GreenStar™ 3
2630 Display - Self Propelled Forage Harvester

User Guide

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About This Document

This User Guide will help you learn how to perform common tasks with your new display. It is a supplement to the display Operator Manual.

Read the Operator Manual for the following information:

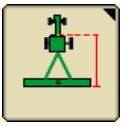
- How to operate your display safely
- Theory of operation
- How to install the display and do initial setup
- Diagnostics

Section Contents

This section applies to GreenStar applications associated with HarvestingMachines, including:

- Self-Propelled Forage Harvester (SPFH)

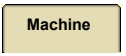
Machine and Header Setup



Machine and Header setup is required when moving the display between machines or changing Headers. Accuracy of guidance and mapping relies on accurate settings. Settings that are automatically detected will be grayed out.

Machine Setup in GreenStar

1. ***Menu*** ..... 
2. ***GS3*** ..... 

3. ***Equipment*** ..... 
4. ***Machine*** ..... 

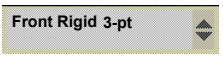
5. Select ***Machine Type*** ..... 

NOTE: The machine type is pre-selected automatically when the Display has successfully connected to an SPFH.

6. Select ***Model*** (Optional) ..... 

7. Select or create a ***Machine Name*** ..... 

NOTE: Machine and Implement settings will be saved under the current machine or implement name.

8. Verify ***Connection Type*** is set to Front Rigid 3-pt. 

9. Select ***Change Offsets*** to verify and change them as needed. 

NOTE: Adjust pre-loaded offsets to achieve desired guidance and mapping accuracy.

10. Select ***Recording Source***. This turns mapping and Documentation ON / OFF.

NOTE: If selection box is grayed out, the Recording Source has been auto-detected and can be adjusted through the implement controller software (see "Recording Source" in the Forage Harvester Menu section of this manual).

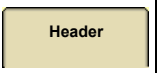
Header Setup in GreenStar

1. ***Menu*** .....

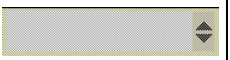
2. ***GS3*** .....

3. ***Equipment*** softkey .....

4. ***Header*** tab .....



5. Select ***Implement Type*** .....



NOTE: If selection box is grayed out, the Implement Type has been autodetected and can be adjusted through the implement controller software (see "Change Header Type" in the Forage Harvester Menu section of this manual).

6. Select ***Model*** (Optional) .....

7. Select or create ***Implement Name*** .....

NOTE: Implement settings will be saved under the current implement name.

8. Select ***Change Offsets*** to verify and change them as needed.

NOTE: Preloaded offsets often need to be adjusted on an individual machine basis. Accuracy of guidance and mapping relies on accurate offsets.

9. Select ***Change Widths*** to set the ***Implement Width*** and ***Track Spacing***.

- ***Implement Width*** - Used to generate the on-screen map. This is the width of the Header. Implement width on an SPFH is based on the number of rows/row width setup in the corner post display of the Forage Harvester. Refer to the appropriate section in the Forage Harvester Operators Manual to setup number of rows and row width.
- ***Track Spacing*** - sets the distance between the guidance lines on each pass and defines the desired overlap.

NOTE: If an overlap is desired, enter a Track Spacing smaller than the Implement Width.

NOTE: Changing the Implement Width may prevent previously recorded Coverage maps from being displayed.

Documentation Setup

Setup Documentation to calculate Harvest Totals and map yield or moisture.

Task Setup

Client, Farm, Field, and Task selections are required for Documentation.

1. ***Menu*** ..... 
2. ***GS3*** ..... 

3. ***Resources*** ..... 
4. Select or create a ***Task*** ..... 

NOTE: If selecting a new Task for a Field Name that has a previously recorded Coverage map, go to Map Settings and clear the Coverage map to record a new Coverage map.

Turn Documentation OFF

If Documentation is not needed, turn it OFF to avoid extra setup.

1. ***Resources*** ..... 
2. Select ***Documentation OFF*** ..... 

Operation Setup

When connecting a GreenStar 3 2630™ display to a Self-Propelled Forage Harvester, a Harvest Task is pre-populated in the documentation menu and cannot be deleted.

NOTE: Ensure only one operation is assigned, Documentation and Coverage Recording will not start when two operations are assigned.

1. ***Menu*** ..... 

2. ***GS3*** ..... 

3. ***Documentation*** ..... 

4. ***Harvest*** ..... 

5. Change ***Harvest Settings*** ..... 

6. Select ***Crop Type*** * ..... 

7. Select or create ***Crop Brand*** ..... 

8. Select or create ***Variety*** * ..... 

9. Check box for ***Variety Locator*** (Optional) ..... 

NOTE: Variety Locator requires a variety map loaded from desktop software.

10. Select ***Residue Management*** ..... 

*NOTE: Only settings with an asterisk * are required.*

Forage Harvester Menu

1. ***Menu*** ..... 

2. ***Forage Harvester*** ..... 

3. Select ***SPFH Main*** softkey to display general machine information. 

Change Header Type

4. ***Menu*** ..... 

5. ***Forage Harvester*** ..... 

6. ***Settings and Totals*** ..... 

7. Choose Header Type from the drop down menu:
   a. Row Dependant
   b. Row Independent
   c. Pickup
   d. Platform

AutoLOC™

1. ***Menu*** ..... 

2. ***Forage Harvester*** ..... 

3. ***AutoLOC*** button to setup AutoLOC ..... 

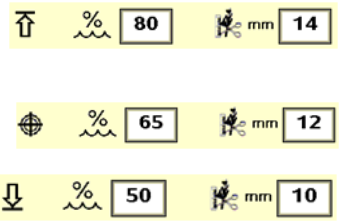
4. Enable/Disable AutoLOC.
   a. Select ***"Auto"*** to enable AutoLOC.

NOTE: When AutoLOC is enabled, cut length cannot be adjusted using the corner post shortcut button.

   b. Select ***"Fixed"*** to disable AutoLOC.

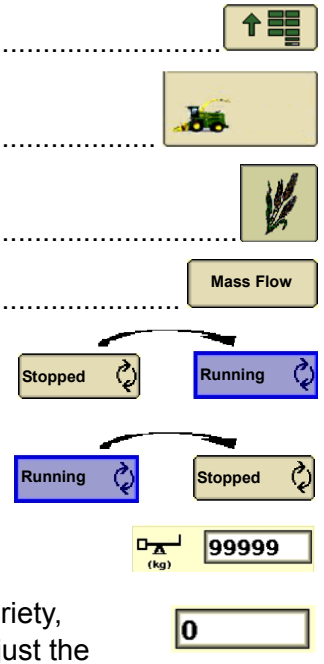
NOTE: When AutoLOC is disabled, adjust cut length using corner post shortcut button.

5. Adjust LOC maximum, target, and minimum values.
   a. Enter maximum moisture level and related LOC value (based on number of knives installed).
   b. Enter target moisture level and related LOC value.
   c. Enter minimum moisture level and related LOC value (based on number of knives installed).



Mass Flow Calibration

1. ***Menu*** .....
2. ***Forage Harvester*** .....
3. **Settings *and Totals*** .....
4. ***Mass Flow*** tab .....
5. Start the Mass Flow Calibration with an empty trailer.
6. Stop the Mass Flow Calibration when the trailer is full.
7. Enter the actual product weight (scale weight information).
8. Depending on crop status (dry, wet, variety, etc.), it is also possible to manually adjust the calibration factor without performing a mass flow calibration.



NOTE: Default calibration value is set to 1000. Depending on the crop to be harvested, the calibration value may vary between approximately 850 and 1150.

Recording Source

1. ***Menu*** ..... 
2. ***Forage Harvester*** ..... 
3. ***Settings and Totals*** ..... 
4. ***Mass Flow*** ..... 

5. Select Recording source from drop down menu.
   a. ***Material*** (recording ON/OFF based on knock-level information).
   b. ***Header*** (recording ON/OFF based on header position).

NOTE: Ensure proper calibration of header height sensors when selecting "Header" as recording source.

NOTE: Ensure proper calibration and adjustment of counter bar when selecting Material as recording source.

Mass Flow Sensor Reset

1. ***Menu*** ..... 
2. ***Forage Harvester*** ..... 
3. ***Settings and Totals*** ..... 
4. ***Mass Flow*** tab ..... 

5. Select ***Mass Flow Sensor Reset*** ..... 

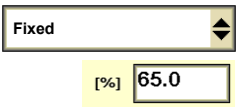
NOTE: Calibration will change when adjusting feed roll spring tension or adjusting spring mounting position.

NOTE: The factory default feed roll height is 10 mm (0.39 in.).

Before calibrating the feed roll height, ensure feed rolls are adjusted correctly (see Forage Harvesters Operator's Manual) and the feed rolls are free of material.

HarvestLab™ Setup

1. ***Menu*** ..... 
2. ***Forage Harvester*** ..... 
3. ***Settings and Totals*** ..... 
4. ***Constituents*** ..... 

5. Select ***Fixed*** or ***Measured*** from source drop down menu.
   a. Select ***"Fixed"*** to disable HarvestLab™ moisture readings and enter a fixed moisture value manually.
   

   b. Select ***"Measured"*** to enable HarvestLab™ moisture reaings.
   

Select HarvestLab™ Moisture Curve

The HarvestLab™ moisture curve is typically pre-selected based on the crop setup in the GreenStar 3 documentation menu.

Use the following steps to change the moisture curve manually.

1. ***Menu*** ..... 
2. ***Forage Harvester*** ..... 
3. ***Settings and Totals*** ..... 
4. ***Constituents*** ..... 

5. ***C1*** ..... 

6. Select Moisture curve based on information in Table 1:

Table 1:

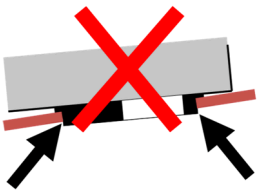
Calibration ID	MoistureCurve
100-0903	Alfalfa
200-0903	Corn
300-0903	Grass
400-0902	Whole Crop Silage - Young
400-0903	Whole Crop Silage - Mature (default)

HarvestLab™ Adjustment on Spout

If the HarvestLab sensor (attached to the spout) is not positioned properly, moisture readings will not be accurate, sapphire glass may wear excessively, and damages may occur.

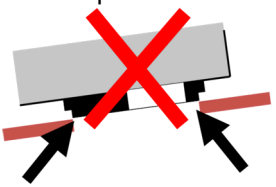
1. Incorrect adjustment: HarvestLab sensor adjustment is too deep.

When sensor adjustment is too deep, excessive wear on sapphire flange and possible damage to sapphire glass can occur.



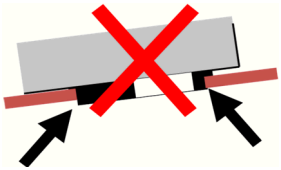
2. Incorrect adjustment: HarvestLab sensor adjustment is too high.

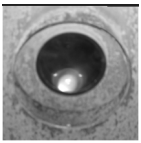
When sensor adjustment is too high, gumming on glass and excessive wear on spout wear plates can occur.



3. Incorrect adjustment: Irregular HarvestLab sensor adjustment.

Irregular sensor adjustment can cause uneven wear and damage tosapphire glass.





4. Correct HarvestLab sensor adjustment.

The rear end of the sapphire flange (in driving direction) is even with the spout wear plate or up to 1mm (0.03 in.) in spout. The front end of the sapphire flange (in driving direction) is even with spout wear plate.