

# **INSTALLATION MANUAL**



Agra-GPS CNH-JD Bridge for New Holland CR / CX-series combines

Version 1.1 Revision A July 2019 Contact information Agra-GPS Ltd. Box 2585 Stony Plain, AB T7Z 1X9 CANADA 001 780 990 4052 Phone www.agra-gps.com

Release Notice

This is the July 2019 release (Revision A) of the New Holland-JD Bridge 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 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 CNH or NH combine (Autoguide ready) and a John Deere display (1800, 2600, 2630, 4640). This allows a JD display to create maps in the John Deere format and also provides autosteer.

The operator used 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 CNH combine. 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 combine can be activated.

#### **NOTICE**

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

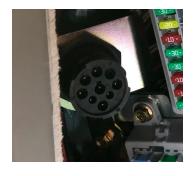
## **Step 1: Mounting the CNH-JD Bridge**

The CNH-JD Bridge is installed right of the driver seat inside the cab. Lift the plastic cover and you should find lots of space to setup the CNH-JD bridge.

The Bridge adaptor has 2 connectors which must be connected to the combine. One connects to the diagnostic port of the machine

If you have an older machine, please refer to 1A!

Open the cover and connect the adapter to the black diagnostic port.



The 2<sup>nd</sup> part of the adapter inserts into the 12-pin deutsch connector going to the seat.

It is the source for constant 12V battery power used by the JD components to store data.







If there is a Trimble NavController installed make sure that is unplugged. The NavController is located outside under the cabin on the right side.



On older machines the navcontroller is inside the machine.

Mount the JD GPS receiver to the front of the cab



The JD 2630 or 2600 should be mounted that the operator can access the display from his seat. Hide and secure the cable to the JD components.



# Step 1A: Mounting the CNH-JD Bridge on older style NH combines

If your armrest looks like the one on the left, the AgraGPS - JD Bridge is connected to a white connector below the armrest.

Open the white connector at the bottom of your armrest and connect the AgraGPS adapter kit there.

In addition, use the black 2-pin connector and insert into the black connector with the red and black wiring.



## **Step 2: Operating the CNH-JD Bridge**

If the JD display shows "road mode" or does not go from "Steer OFF" (2 parts of the PIE) to "Steer ON" your CNH combine is not ready for autosteer.

For the New Holland combine to be autosteer ready, you must hold the "road mode" and the "steering on" button on the right side of the armrest control panel several seconds. You must also move the steering wheel by hand at least once.

The autosteer is engaged with the "Resume" button on the joystick.

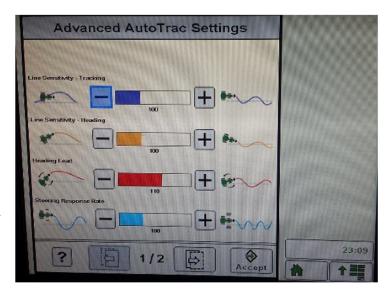
Disengage by moving the steering wheel.

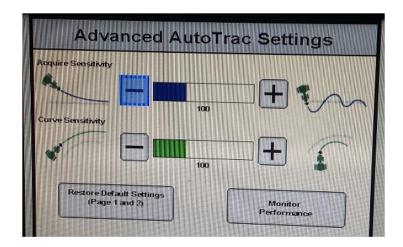




## **Step 3: Adjusting steering**

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 4: 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:

- Calibration
- Option to change work recording mode
- Option to change the machine type
- Optional autosteer engage button & status
- Help page

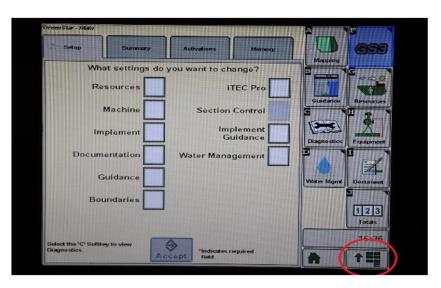
Where to find the CNH ISO application on the John Deere monitor:

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.

# **Step 5: Combine Settings for Autosteer**

To make the AutoSteer working a couple checkmarks in the combines display must be selected. Please see the following photos:

