

INSTALLATION MANUAL



Agra-GPS Massey Swather-JD Bridge for Massey 97xx and 98xx swathers

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Revision A
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Release Notice

This is the July 2019 release (Revision A) of the MasseySwather-JD Bridge Installation Manual.

Disclaimer

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DO NOT USE THE MasseySwather-JD Bridge IF YOU DISAGREE WITH THE DISCLAIMER.

Important Safety Information

Read this manual and the operation and safety instructions carefully before installing the MasseySwather-JD Bridge.

- Follow all safety information presented within this manual.
- If you require assistance with any portion of the installation or service of your equipment, contact your Agra-GPS for support.
- Follow all safety labels affixed to the system components. Be sure to keep safety labels in good condition and replace any missing or damaged labels. To obtain replacements for missing or damaged safety labels, contact Agra-GPS.

When operating the machine after installing the MasseySwather-JD Bridge, observe the following safety measures:

- Be alert and aware of surroundings.
- Do not operate the MasseySwather-JD Bridge system while under the influence of alcohol or an illegal substance.
- Remain in the operator's position in the machine whenever the MasseySwather-JD Bridge system is engaged.
- Determine and remain a safe working distance from other individuals. The operator is responsible for disabling the MasseySwather-JD Bridge system when a safe working distance has been diminished.
- Ensure the MasseySwather-JD Bridge is disabled prior to starting any maintenance work on the machine or parts of the MasseySwather-JD Bridge system.
- Follow all safety instructions from the MasseySwather system as well as the JD system.
- The MasseySwather-JD Bridge must only be used in the field, never on the street.

Electrical Safety

- Always verify that the power leads are connected to the correct polarity as marked. Reversing the power leads could cause severe damage to the equipment.
- Verify that all cables and connectors are not going over sharp edges and are not pinned, as this could cause power shortages and/or malfunctions.

Introduction

Congratulations on your purchase of the MasseySwather-JD Bridge. The MasseySwather-JD Bridge is designed to bridge the communication between a Massey swather (Autoguide ready) and a John Deere display (1800, 2600, 2630 or 4640). This allows a JD display to create maps in the John Deere format and also provides autosteer.

The operator uses the JD display to create AB-lines. The current position is determined by a John Deere receiver and all this information is used by the MasseySwather-JD Bridge to create steering instructions for the Massey swather. All conditions for autosteer such as minimum speed, steering enabled, etc. must be met by the MasseySwather-JD system before the autosteer engage option in the tractor can be activated.

NOTICE

This manual is not intended to replace the manuals for the Massey swather or the John Deere system. The operator must read and understand the manuals and instructions of these systems, before using the MasseySwather-JD Bridge.

Step 1: Mounting the MasseySwather-JD Bridge

The MasseySwather-JD Bridge is installed right of the driver seat.

Remove 2 screws from the small storage area below your armrest.

This will give you access to power and CANbus wiring hidden inside the armrest.



Inside the armrest you will find two 3-pin Deustch connectors plugged into their terminators. Remove both 3-pin Deustch plugs from their terminators. The Agra-GPS adapter cable will have two 'in-between' style connector pairs. The first connector pair (the pair that is under the same sleeving as the switched power/power/ground) is connected between the CAN 0 line, and a terminator. The other two plugs will be connected between CAN 1, and a terminator.



For the power supply the adapter has inserts for the 2 cigarette lighter plugs located top the back of the armrest.

Insert the red/black wires to the "C12 ADPTR/BAT" labelled connector.

Insert the purple/black wires to the "C13 PWR ADPTR SW" labelled connector.

Red must be connected to constant power, purple is for switched power!

Make sure you match black to black and red to red as well as purple to red!

The adapter cable comes out at the bottom of your armrest and connects the JD-Bridge there. Mount the JD-Bridge outside the armrest and run the JD cables to your JD components.



Step 2: Mounting the JD Display

The mounts for the JD display are NOT part of the MasseySwather-JD Bridge, however they can either be ordered as an optional item from AgraGPS or directly from RAM.

The JD-display may be mounted many different ways.

You may use the standard JD mounts or a RAM mount. RAM-270U + 2 * 1.5" balls (RAM-202U) + 4" double socket arm (RAM-201U)

<http://www.rammount.com/part/RAM-270U>



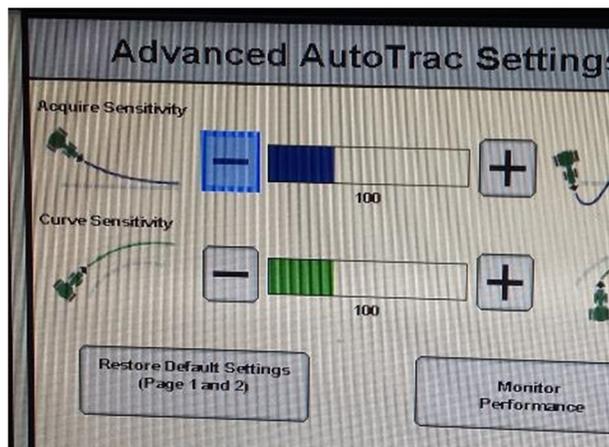
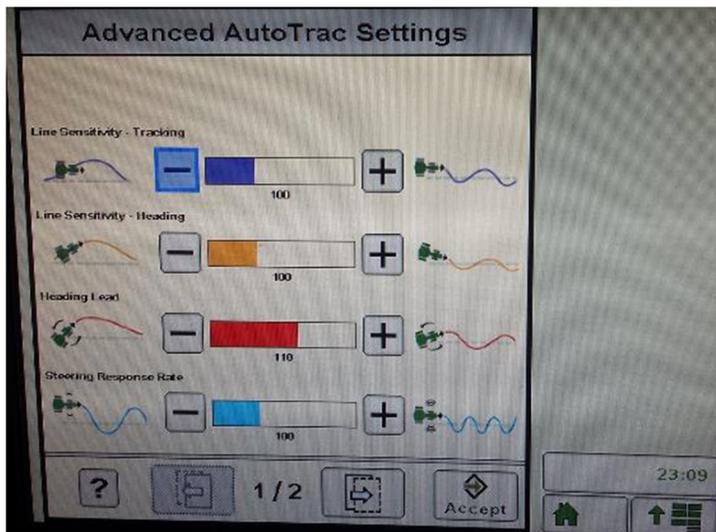
Step 3: Mounting the JD Receiver

The MasseySwather-JD Bridge does NOT include a standard JD-receiver bracket. You will want to create a mount which is centered left-right on the cab roof.



Step 4: Adjusting steering

Using the JD display you may adjust your steering performance. Most machines will perform optimally with all JD settings at 100. If a change is required, find an open area where you can travel at target speed and adjust one parameter at a time until you are satisfied with the steering performance.



Step 5: ISO Application

The MasseySwather bridge comes with an ISO application that will be loaded onto the John Deere monitor. The app should automatically store itself on the monitor after the first few minutes of the initial startup. On subsequent runs the app will load itself from memory as soon as possible. The MasseySwather app includes:

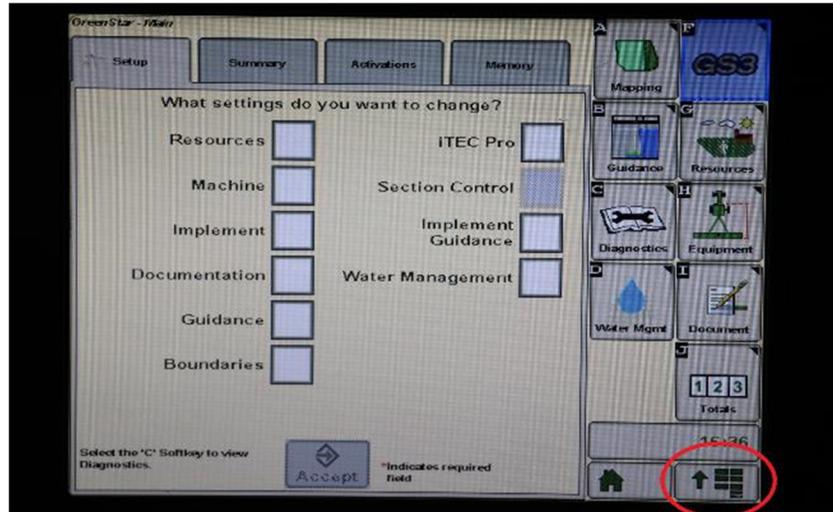
- Option to change work recording mode
- Option to change the machine type
- Option to disable throttle autosteer engage button
- Help page

Where to find the MasseySwather ISO application on the John Deere monitor:

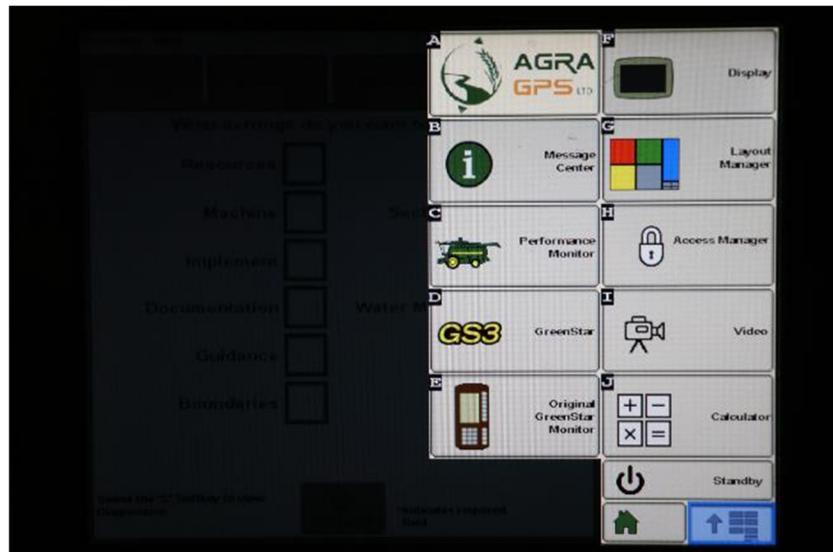
- On a John Deere 4640 the application will be loaded in the ISOBus VT section on the main page of the display.



- On John Deere 1800, 2600, 2630 the application will be shown in the side menu of the John Deere display. The side menu is opened by clicking the button on the bottom right of the display.



- **NOTE:** John Deere 1800 and 2600 monitors do not show a loading bar for ISO applications, while 2630 and 4640 monitors do.



If the ISO application is not loaded:

- Try clearing the monitor's memory. On 2630 monitors this can be done in the Message Center in the side menu. Go to the Cleanup tab, check controllers, then Begin Cleanup. On 4640 monitors this can be done in the info page of the ISOBus VT. Navigate to the ISOBus VT window and click the info button at the top of the page, then press Clean Up ISO Bus VT.
- Do a hard reset of the John Deere monitor (Unplug it, then plug it back in).
- Do a full restart of the machine. Remember the app may take a few minutes to load.

Step 6: Additional information for MasseySwather-JD Bridge

Important – Currently, the tractor machine type must be selected in the John Deere monitor for proper work recording while using the MasseySwather-JD bridge.

Work recording – To enable work recording, select hydraulic one in the SVC page of the John Deere monitor as the work recording trigger. Then select how the user wants to enable work recording in the Agra-GPS ISO application. 'On Resume' means that work recording will start whenever autotrac guidance is enabled. 'Header' means that the user will select a work recording height in the Agra-GPS ISO application, and work recording will start when the header height goes below that height.

Machine Gear – The machine's gear must be below gear three for the machine to allow autosteering capabilities.