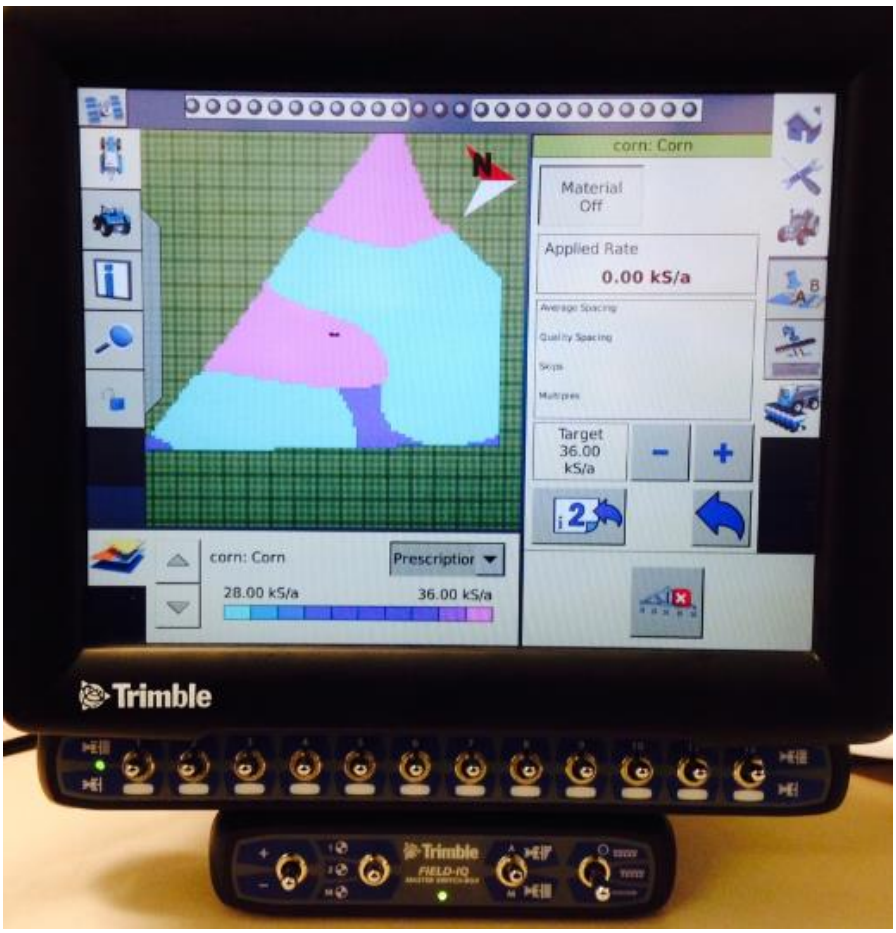
Trimble FMX

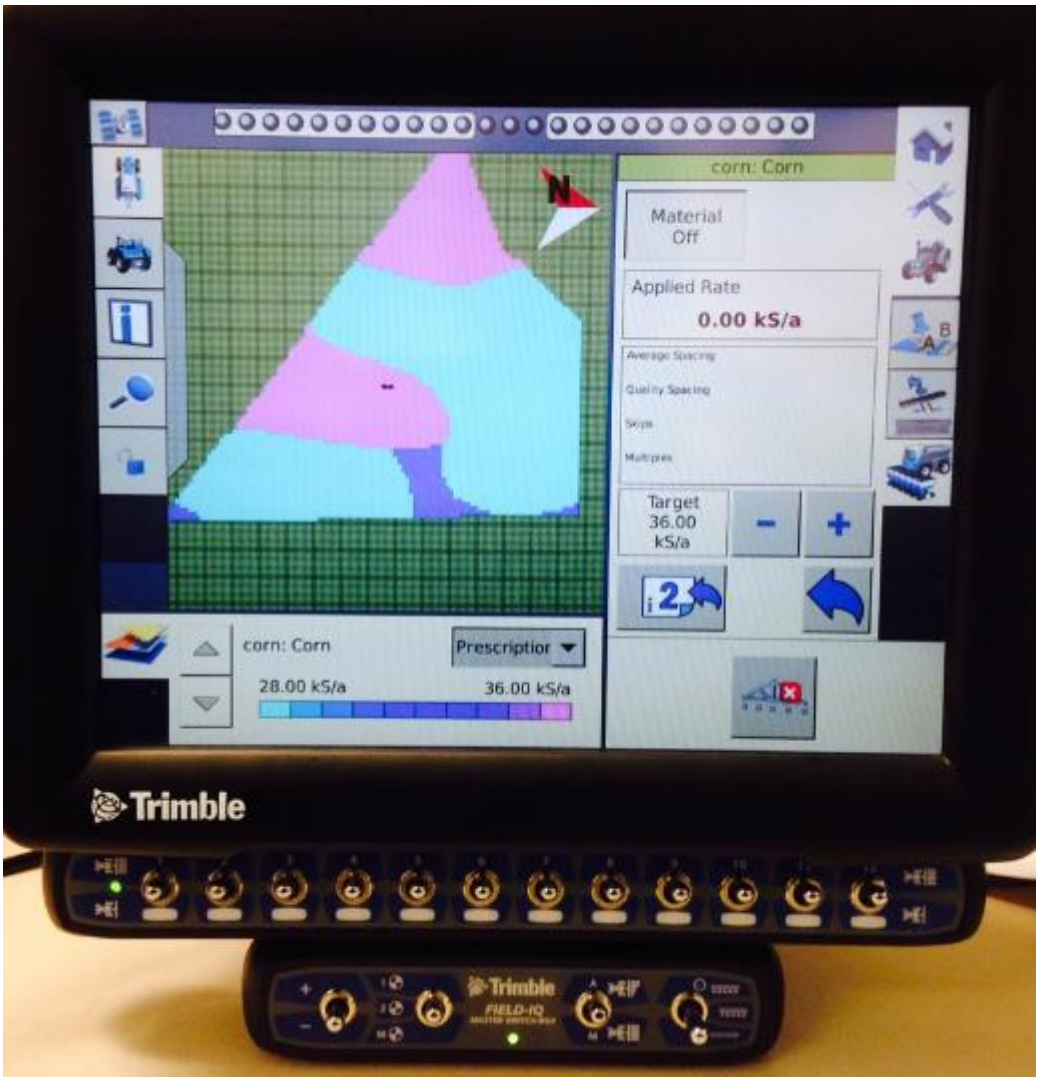


This document is designed to provide basic support for implementing variable rate seeding in common precision ag equipment. It is neither an operating manual nor a set-up guide for the monitor. Rather, it is a general set of principles designed to provide help with trouble shooting while preparing for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

Contents:

Updated: 4/2/2016

Prescription File Management



Prescription File Management
Trimble FMX

1

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

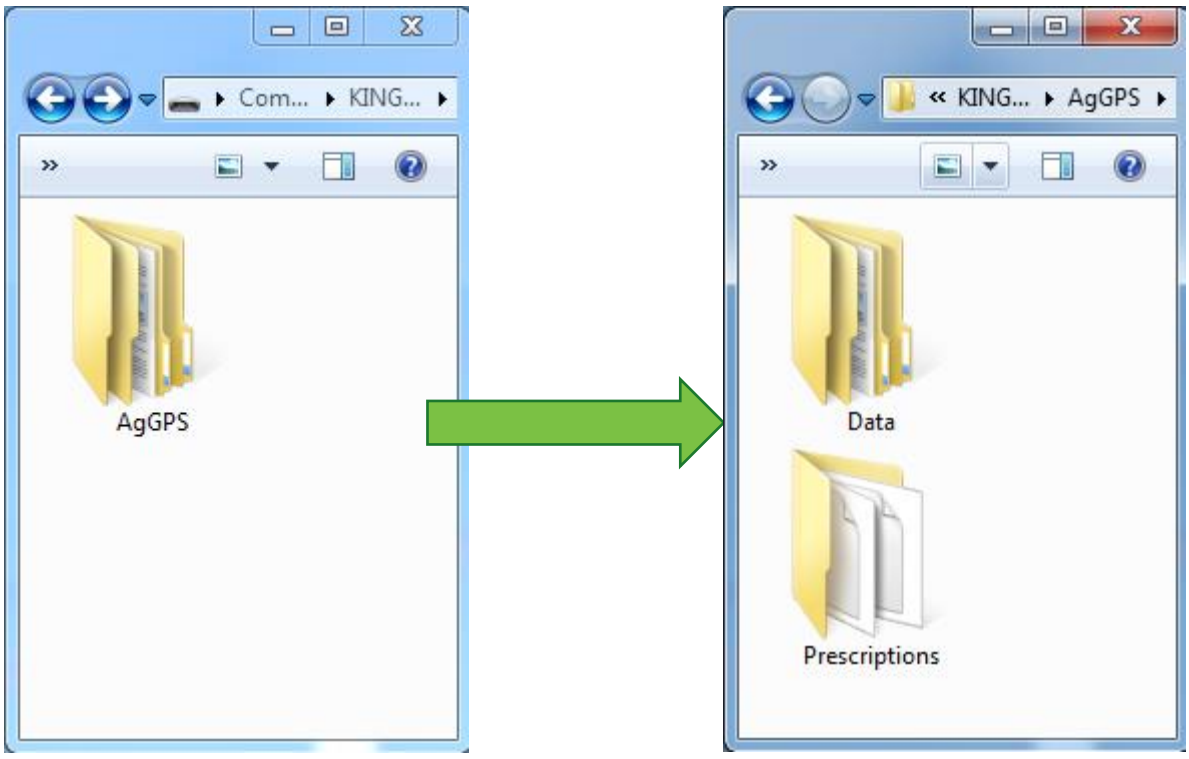
Prescription units must be in **kilo seeds per acre and a contoured map**

2

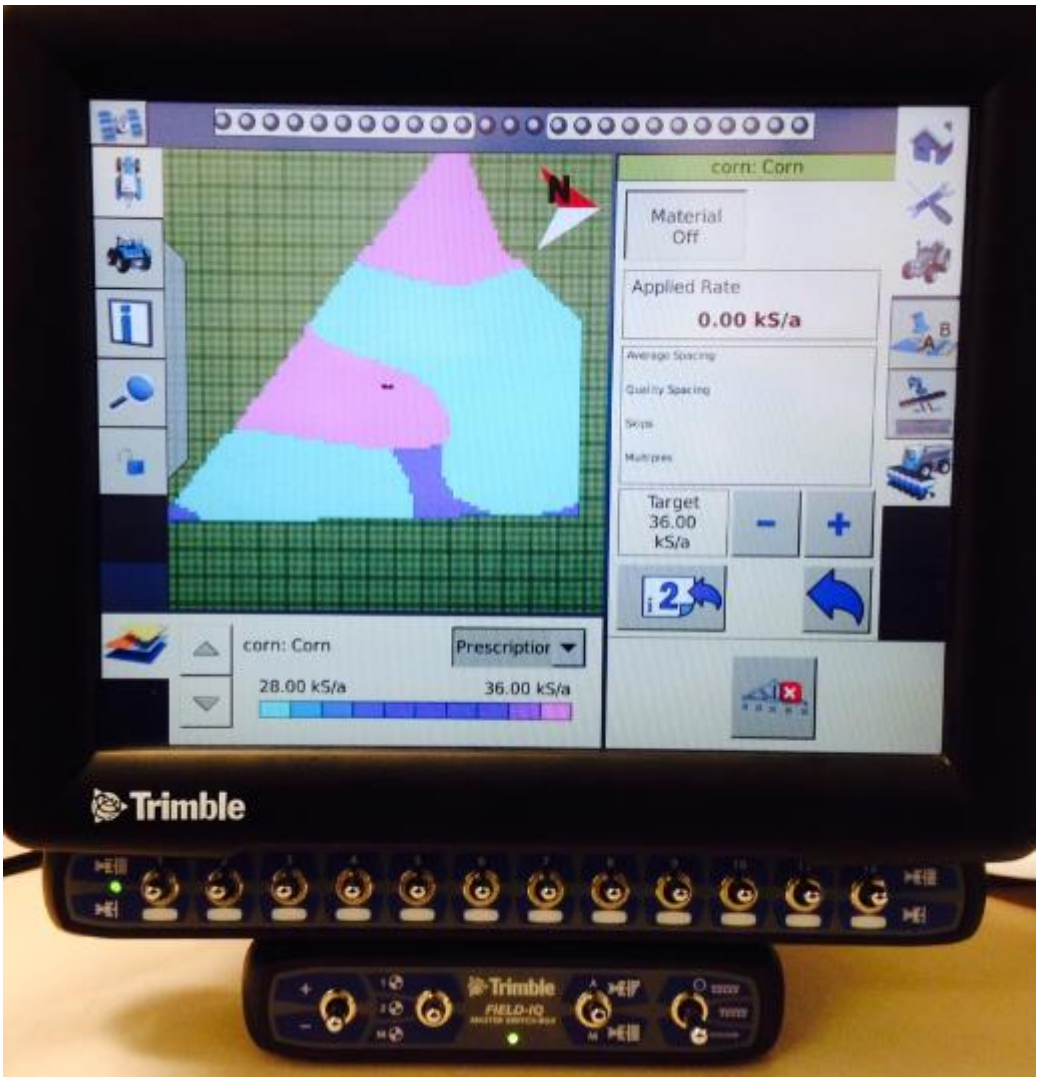
On a blank USB thumb drive, create a folder named "AgGPS" at the highest level of the drive (i.e. E:AgGPS). Within the "AgGPS" folder, create a new folder named "Prescriptions."

Using Windows Copy/Paste tools, copy all the individual shapefiles into the Prescriptions 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 Prescription 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 VRS Prescription Map



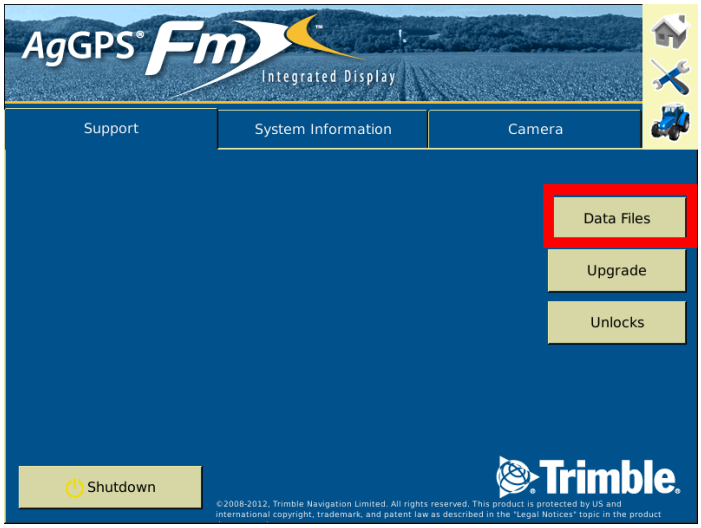
Importing VRS Prescription Files
Trimble FMX

1

Insert the USB drive containing the AgGPS folder into the FMX display. The USB drive is located on the back side of the monitor.

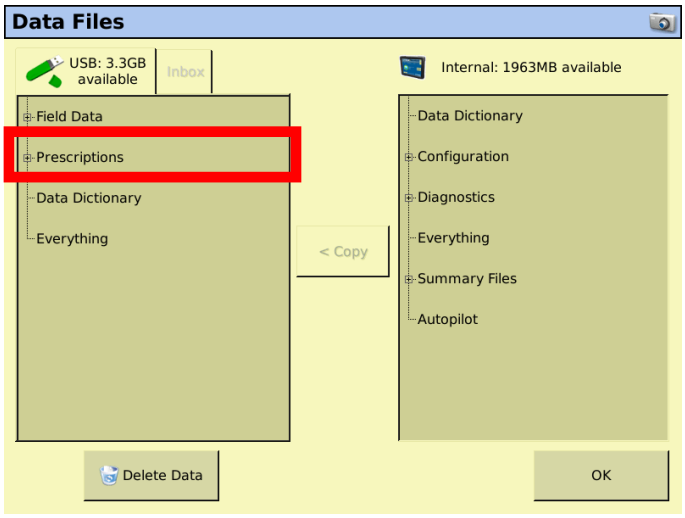
2

Start from the Home screen of the FMX display and press the **Data Files** icon.



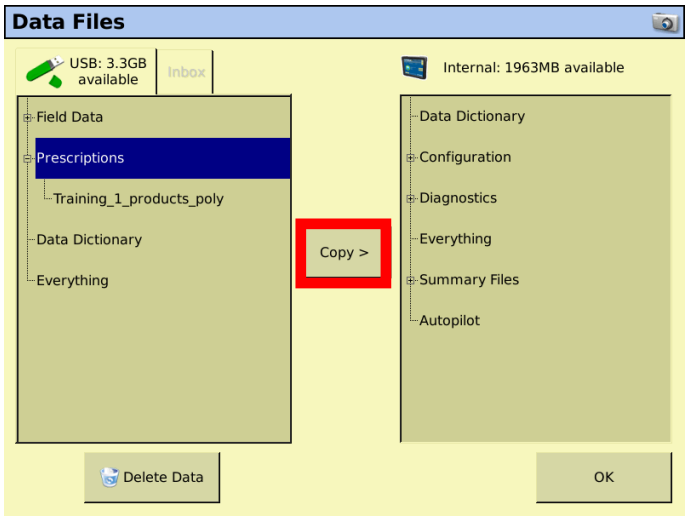
3

Once the USB has been recognized highlight the Prescriptions folder on the USB by pressing on **Prescription**.



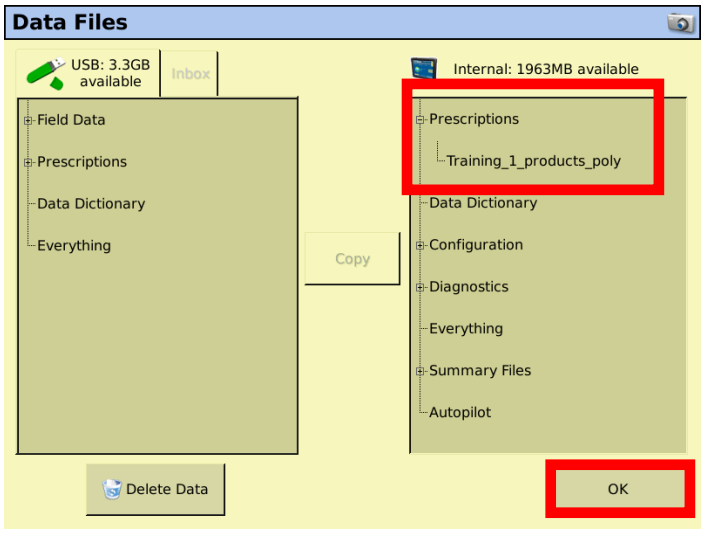
4

When the Prescriptions Folder is highlighted press **Copy** in the middle of the screen to copy the data to the monitor.

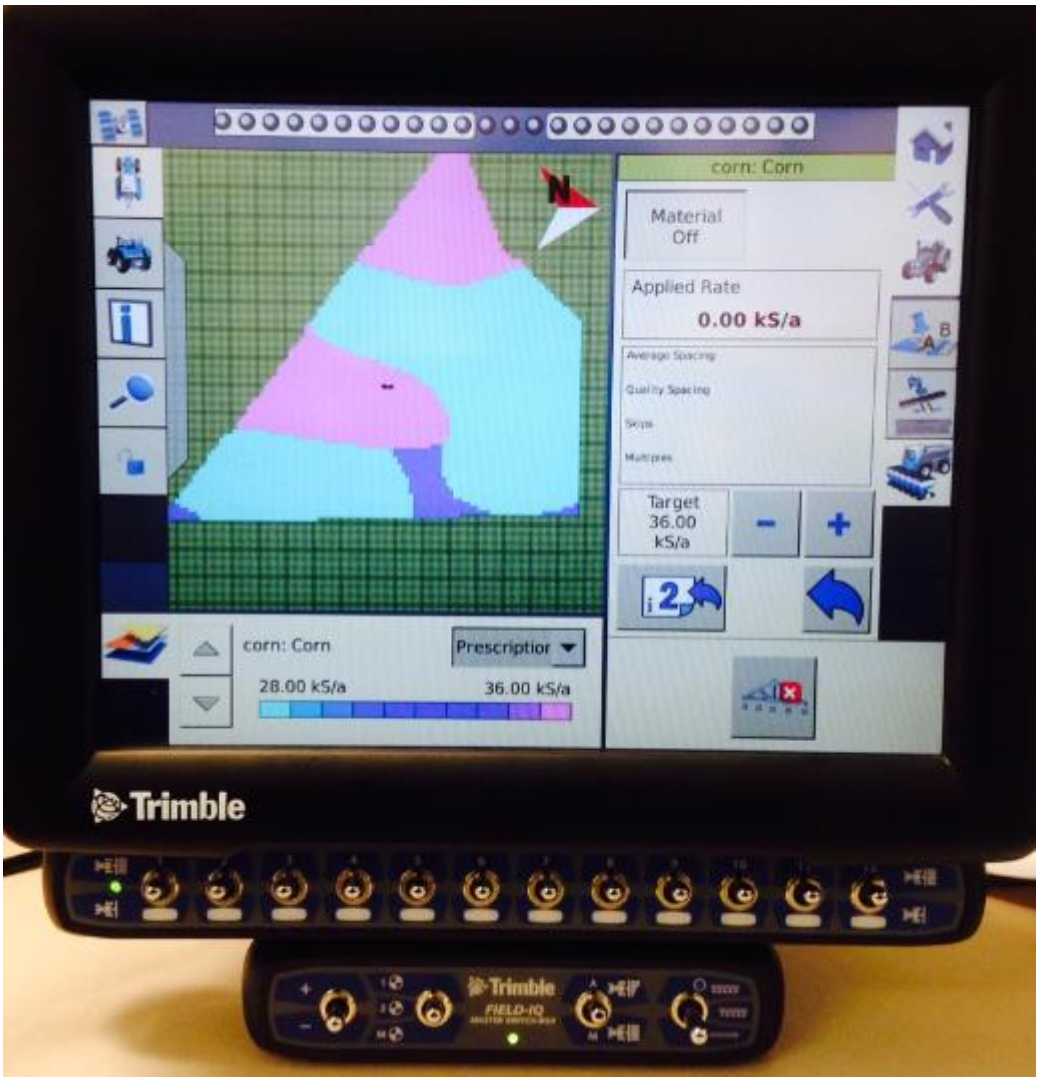


5

Check to make sure the files are on the monitor by expanding the Prescription folder on the FMX's internal drive. Press **Ok** to return to Home screen.

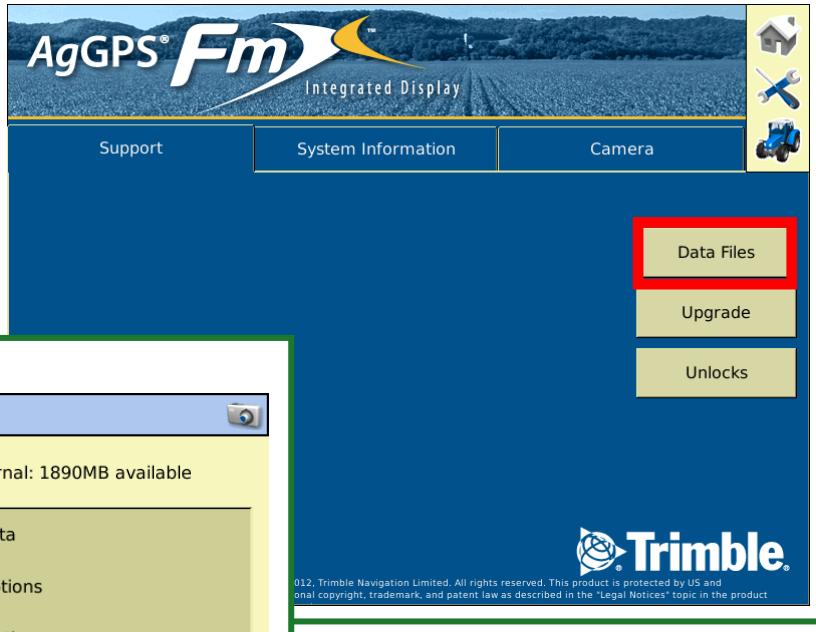


Cleaning up Prescriptions

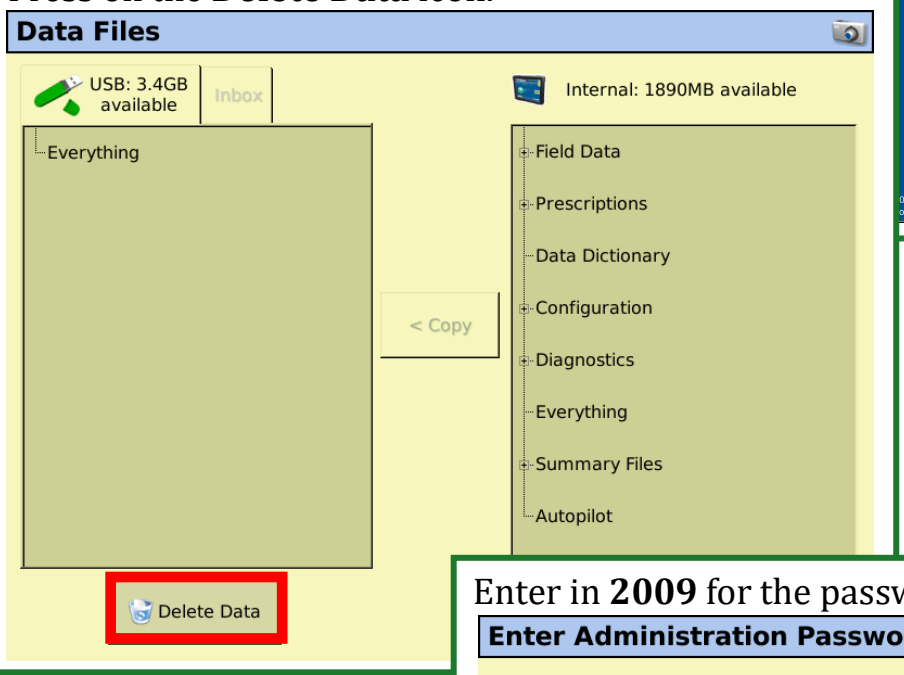


Cleaning up Prescriptions
Trimble FMX

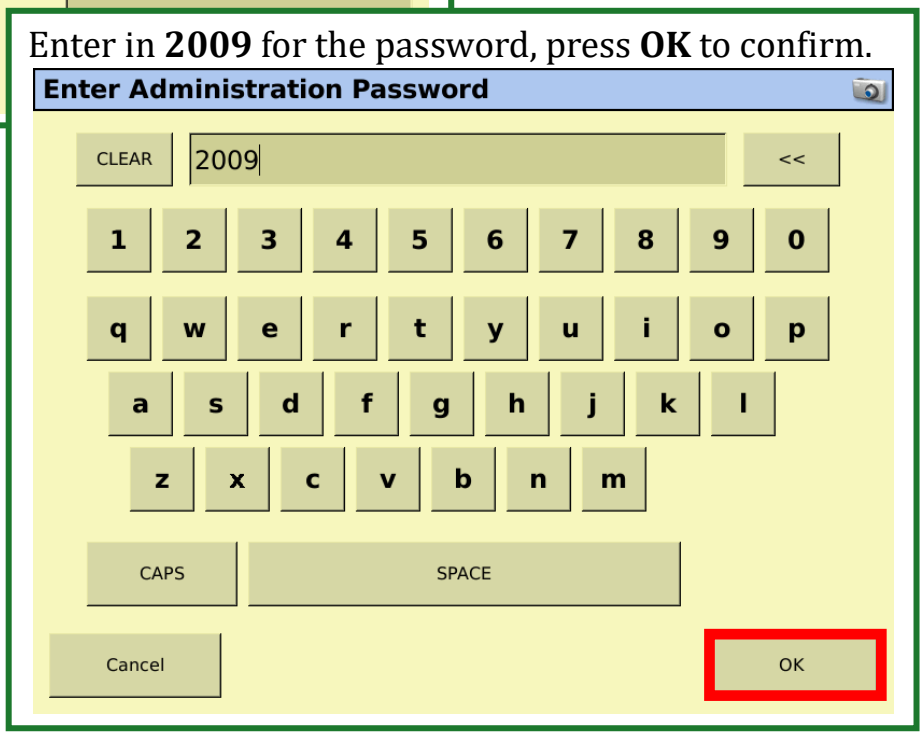
1 Press the **Data Files** icon.



2 Press on the **Delete Data** icon.

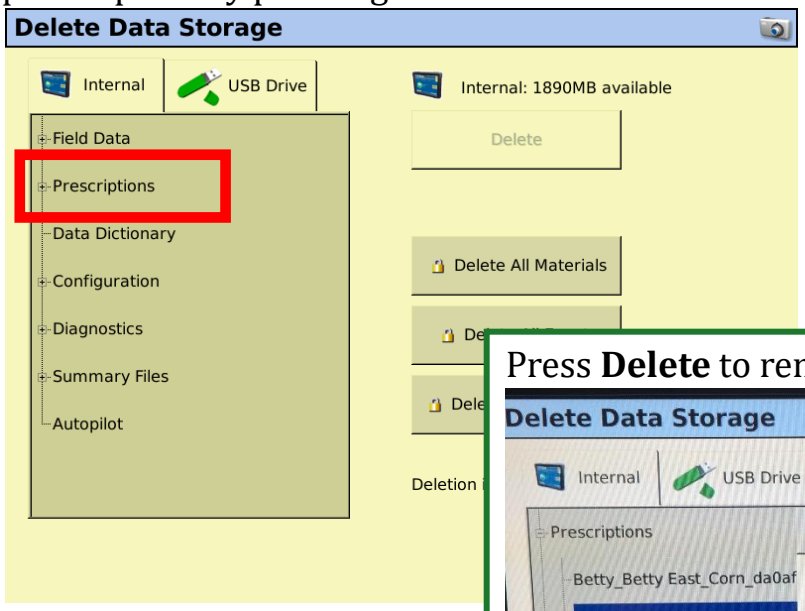


3 Enter in **2009** for the password, press **OK** to confirm.



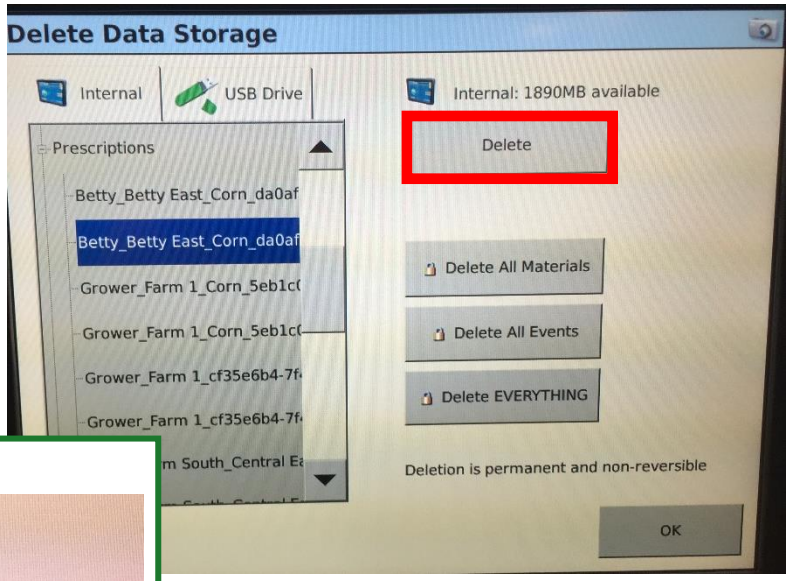
4

Select individual prescription files or all prescription by pressing on the file name.



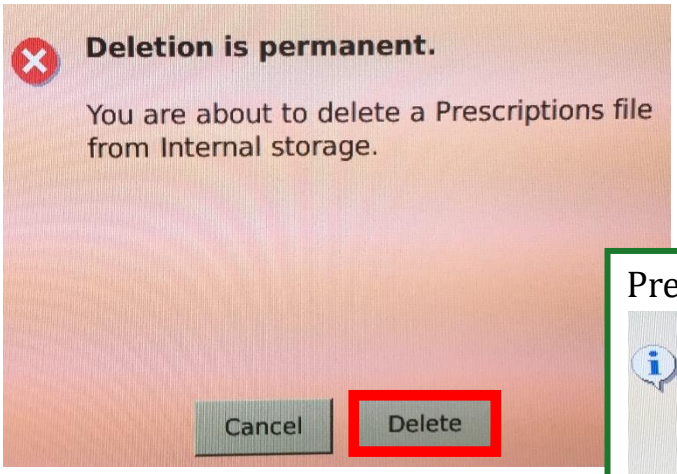
5

Press **Delete** to remove selected file.



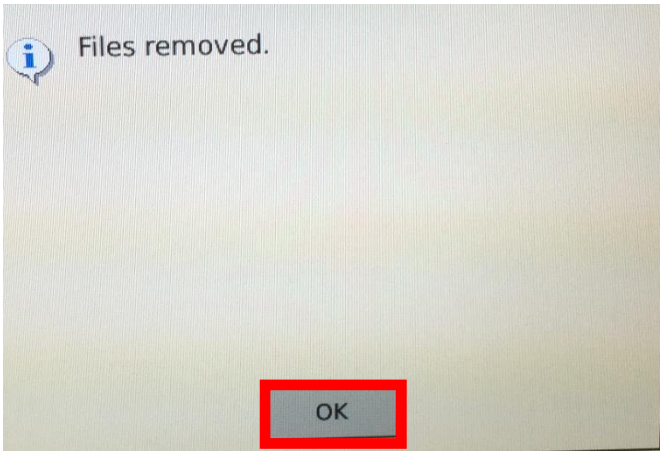
6

Press **Delete** to confirm removal.

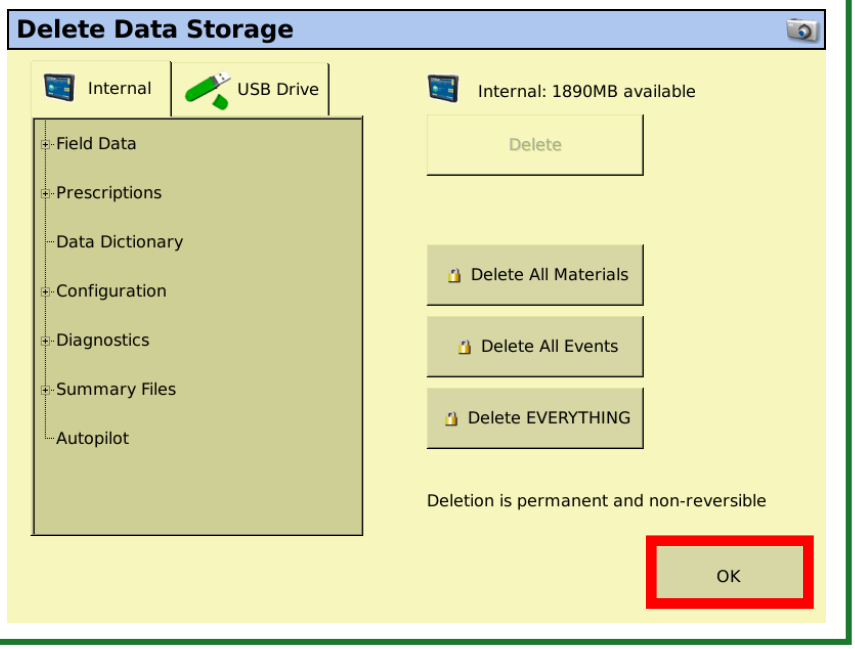


7

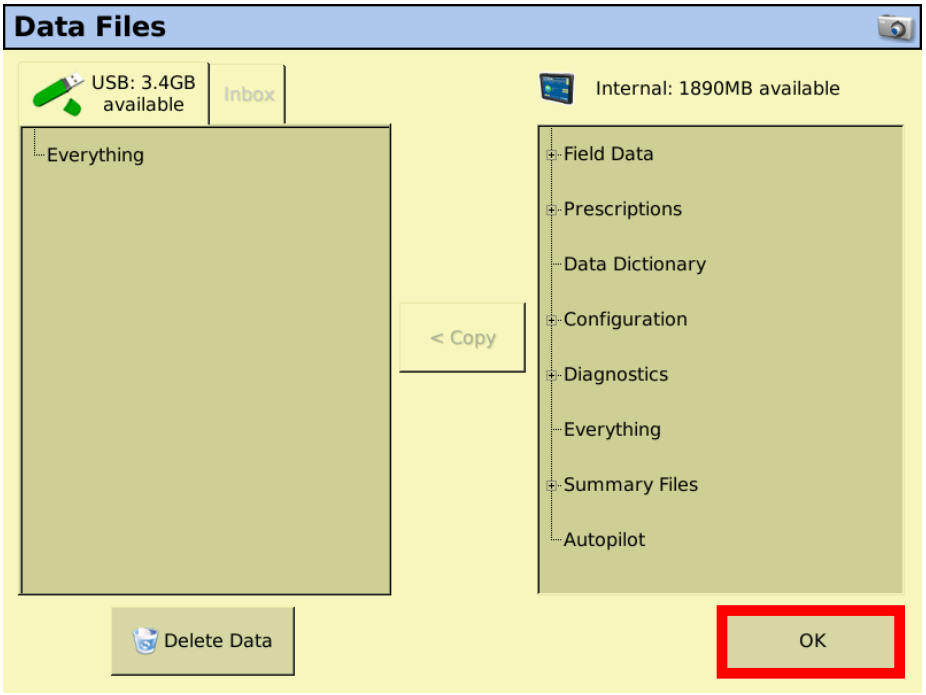
Press **OK** for files removed.



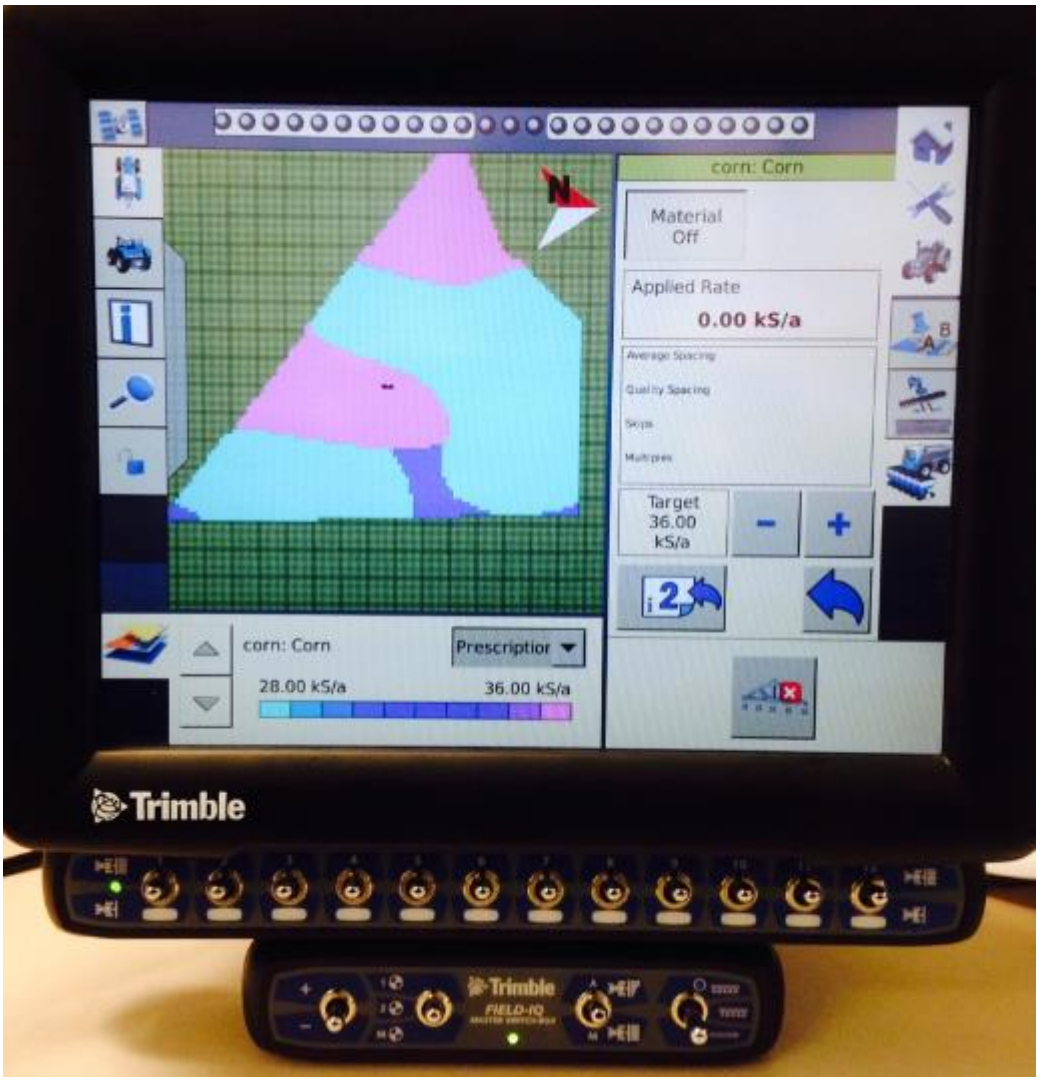
8 Press **OK** to return to the Data Files screen.



9 Press **OK** to return to the Home screen.



Selecting VRS Prescription Files

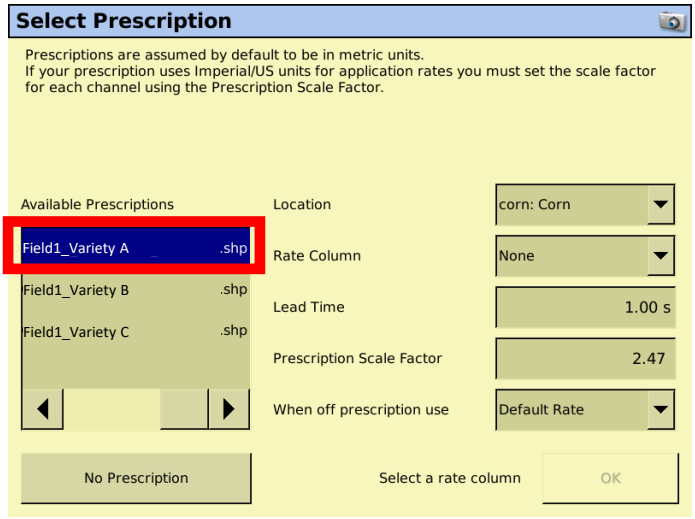


Selecting VRS Prescription Files
Trimble FMX

Note a Prescription can't be selected until the Operation has been started. Also the Prescription map will only appear if your within 1.5 miles from the field.

1

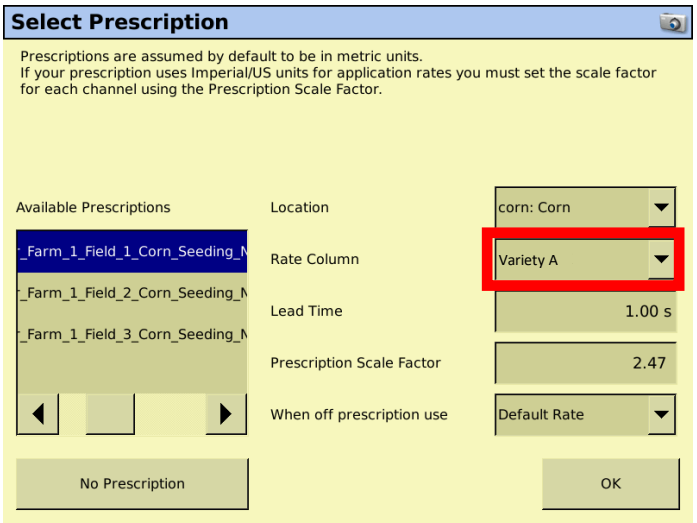
From the home screen begin a new operation and navigate to the Select Prescription page. Highlight the correct prescription by pressing on the prescription shapefile.



2

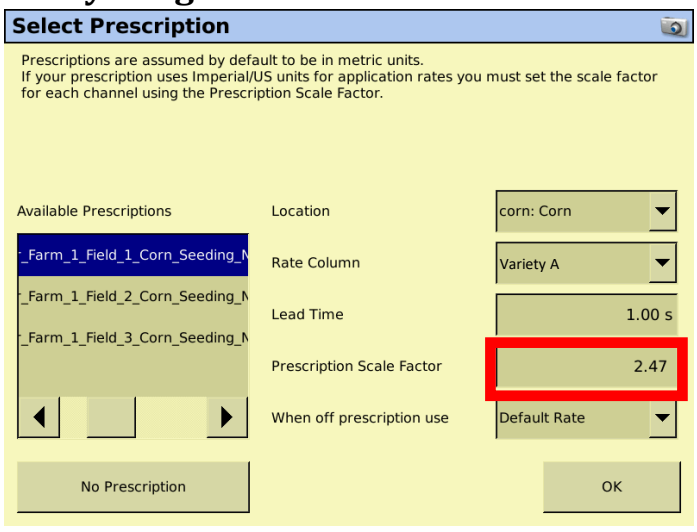
Change the Rate Column to the desired Target rate this may appear to be the type of variety being planted in the field.

Other tags for this is Target Rate or Rt1_Corn this is typically not the default.



3

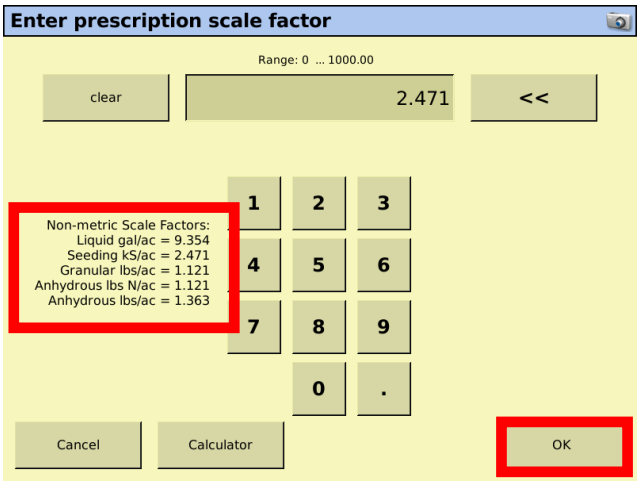
Press on **Prescription Scale Factor** to enter in the scale factor. **Note: This needs to be done the display assumes everything is in hectares.**



Selecting VRS Prescription Files
Trimble FMX

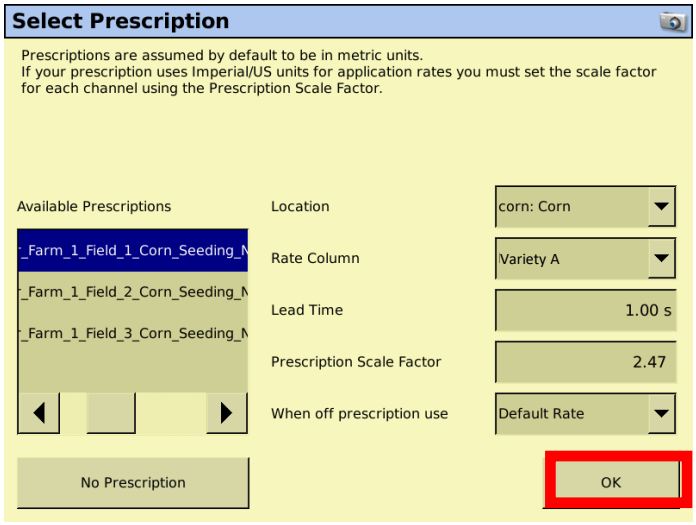
4

Look at the Non Metric Scale factors, and enter the number dealing with Seeding (2.471) in the box. Press **OK** when you are finished.



5

Press **OK** once everything on this screen looks correct. The lead time will vary from system to system. For **When off Prescription use** (...) recommended values are either the default rate that was created on the prescription map or last rate.

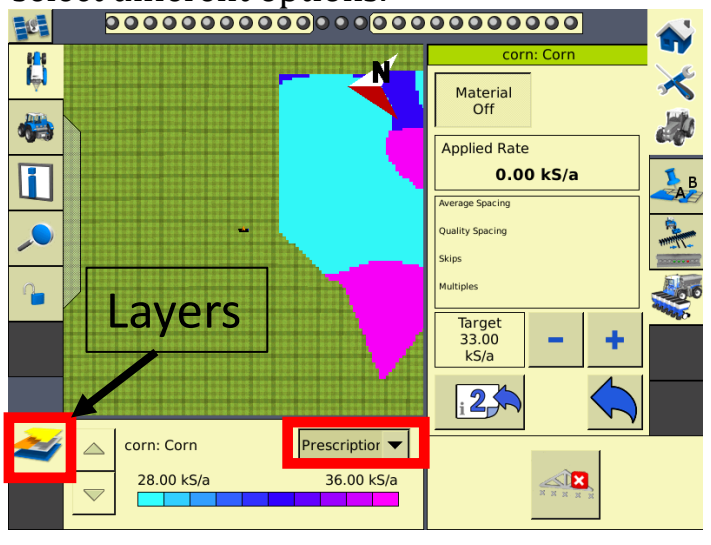


6

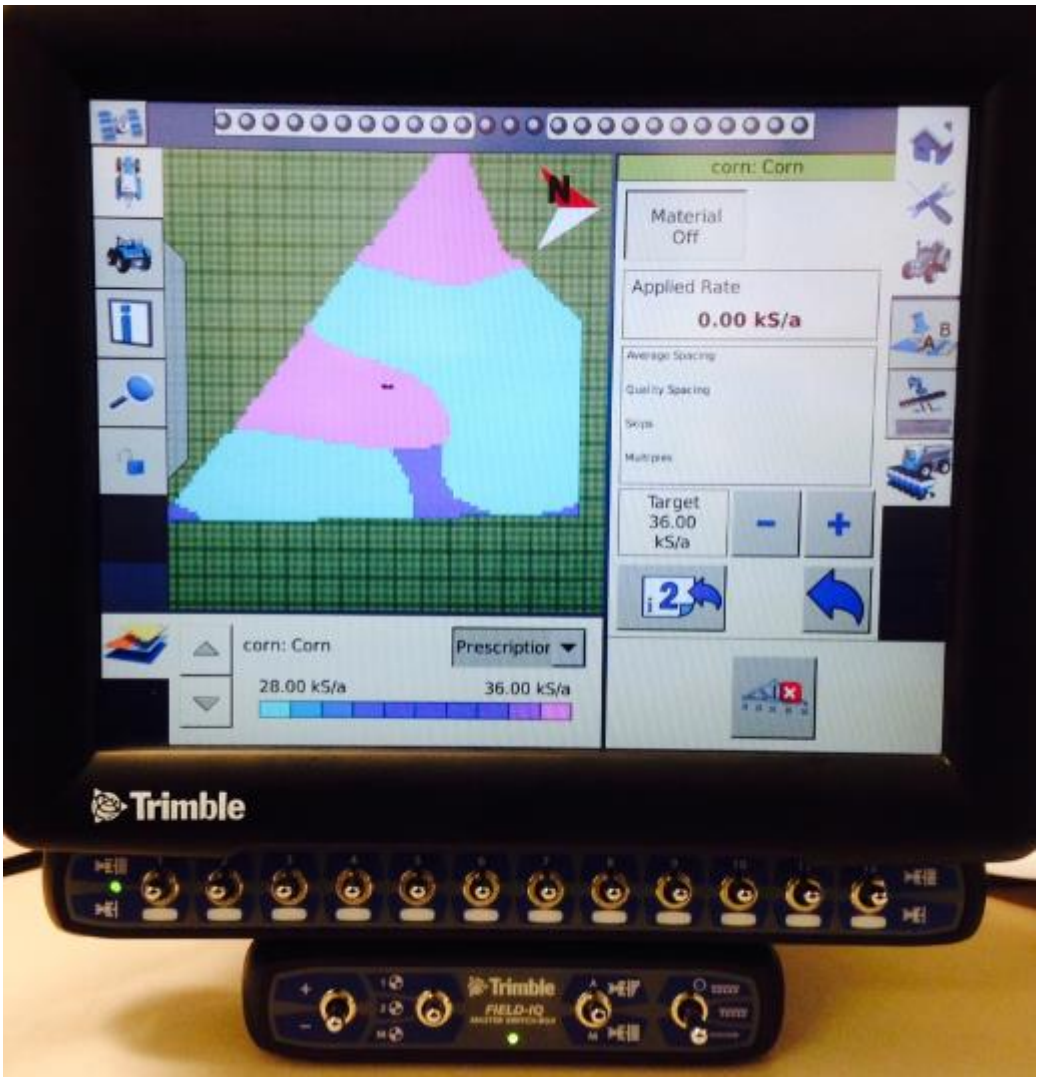
The Field-IQ Mater Switch-Box Target Rate needs to be flipped to Rate 1 before Planting operation starts this will ensure that the Seeding rates will be planted accordingly to the Prescription map. Also make sure to have shutoffs to A mode or automatic.

7

The Map Screen will appear with Prescription map as the background. The **Layers** icon allows you to choose if the Prescription, Variety and etc. maps are showing up on the mapping screen. If you press on the **drop down arrow** you can select different options.



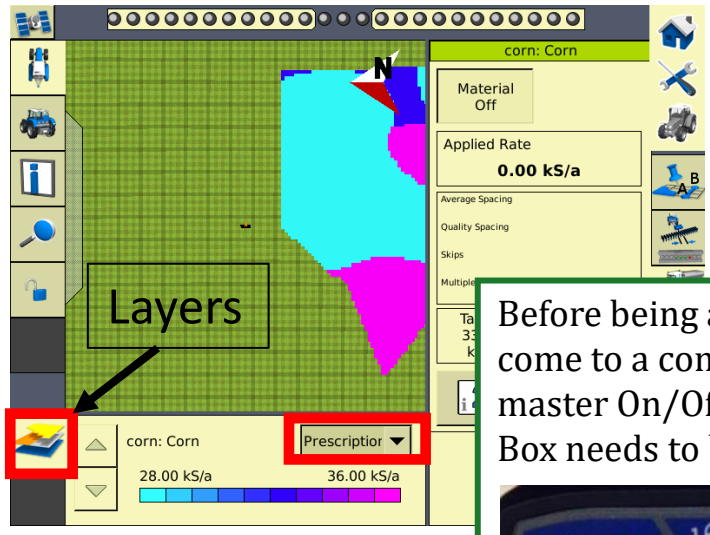
Creating and Changing Varieties for Planting



Creating and Changing Varieties
Trimble FMX

1

When creating or changing varieties in the mapping screen change the **Layers** icon to **Variety** by pressing on the drop down arrow. This will bring up the Variety mapping for the page.

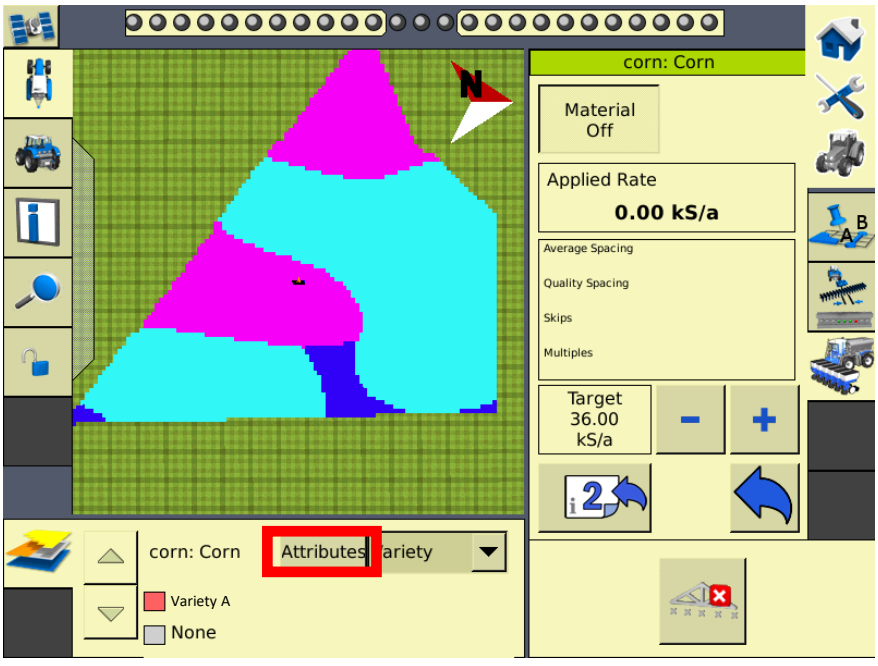


2

Before being able to change the Variety make sure to come to a complete stop in the operation, because the master On/Off switch on the Field-IQ master Switch-Box needs to be turned off **(the down position).**

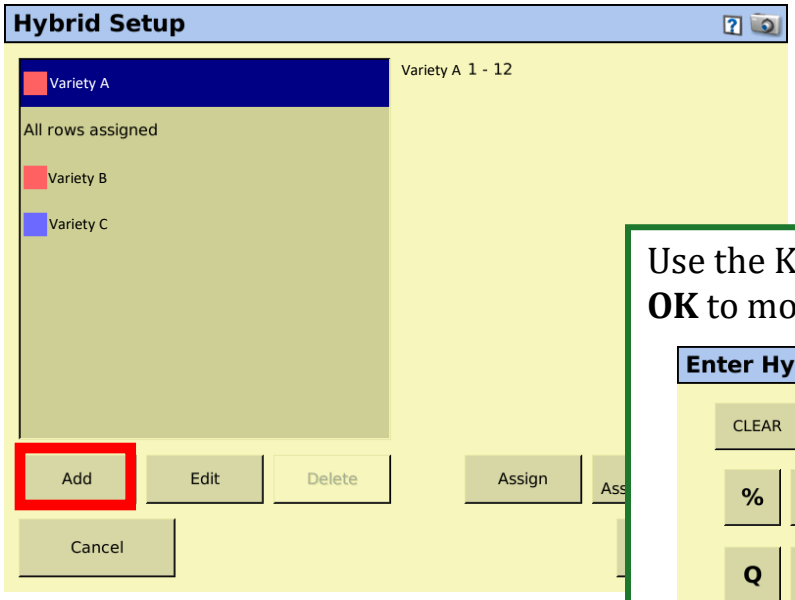
3

Press on **Attributes** to change the Variety for the field.



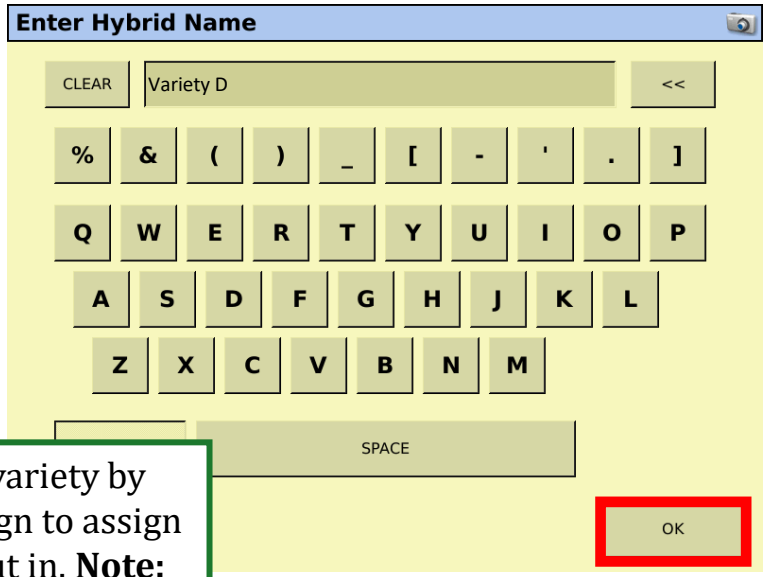
4

Press **Add** to create a new Variety.



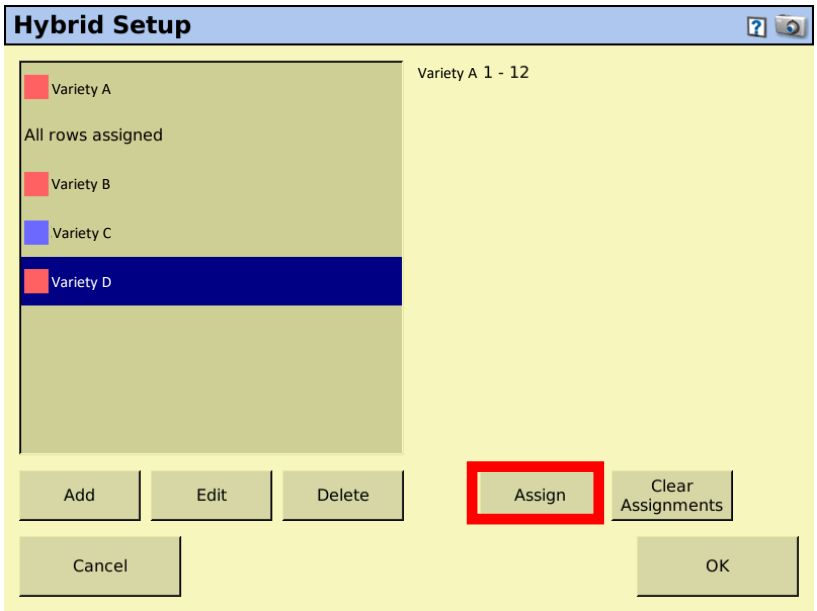
5

Use the Keyboard to enter in the new variety. Press **OK** to move on.



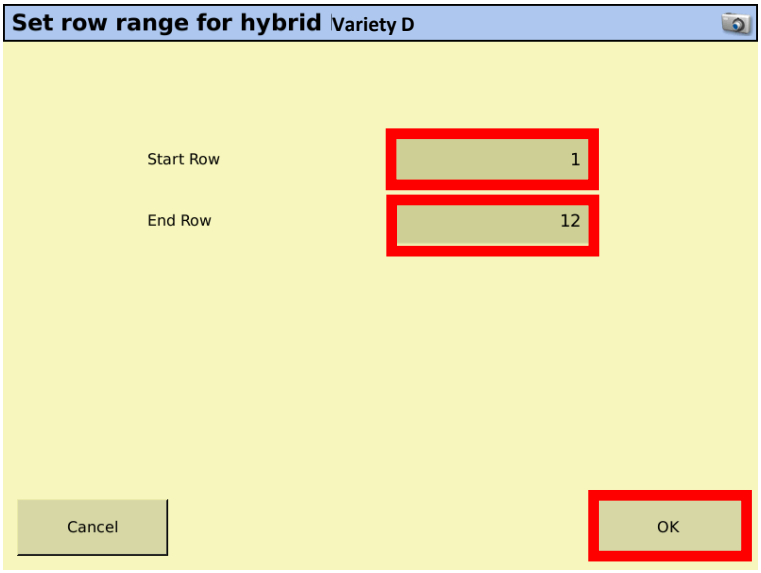
6

To assign rows to the Variety highlight the variety by pressing on the variety name. Press on assign to assign the correct rows that the variety is being put in. **Note: to change Variety in the field Assign the rows to the different Variety.**



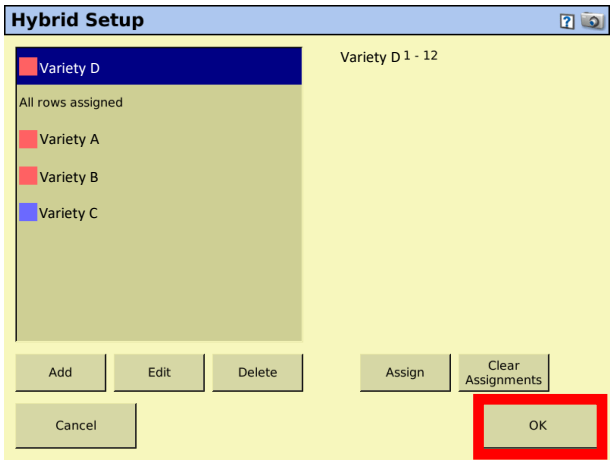
7

Enter in a value for the **Start row** and **End row** by pressing the boxes next to each name. Press **OK** to move on. **Note: Variety tracking of two different varieties can be done by changing the Start and End rows of each Variety.**



8

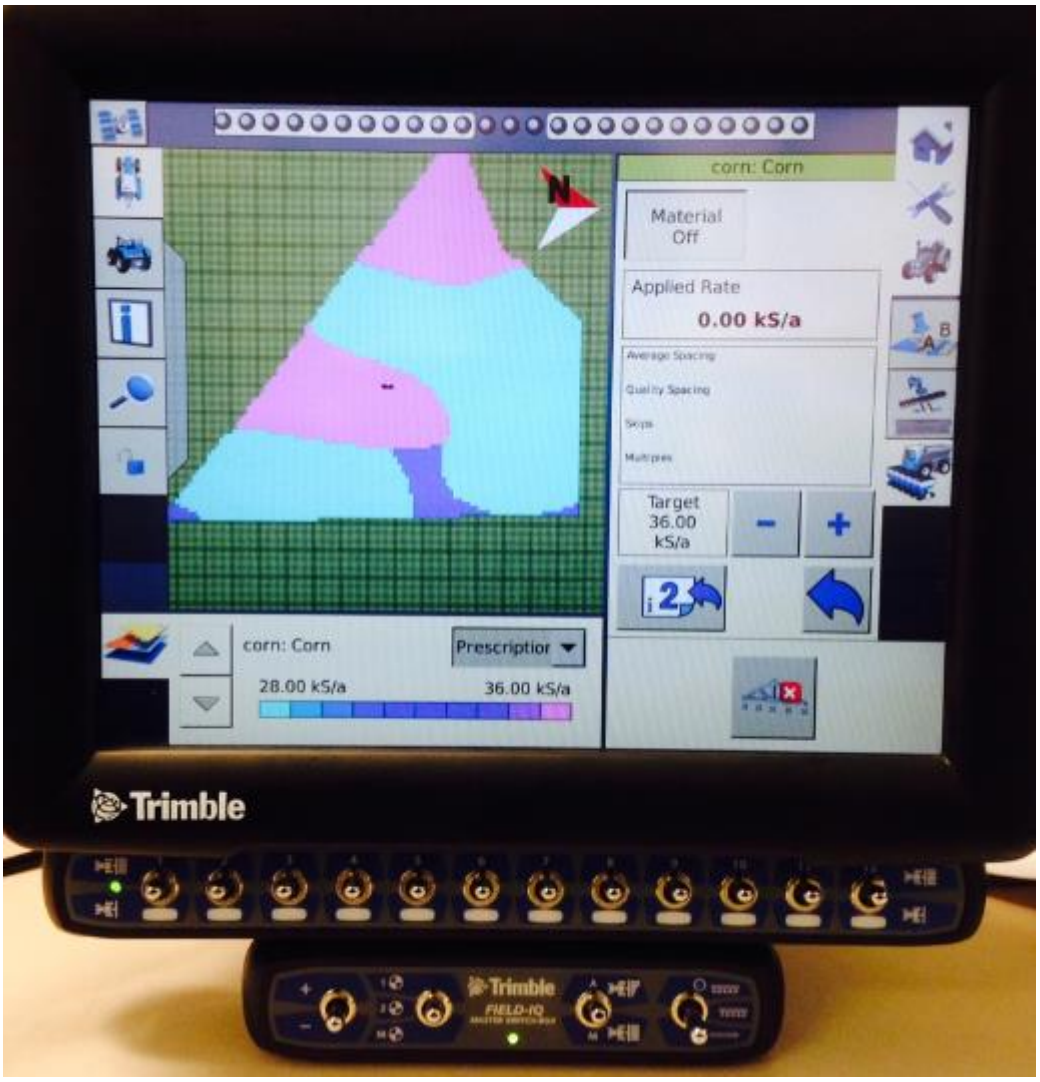
Once the Variety has been added to the correct rows press **OK**.



9

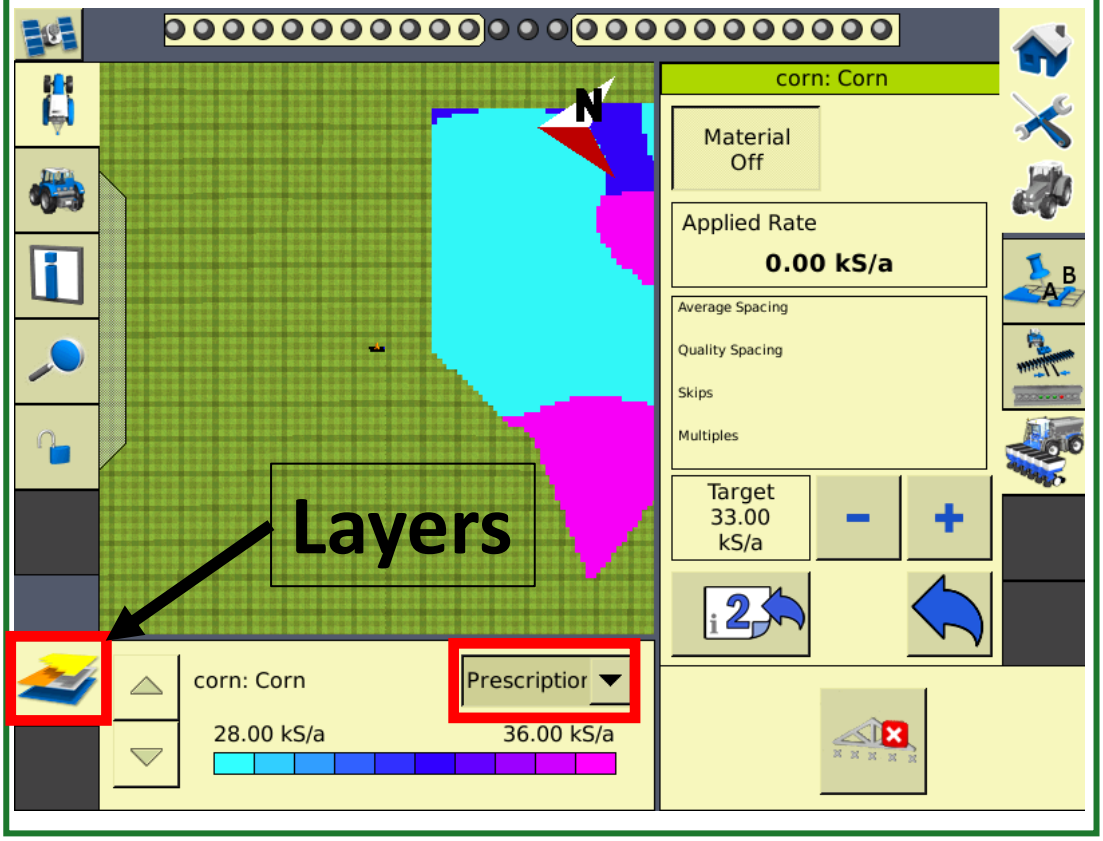
This will take you back to the Planting screen. Before you start the operation make sure to switch the Master On/Off back to the on position **(middle position).**

Cleaning up Varieties



Cleaning up Varieties
Trimble FMX

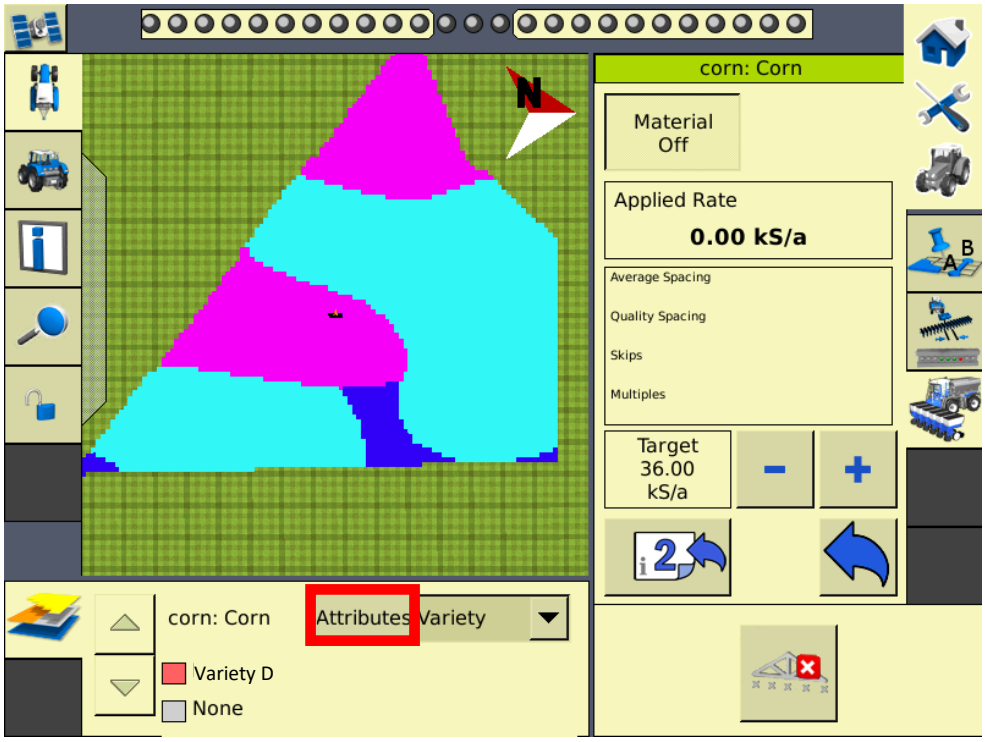
1 When deleting varieties in the mapping screen change the **Layers** icon to **Variety** by pressing on the drop down arrow. This will bring up the Variety mapping for the page.



2 Before being able to delete the Variety make sure to come to a complete stop in the operation, because the master On/Off switch on the Field-IQ master Switch-Box needs to be turned off **(the down position).**

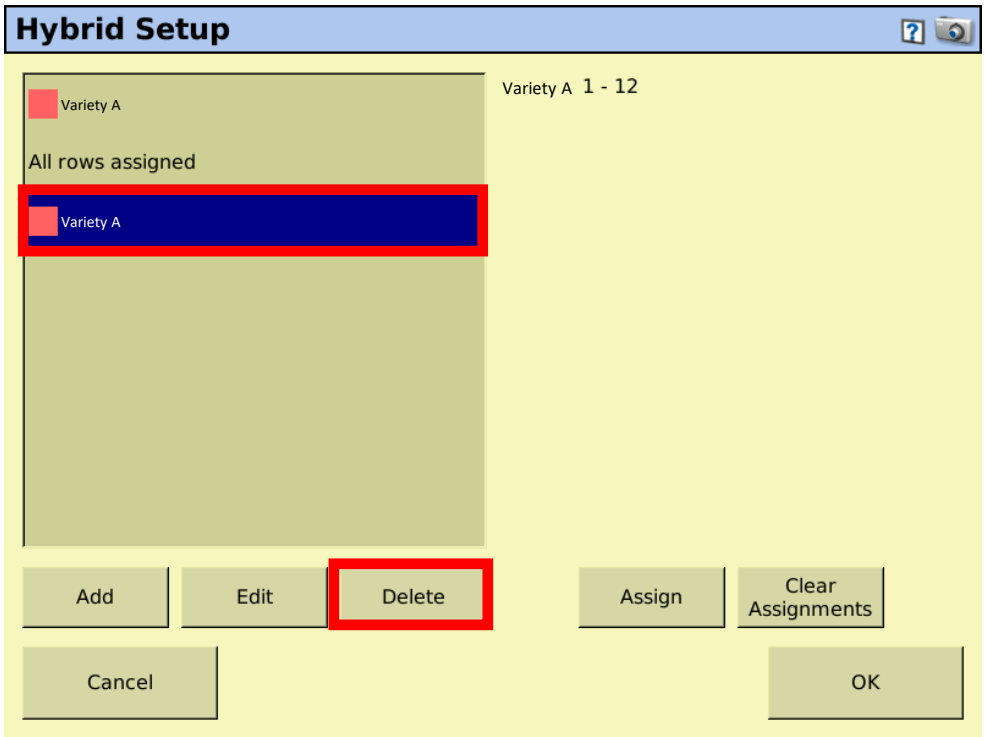
3

Press on **Attributes** to delete old varieties.



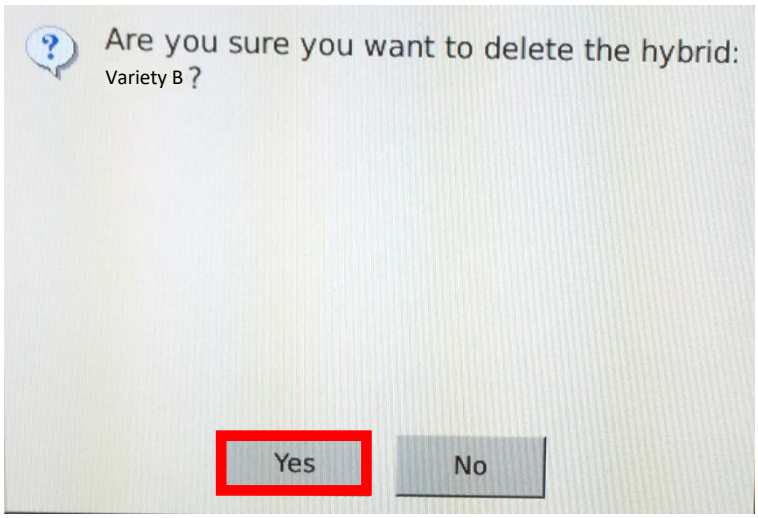
4

Select varieties by pressing on the variety name. Press **Delete** to remove the selected variety



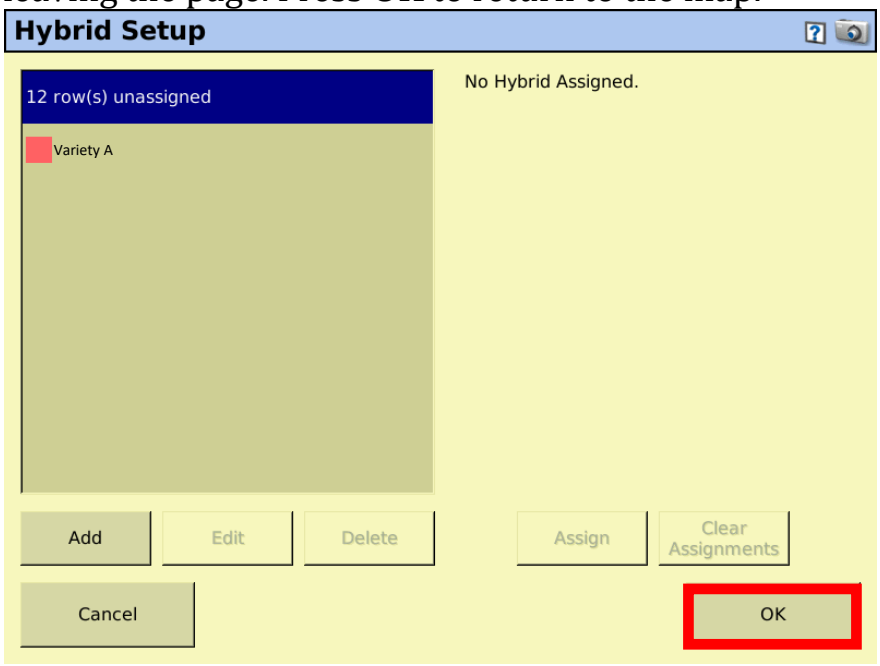
5

Press **Yes** to remove the variety.



6

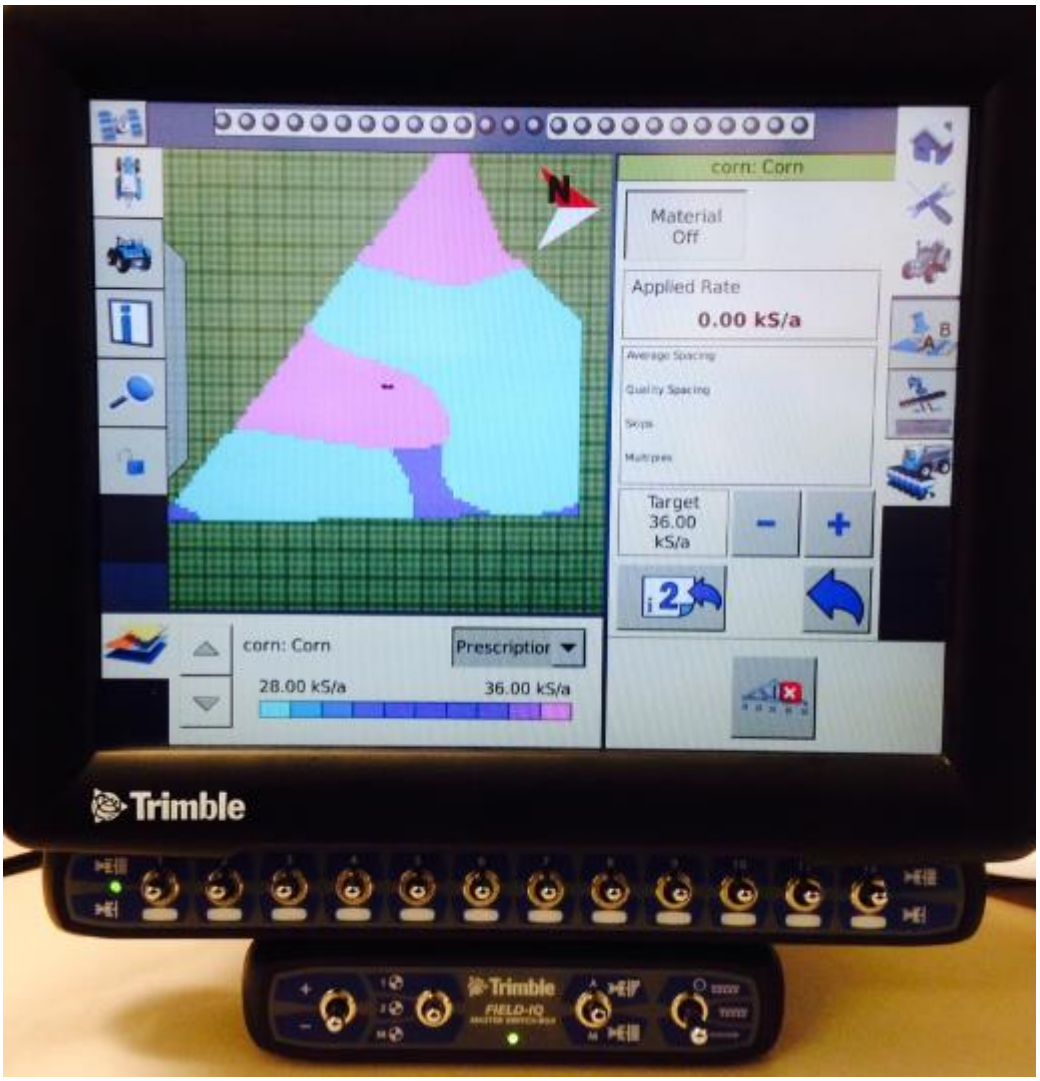
Make sure to assign rows to the current variety, before leaving the page. Press **OK** to return to the map.



7

This will take you back to the Planting screen. Before you start the operation make sure to switch the Master On/Off back to the on position **(middle position).**

Exporting As-Applied Planting Files



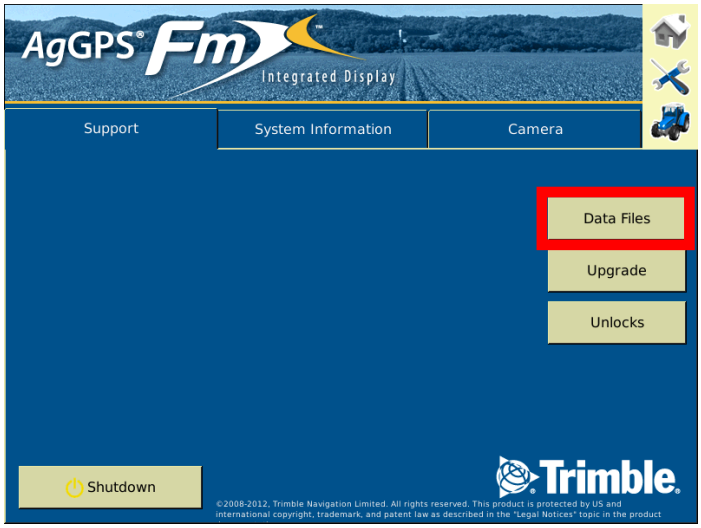
Exported As-Applied Planting Files
Trimble FMX

1

Insert the USB drive into the FMX display. The USB drive is located on the back side of the monitor.

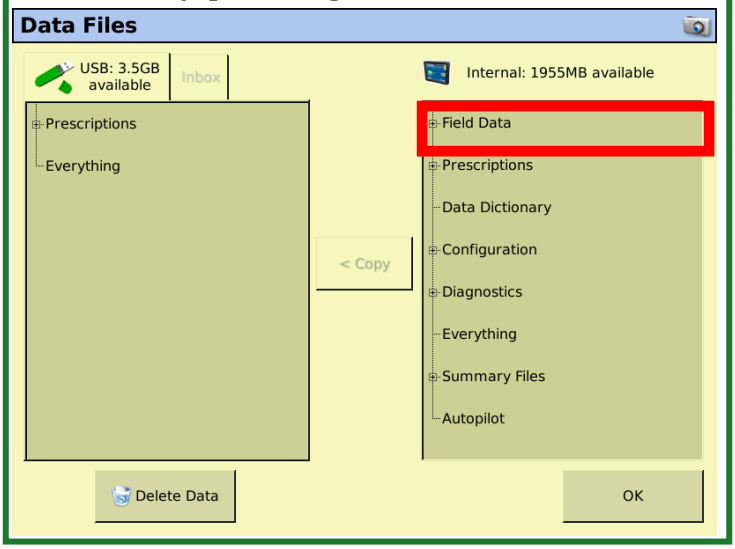
2

Start from the Home screen of the FMX display and press the **Data Files** icon.



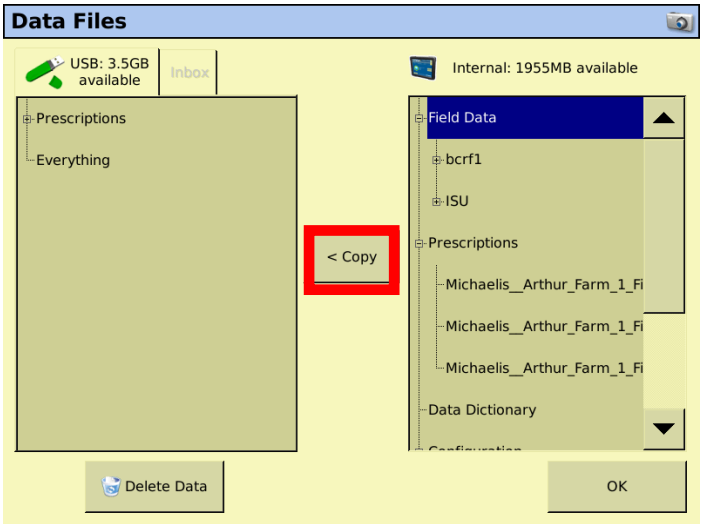
3

Once the USB has been recognized highlight the Field Data folder on the FMX Internal by pressing on **Field Data**.



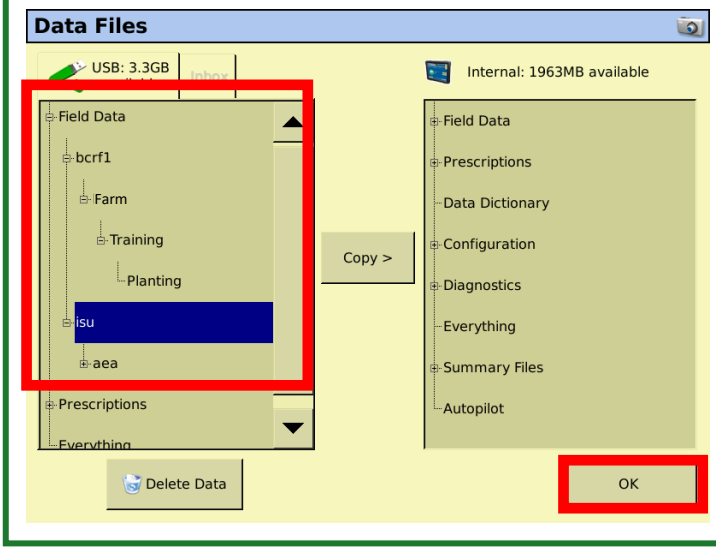
4

When the Field Data Folder is highlighted press **Copy** in the middle of the screen to copy the data to the USB drive.



5

Check to make sure files are on the USB by expanding the Field data Folder on the USB drive. Press **OK** to return to Home screen.



Content written by Christopher Murphy, Program Coordinator II, Iowa State University Department of Agricultural and Biosystems Engineering.

IOWA STATE UNIVERSITY
Department of Agricultural and Biosystems Engineering