

INSTALLATION MANUAL

Agra-GPS CNH-JD Bridge for Case & New Holland Rowcrop Tractors (can based steering)



MAKE: Case IH or New Holland
MODEL: T5, T6, T7, T7 HD, T8, Maxxum, Puma, Optum, Magnum
YEAR: 2017-2019 (CAN-BUS based autosteer)

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Release Notice

This is the April 2019 release (Revision A) of the CNH-JD Bridge for CNH Rowcrop Tractors with canbus steering installation manual.

Disclaimer

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

Important Safety Information

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

- Be alert and away of surroundings.
- Do not operate the CNH-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 while the CNH-JD Bridge system is engaged.
- Determine and remain a safe working distance from other individuals. The operator is responsible for disabling the CNH-JD Bridge system when a safe working distance has been diminished.
- Ensure the CNH-JD Bridge is disabled prior to starting any maintenance work on the machine or parts of the CNH-JD Bridge system.
- Follow all safety instructions from the CNH system as well as the JD system!
- The CNH-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 CNH-JD Bridge. The CNH-JD Bridge is designed to bridge the communication between a Case or New Holland tractors (canbus autosteer ready) and a John Deere display (1800, 2600, 2630, 4240 or 4640). This allows a JD display to create maps in the John Deere format and also provides JD 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 CNH-JD Bridge to create steering instructions for the tractor. All conditions for autosteer such as minimum speed, steering enabled etc. must be met by the CNH system 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 AgraGPS CNH-JD Bridge.



Installation of the CNH-JD Bridge

Step 1: Mounting the CNH-JD Bridge

The CNH-JD Bridge is installed in the right back of the cab.

The plastic cover can be removed and there is space for the Bridge box behind at the bottom.

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Find the turquoise/light blue diagnostic socket.

For New Holland machines its located behind the seat at the cover you removed to place the bridge.

Connect the diagnostic connector of the provided AgraGPS harness.



Locate the InCab ISO BUS socket of the tractor.

Connect the ISO BUS InCab connector of the provided AgraGPS harness.



Now run the the long cable from the Bridge to the John Deere GPS receiver (here a SF3000). The receiver must be mounted at the front of the roof!



Also run the display portion of the long cable to a John Deere display (here a 4640).



Once you have routed all cables, connect them with the Bridge.

Reinstall plastic covers on the tractor and secure all loose cables away from moving parts and heat sources.

Step 2: Mounting the JD receiver

The mounts for the JD display and receiver are NOT part of the CNH-JD Bridge.

The JD mount can easily be bolted to the metal bracket provided by CNH in the back of the roof.

Or you build an own bracket in the front of the roof.

Below an example for that:



Use the John Deere monitor as you do in a John Deere tractor, set an AB-line, activate "Steer ON", then use the build-in resume button to activate autosteer!

Note: If you have your forward/reverse level in the park position, you will not be able to engage. The John Deere monitor will show a "Road switch" message!

The resume button is located in the joystick and next to the roadswitch, however it works the same.



Roadswitch

Roadmode



If you have a newer machine then 2017 make sure that the tractor is configured to ISO BUS Steering. It's the same configuration like using a Trimble XCN-1050™ Display.



Step 3: ISO Application

The CNH 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 CNH app includes:

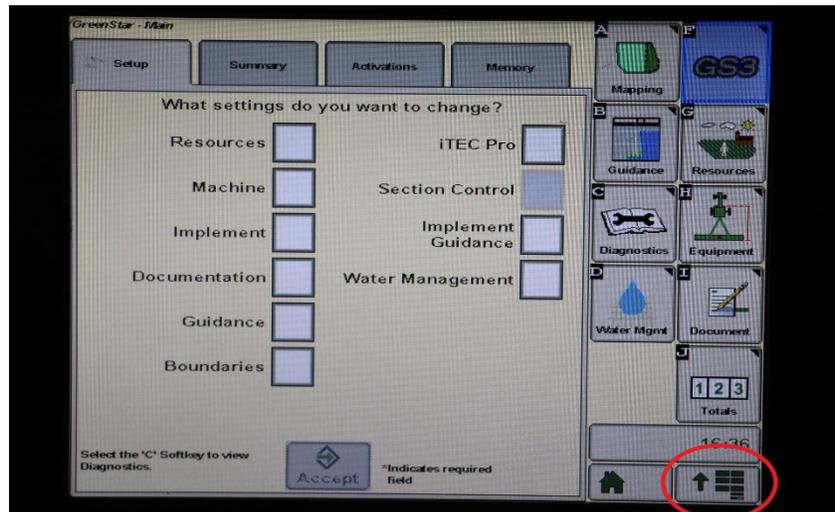
- Option to change work recording mode
- Option to change the machine type
- Optional autosteer engage button & status
- Help and Support page
- Diagnostic Page

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

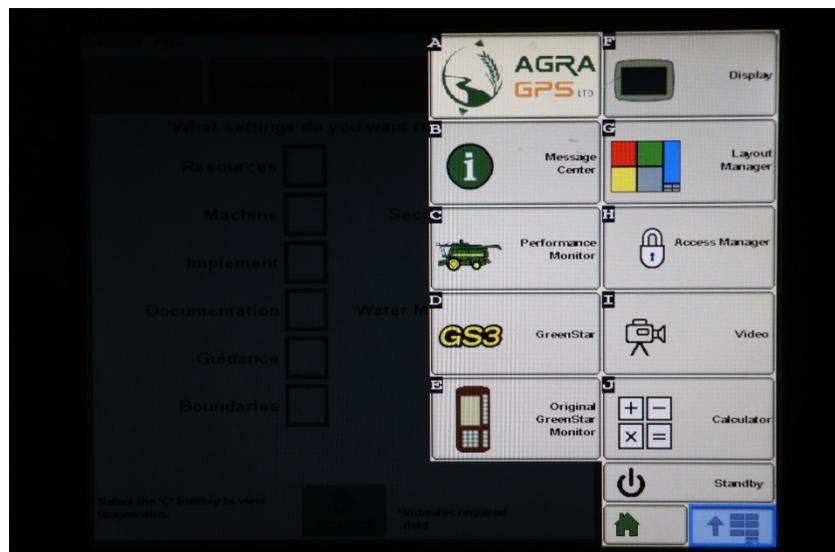
- On a John Deere 4640 the application will be loaded in the ISOBus VT section on the main page of the display.



- 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.