

HARDWARE MANUAL

Trimble® Autopilot™ System with NavController III

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Revision A
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Agriculture Business Area

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Official Language

THE OFFICIAL LANGUAGE OF THESE TERMS AND CONDITIONS IS ENGLISH. IN THE EVENT OF A CONFLICT BETWEEN ENGLISH AND OTHER LANGUAGE VERSIONS, THE ENGLISH LANGUAGE SHALL CONTROL.

Safety

Always follow the instructions that accompany a Warning or Caution. The information it provides is intended to minimize the risk of personal injury and/or damage to property. In particular, observe safety instructions that are presented in the following format:



WARNING – This alert warns of a potential hazard which, if not avoided, could result in severe injury or even death.



CAUTION – This alert warns of a potential hazard or unsafe practice which, if not avoided, could result in injury or property damage or irretrievable data loss.

Note – *An absence of specific alerts does not mean that there are no safety risks involved.*



CAUTION – Make sure the vehicle power is off when you are connecting system components.



WARNING – Auto guidance systems cannot avoid items in the field such as obstacles. Make sure you are adequately trained to operate the auto guidance system.

Restrictions on use

The Autopilot system is for agricultural use only.

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Introduction

The Trimble® Autopilot™ steering system with NavController III automatically steers your vehicle on line with maximum precision.

In addition to cables, hydraulic components and other parts, the Autopilot steering system includes the Autopilot steering system with NavController III which uses internal sensors and GPS data to correct roll, pitch and yaw.



Product features

The Autopilot system has the following features:

- Precision guidance
- Reduction of operator fatigue
- Increase in safety
- Operator freedom to monitor other operations within the cab
- Warnings for the operator such as end of row
- Operation:
 - On slopes
 - During day or night
 - In dusty or low visibility conditions

The Autopilot system is compatible with the following:

- TMX-2050™ display
- FmX® integrated display
- CFX-750™ display
- EZ-Guide® 500 lightbar

Installation



CAUTION – Make sure the vehicle power is off when you are connecting system components.

Components

The components for the Autopilot system depends on your configuration. Required components are:

- Platform kit
- Hydraulic components
- NavController III and mounting bracket
- GNSS antenna / receiver
- Cables
- Display

Optional components include:

- Remote engage control

Basic installation steps

1. Prepare the vehicle for installation.
2. Install hydraulic components.
3. Install the AutoSense steering, if applicable.
4. Install the GNSS antenna / receiver.
5. Install the power cables.
6. Install the NavController III.
7. Install any optional components.

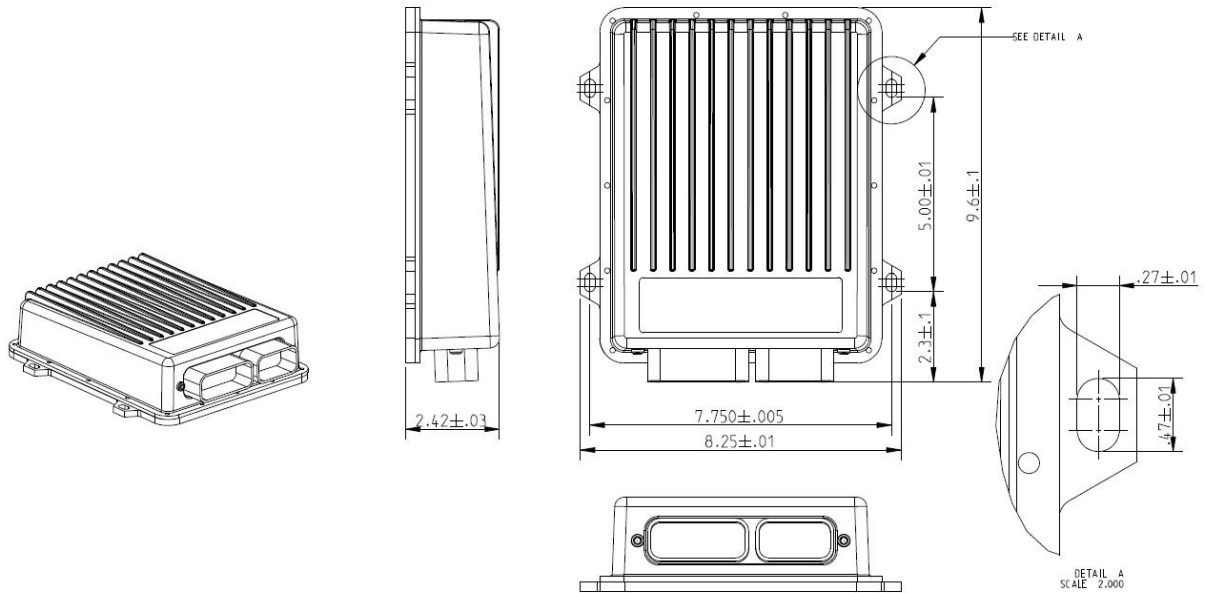


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NavController III data sheet / operating parameters

Item	Description
Size	200 mm (wide) x 225 mm (long) x 60 mm (deep) (7.87 in wide x 8.86 in long x 2.36 in deep)
Operating temperature	-30 °C through +70 °C (-22 °F through + 158 °F)
Storage temperature	-40 °C through +85 °C (-40 °F through + 185 °F)
Input voltage range	+10 to +16 VDC
Operational current	~10 A peak, <2.5 amps average
Valve drive output	12 VDC -6 max, 3 amp continuous
IP protection rating	IP66

NavController III mechanical drawing



Resources

For more information, see your authorized Trimble dealer or <http://www.trimble.com/Agriculture/index.aspx>.