx folder) for the Next Sections. This will setup the VRS for all the sections on the planter. **Note: if you don't do this one side of the planter will not plant at the VRS rate and if you don't enter in any target rate the section won't plant at all.**

15

Import Prescription: Select Column

Column: Variety A

Product: Variety A

Units: seeds

Default Rate: 33000

Column Preview

32000
32000
30000
34000
34000
32000
33000
32000
34000

16

After accepting the VRS prescription shapefile, you'll return to the Rate Control Settings window.

Notice that the USB drive icon has been replaced with a red negative bars (**do not press**). This indicates that a VRS map is loaded. To change maps, you first need to delete the current map by pressing the red button. Then repeat the VRS process from Step 9 (selecting the Rx folder).

To return to the main run screen and execute the VRS prescription map, simply press the back arrow return button at the top left of the active window.

Rate Control Settings

Rate Control

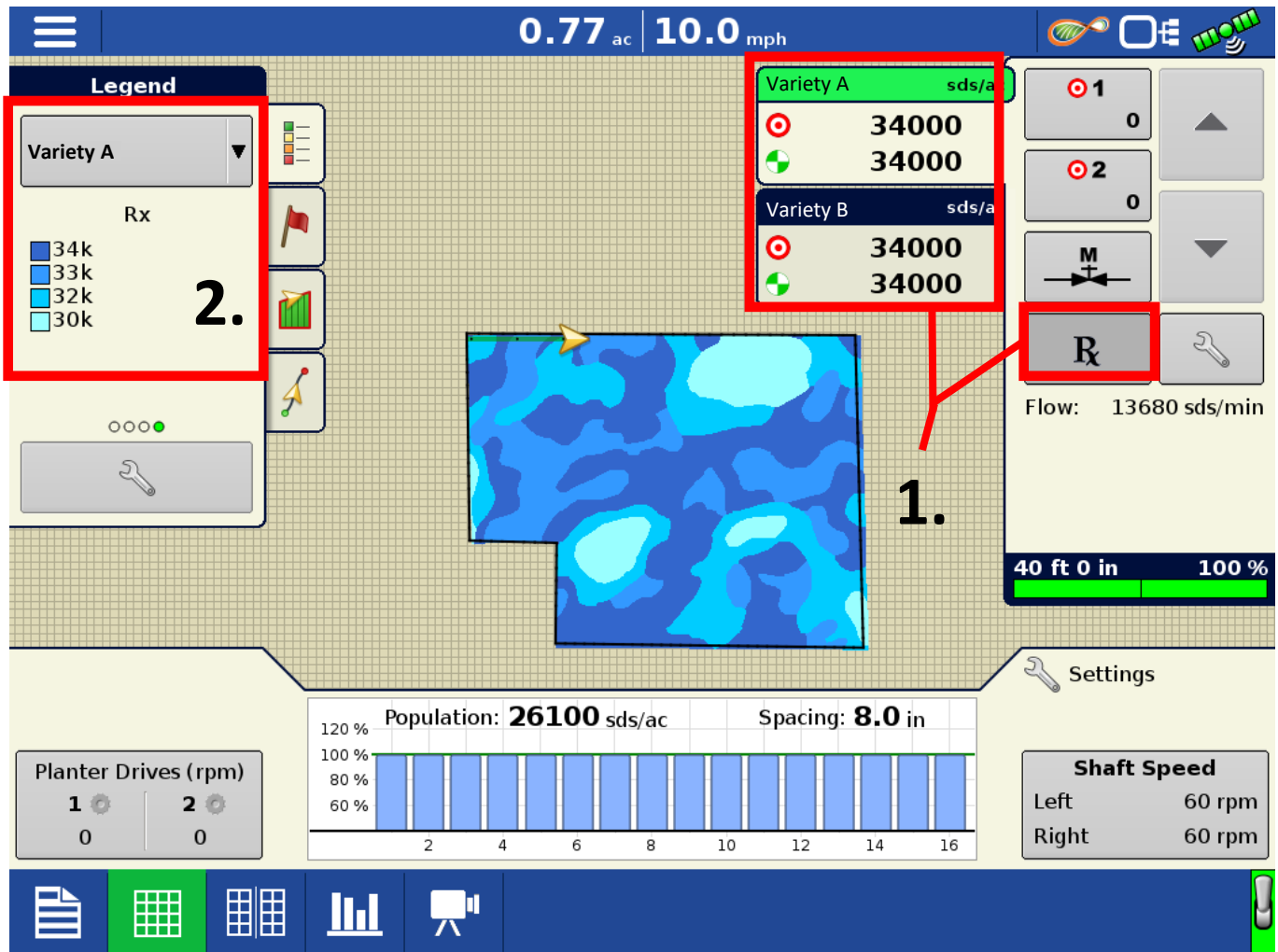
Variety A (sds)

| | | | | |
|--------|--------|-----------|--------------|----|
| Rate 1 | Rate 2 | Increment | Minimum Flow | Rx |
| 0 | 0 | 0 | 0 sds/min | - |

Variety B (sds)

| | | | | |
|--------|--------|-----------|--------------|----|
| Rate 1 | Rate 2 | Increment | Minimum Flow | Rx |
| 0 | 0 | 0 | 0 sds/min | - |

Setting up Split Planter Treatment Data Ag Leader InCommand 1200



Confirm that the VRS map was properly loaded by reviewing the following check list:

1. Make sure the Rx seeding rate is selected, and the Target rate matches the current VRS zone.
2. Review the Rx rates on the reference map, and confirm they match the seeding plan.

Exporting As-Applied Planting Files



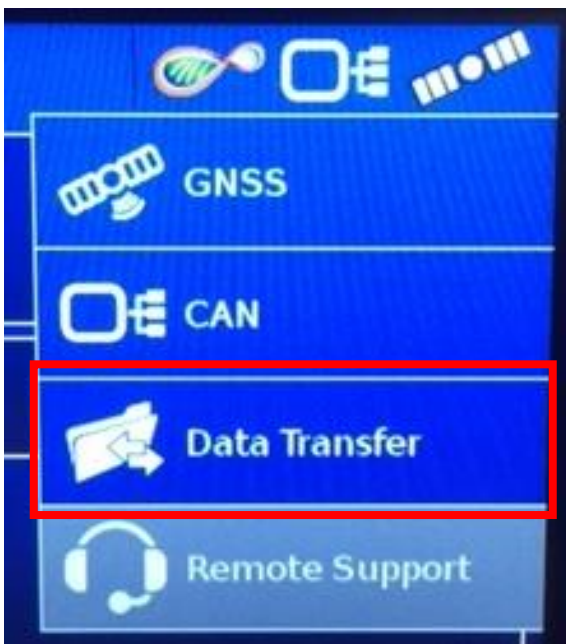
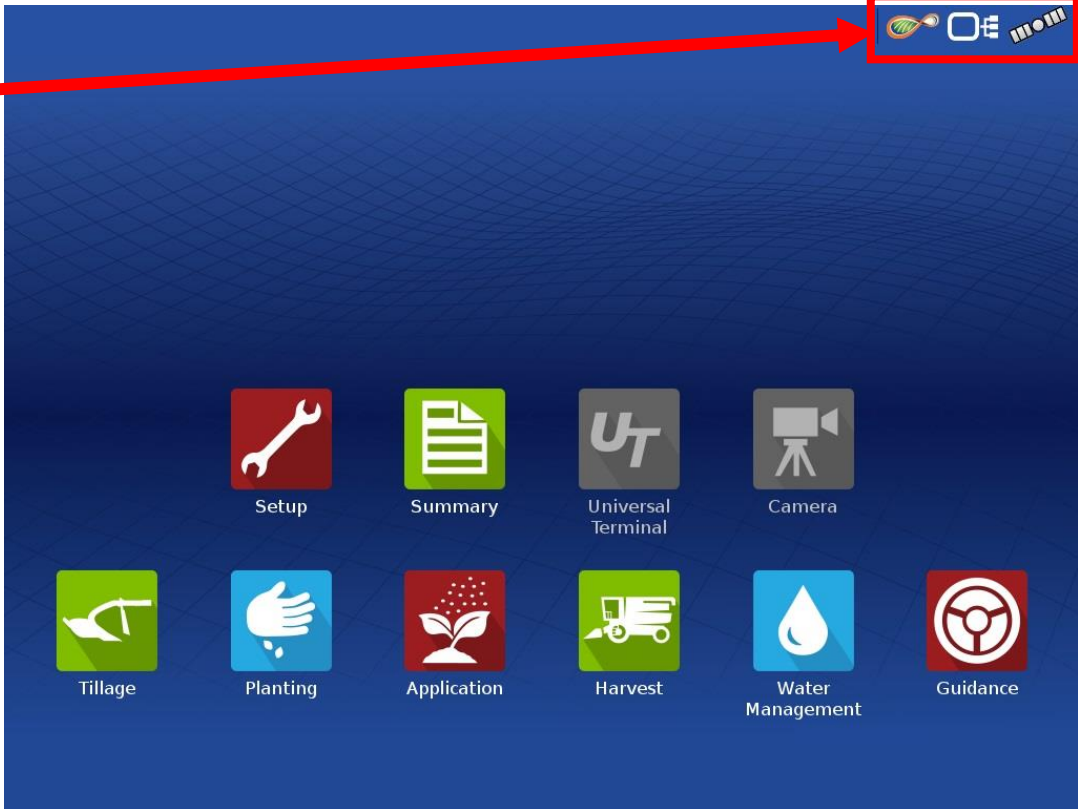
Exported As-Applied Planting Files

Ag Leader InCommand 1200

Managing grower data is very important. When you go out to gather data from a grower, have the grower remove the data from the display, make a copy of the data, and give the data back to the grower.

From the main screen, press on the **Status Indicators** on the top right side of the display.

1



2

Insert a USB drive into the InCommand monitor. Press **Data Transfer**.

Exported As-Applied Planting Files

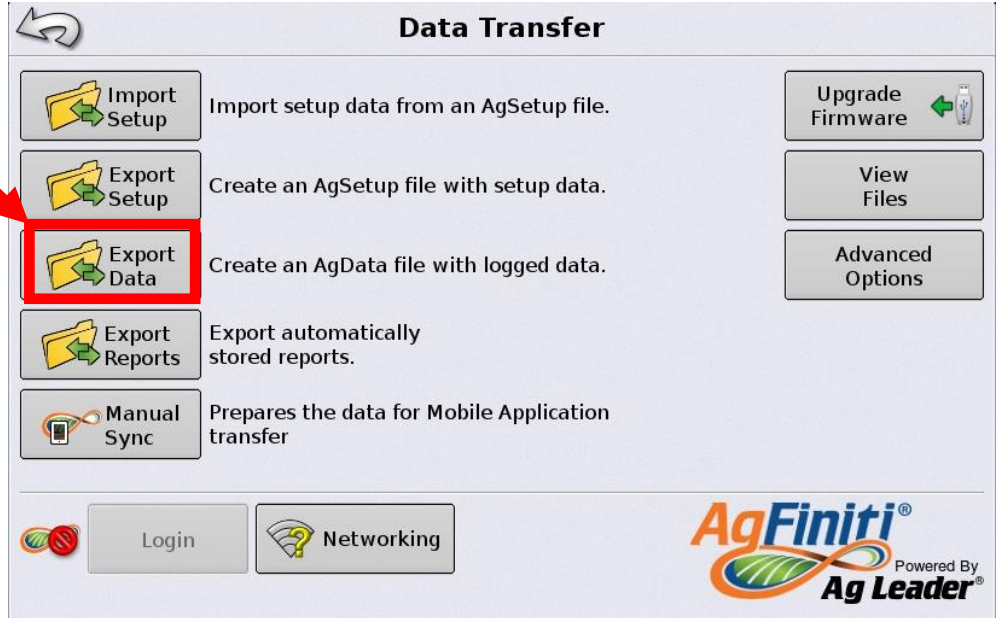
Ag Leader InCommand 1200

Press the **Export Data** button to transfer as-applied files on the monitor to USB drive.

After files are exported they will no longer reside on the display.

Make sure to provide the grower a backup copy of the exported files for there own records.

3



4

Wait while data files are transferred to the USB drive.

Once the transfer is complete, press the **Checkmark** to accept the export. You can now remove the jump drive.

Data files will be stored on the USB drive in a folder which is the serial number of the InCommand display. This will be unique to the customer, but it is good practice to rename the folder with the customer's name to ensure data integrity.



Troubleshooting

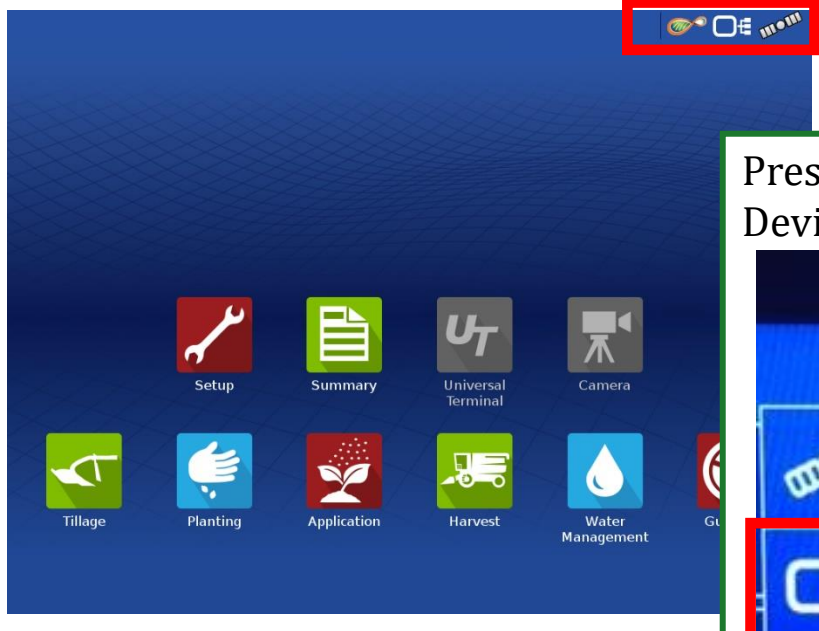


Troubleshooting

Ag Leader InCommand 1200

1

Check the firmware version number of the display by pressing the **Terminal** icon in the upper right hand corner of the display.



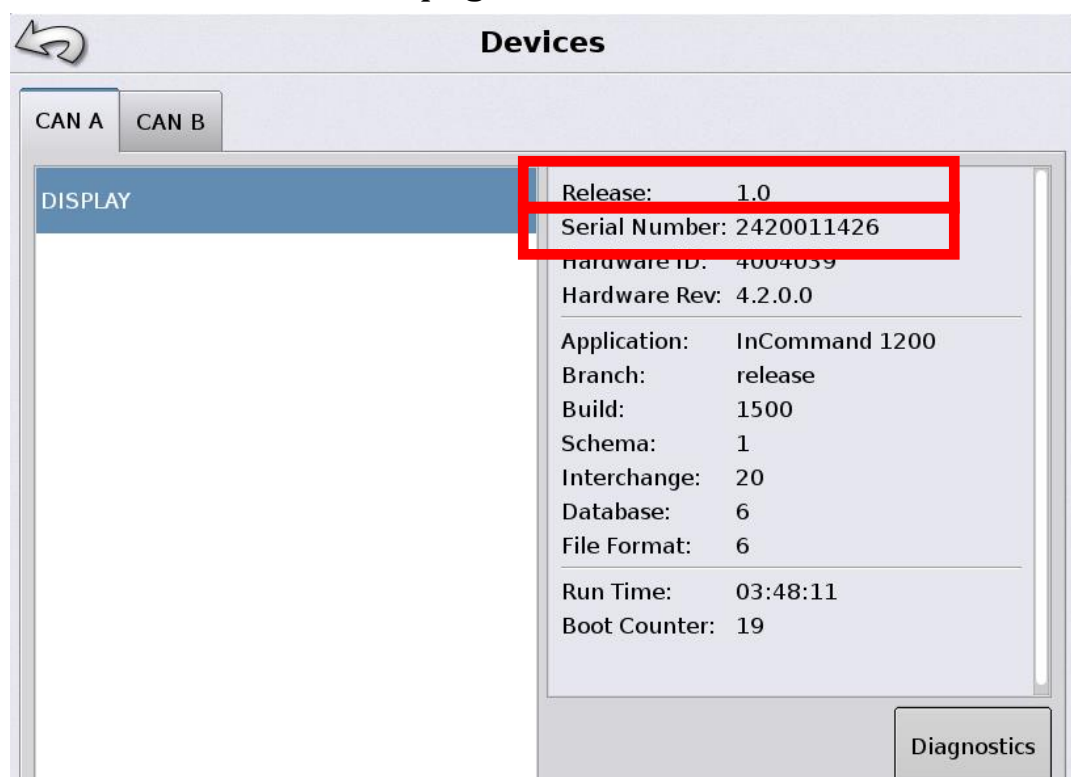
2

Press on **CAN** to open the Devices page



3

The Release firmware along with the Serial Number will be located on the Devices page.



Troubleshooting Ag Leader InCommand 1200

Question: Does it matter what the seeding rate units are?

Answer: Yes, Shape files for the Integra and Insight displays require units of Seeds Per Acre. Prescription shapefiles with units of thousands of seeds per acre or kilo seeds per acre will not work correctly.

Split Planter setup not working: Display needs to be Unlocked for Multiple Products, Please contact the Equipment provider for more assistance.

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