INSTALLATION MANUAL

Agra-GPS Miller1200-JD Bridge



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Release Notice
This is the February 2025 release (Revision A) of the Miller1200-JD Bridge Installation Manual.

Disclaimer

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DO NOT USE THE Miller1200-JD Bridge IF YOU DISAGREE WITH THE DISCLAIMER.

Important Safety Information

Read this manual and the operation and safety instructions carefully before installing the Miller1200-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 Miller1200-JD Bridge, observe the following safety measures:

- Be alert and aware of surroundings.
- Do not operate the Miller1200-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 Miller1200-JD Bridge system is engaged.
- Determine and remain a safe working distance from other individuals. The operator is responsible for disabling the Miller1200-JD Bridge system when a safe working distance has been diminished.
- Ensure the Miller1200-JD Bridge is disabled prior to starting any maintenance work on the machine or parts of the Miller1200-JD Bridge system.
- Follow all safety instructions from Miller as well as the John Deere.
- The Miller1200-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 Miller1200-JD Bridge. The Miller1200-JD Bridge is designed to bridge the communication between an autosteer-ready Miller Nitro sprayer with the new 1200 displays (use the Miller-JD on older machines) and a John Deere display (4240, or 4640 or 5Gen). This allows a JD display to create maps in the John Deere format and also provides straight AB-Line, curve, pivot or circle-track autosteer. While the Miller1200-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 just as they would in any John Deere equipment. The current position is determined by a John Deere receiver (or a Agra-GPS CRG receiver). All information is used by the Miller1200-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 autosteer can be engaged.

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 Miller1200-JD Bridge.

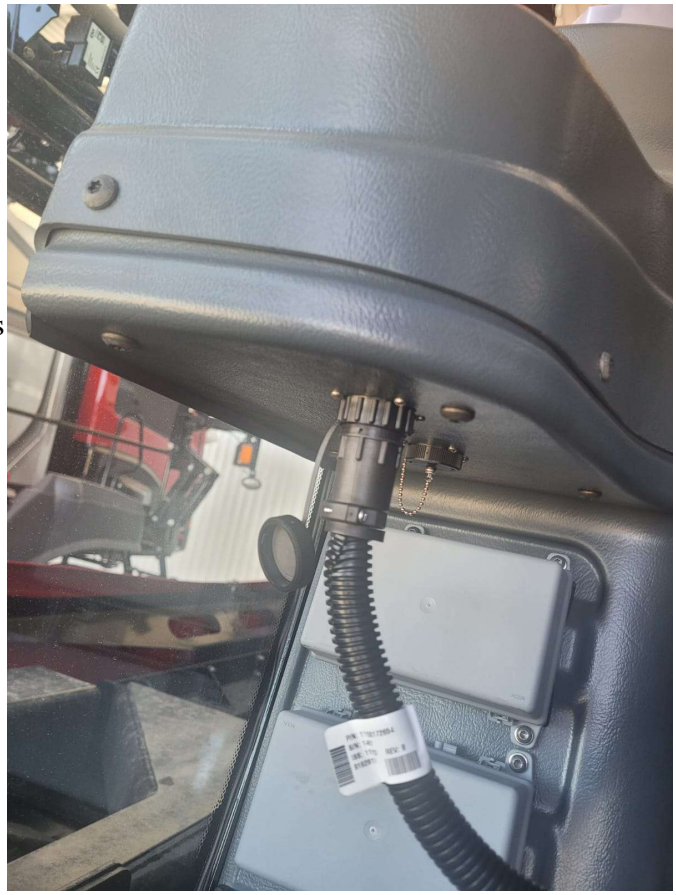
Installation of the Miller1200-JD Bridge

Step 1: Mounting the Miller1200-JD Bridge

The Miller1200-JD Bridge will be placed under the armrest to the right of the seat.

The 16 pin round AMP connector connects under armrest. This harness divides with a connection to the bridge itself (unless you use a CRG, then this DTM connector remains open or can be used to integrate a JD-Link modem). The other connections are for your JD display (26 pos connector)

Should you still have a Viper 4 display, it is connected in that spot and will have to be removed.



Right

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.



If you install a Agra-GPS CRG, you may also connect the 3-pin Deutsch. It provides NMEA serial to the Miller, and the CRG could then also be used with the factory installed Raven SC1 and the Viper 4 screen.

For installation with a John Deere or CRG-Vision display, however, the 3 pin is not used.



Step 3: Mounting the JD Display

The mounts for the JD display are NOT part of the Miller1200-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 or 5gen display as it supports more than 16 boom sections.

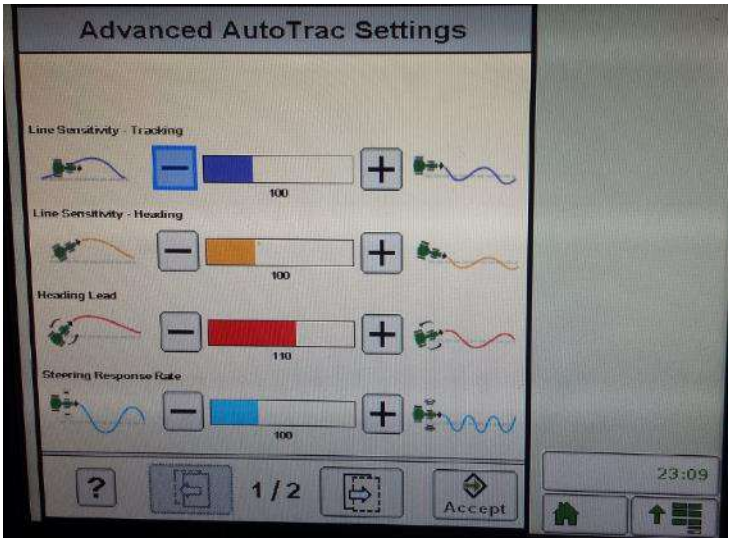
See the picture for a recommended John Deere display location.

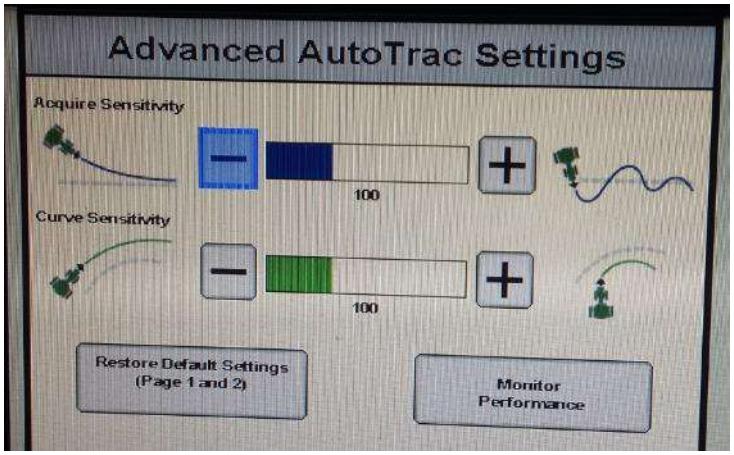


The display connection is part of the Y harness going to the 16 pin armrest connection.

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 Miller1200-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

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





If the ISO application is not loaded:

- Try clearing the monitor's memory. On 4gen or 5gen 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.