

INSTALLATION MANUAL

Agra-GPS Miller-JD Bridge



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Release Notice

This is the January 2020 release (Revision A) of the Miller-JD Bridge Installation Manual.

Disclaimer

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

Important Safety Information

Read this manual and the operation and safety instructions carefully before installing the Miller-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 Miller-JD Bridge, observe the following safety measures:

- Be alert and aware of surroundings.
- Do not operate the Miller-JD Bridge system while under the influence of alcohol or an illegal substance.
- Remain in the operator's position in the machine at all times when the Miller-JD Bridge system is engaged.
- Determine and remain a safe working distance from other individuals. The operator is responsible for disabling the Miller-JD Bridge system when a safe working distance has been diminished.
- Ensure the Miller-JD Bridge is disabled prior to starting any maintenance work on the machine or parts of the Miller-JD Bridge system.
- Follow all safety instructions from Miller as well as the John Deere.
- The Miller-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 Miller-JD Bridge. The Miller-JD Bridge is designed to bridge the communication between a Miller Nitro sprayer (autosteer ready) and a John Deere display (4240, or 4640). This allows a JD display to create maps in the John Deere format and also provides straight AB-Line, curve, or circletrack autosteer. While the Miller-JD Bridge also works with the older John Deere displays, they are not recommended as they are limited to 16 sections and your Miller Nitro is likely setup with more than 16 sections.

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 Miller-JD Bridge to create steering instructions for the sprayer. All conditions for autosteer such as minimum speed, steering enabled etc. Must be met by the Miller sprayer before the autosteer engage option in the tractor can be activated.

NOTICE

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

Installation of the Miller-JD Bridge

Step 1: Mounting the Miller-JD Bridge

The Miller-JD Bridge will be placed under the tray to the right of the seat. One connector (802) is however under the tray to the right of the seat.

Open the trays left and right of the seat to gain access.

Find the C802 2-pin DTM deutsch connectors and open the connection.

Run the long end of the Bridge adapter cable with the 12-pin DTM connectors from the right tray opening to the left opening. You may have to lift the plastic slightly.

Insert the DTM 2-pin connectors from the Miller-JD Bridge adapter cable in the 802 connectors.

Find the LC064 connector in the left opening. If it is connected, open it and leave the unused end open. This end does go to the navcontroller which is no longer in use.

Connect the 12-pin Bridge adapter to the LC064.

Secure the Bridge in the right opening and close both tray openings.



Right



Left

Step 2: Mounting the John Deere receiver

The John Deere receiver should be installed at the back of the cab.



Use the short adapter cable for the John Deere receiver connection into the Miller receiver plug behind the cab.



Step 3: Mounting the JD Display

The mounts for the JD display are NOT part of the Miller-JD Bridge, however they can be ordered from a John Deere dealer.

While the Miller sprayer may be auto-steered with a 2630 John Deere display, we strongly recommend the use of a 4gen display as it supports more than 16 boom sections.

See the picture for a recommended John Deere display location.



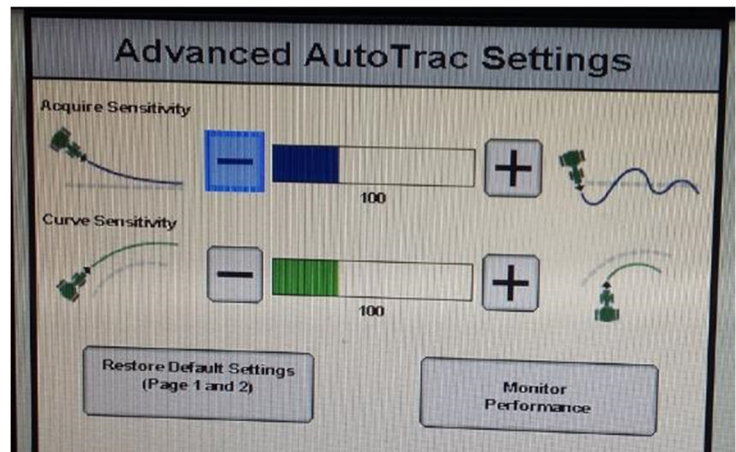
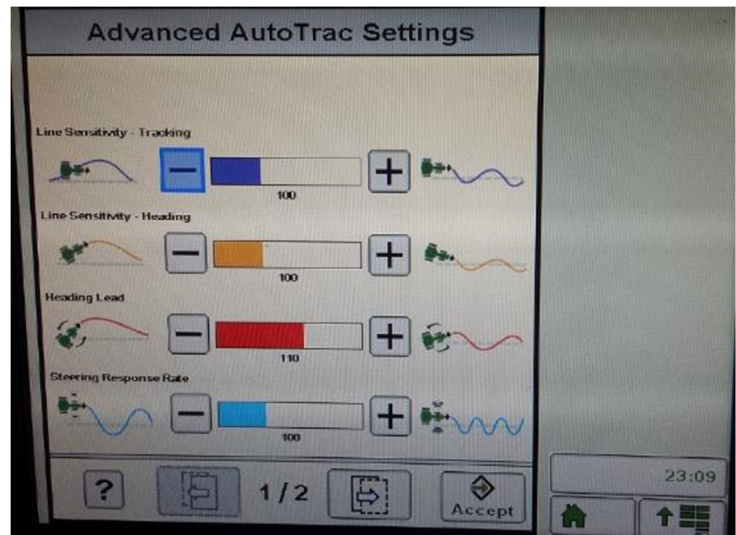
Find the display connector below the armrest, towards the front and connect the Miller-JD Bridge display adapter.

Run the cable up to the John Deere 4640 display.



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: Additional important information for the Miller-JD Bridge

- The valves must be calibrated by a Miller service technician for optimal steering performance!
- In the John Deere monitor the machine type **must** be selected as **tractor** if the user wishes to have section control features. This is due to the machine information being loading onto the JD monitor as an implement.

Step 6: ISO Application

The Miller 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 Miller app includes:

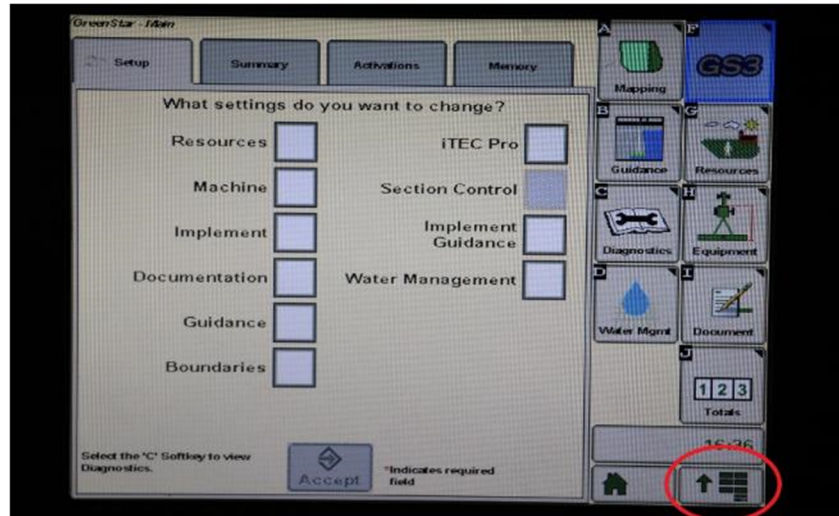
- Option to change the machine type
- Help page
- Support page
- Diagnostic page

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

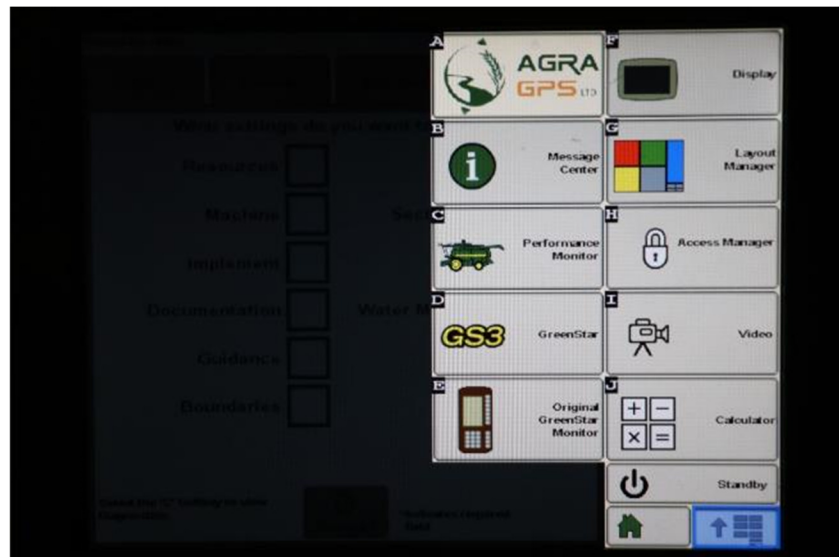
- On a John Deere 4640 the application will be loaded in the ISOBus VT section on the main page of the display.



- 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.