

▶ What is NX510?

CHCNAV NX510 leverages single antenna solution. The whole system consists of HD console, receiver and motor. Fewer components result in faster installation and easier calibration, saving you valuable time. The NX510 is capable of providing automatic steering system with steady centimeter and sub-meter level positioning accuracy. To provide you with efficient, reliable automatic steering service in ditching, planting, fertilizing and harvesting applications.

▶ The NX510 addresses the growing market segment of:

Any farmers investing in after-market automated guidance systems for their tractors and searching for a highly cost-effective solution.

While reducing driver fatigue is one obvious benefit, there are many other advantages that make the NX510 a valuable investment to farmers:

Cost Savings. Before guidance systems, farmers sometimes overlapped rows when planting or applying fertilizer, herbicide, or pesticide. The NX300 precisely guides the equipment so there is little to no overlap. Less overlap means fewer trips across the field, which reduces fuel and labor costs too.

Better for the Environment. Using less fuel and fertilizer is a direct cost saver. Reducing overlap and applying fertilizer more precisely, reduces environmental pollution and improves water quality by reducing nutrient excess.

Reduced Soil Compaction. Driving heavy tractors across the field compacts the soil, which can make it more difficult for seedlings to emerge and restricts water, nutrient, and air movement in the soil. This reduces crop yield and can lead to increased runoff and soil erosion. The NX300 enables farmers to drive in precisely the same paths when cultivating, planting, spraying, and harvesting therefore reducing the overall compaction of the field.

Improved crop yield. Using NX510 increases yield in different ways. By covering more acres in less time, farmers can finish planting earlier in the season which has been shown to increase yield in corn. Reducing overlap also improves yield. Overlapping when planting results in crowded plants that compete for water and nutrients and do not grow well. Over-applying fertilizer due to overlap also affects plant growth and decrease yield.

Improved efficiency and safety. In addition to steering, the driver is usually listening to the engine, watching the gauges, keeping an eye on the implement behind them, and watching the field for rocks and other obstacles. The NX510 systems takes the work of steering away and enables farmers to focus on the tractor, implement and field. Less multitasking decreases stress and driver fatigue, which improves efficiency and safety. The NX300 also enables farmers to better operate equipment when visibility is low because of dust or fog. Nighttime operation is also simplified.

▶ What are the key benefits of NX510?

- Easy installation and maintenance. Non-contact angle sensor
- Highly cost-effective automated steering system
- All-inclusive turnkey autosteering solution. No hidden cost or future option to activate.
- Intuitive AgNav software. Integrated beginner making system adoption easy.

▶ What are the differences between the NX510 PRO and NX510 SE

Configuration	NX510 PRO	X510 SE
Satellites	BDS B1/B2/B3 GPS L1/L2/L5 GLONASS L1/L2/ L3 Galileo E1/E5/ E6 IRNSS L5 SBAS QZSS	GPS L1/L2/L5 BDS B1/B2/B3 Galileo E1/E5a/ E5b GLONASS L1/ L2 SBAS L1 QZSS L1/L5
RTX	Support	/
Network module	Built-in	Built-in
Radio module	External radio	Built-in
Installation time	30mins	30mins
Calibration time	10mins	10mins
NMEA output	1/2/5/10Hz from receiver directly	1/2/5/10Hz from receiver directly
Serial port	2	2
CAN port	2	2

▶ What kind of tractor is NX510 suitable for?

- Front wheel turning tractor/Rear wheel turning tractor/Tracked tractor/Articulated tractor.
- No horsepower limited

▶ **Which differential formats does the NX510 support?**

MR, CMR+, RTCM2.1, RTCM2.2, RTCM2.3, RTCM3.0, RTCM3.1 and RTCM3.2

▶ **Does NX510 support ISOBUS?**

ISOBUS is not supported currently. Coming in Q4/2021.

▶ **Does NX510 support L-Band differential correction services?**

- Yes. NX510 PRO is compatible with Trimble RTX[®] services (Range point and Center Point)
- NX510 SE not support.

▶ **Does the NX510 integrate a 4G network module?**

Yes. The NX510 integrates in fact two 4G modules. One in the PA-3 receiver and one in the display console. When using 2x SIM cards from different operators simultaneously in difficult 4G reception zones, the N510 will automatically using the most robust RTK correction flow to ensure uninterrupted operation.

▶ **What are the communication ports available in the NX510?**

2x CAN Bus, 2x COM, WiFi and Bluetooth 4.0

▶ **What accuracy of NX510 can be chose?**

- DGPS Mode (10-50cm)(Include: SPP SBAS Range point RTX)
- RTK Mode (Include: RTK(1-3cm) and Center point RTX(2-4cm))

▶ **Which tractors does the NX510 currently fit?**

It does not matter with the brand, all use the steering wheel to control the direction of agricultural vehicles can be installed.

▶ **Do NX510 have internal Radio?**

Sorry no. NX510 PRO do not have internal radio. NX510 SE supports HUACE/TT450S/Transparent protocol.

▶ **How does the NX510 confirm the heading of the vehicle?**

NX510 confirms the heading of the vehicle from the data of the main board and the IMU module which is in the receiver.

▶ **What are the items delivered with the NX510?**

Item	Quantity	Image
CES electrical steering wheel	1	
PA-3 Receiver	1	
CB-A10 Tablet display	1 display + 1 mounting bracket	
GA-Sensor angle sensor	1	
Rear camera	1	
Camera power cord	1	
Motor Steering Wheel Cable V510		
GA-Sensor angle sensor cable	1	
CB-A10 tablet display cable	2	
Main cable for control unit	1	
Universal holder	1	
T-type holder	1	
T-frame fixing splint	2	
U-bolt with bezel	1	
Fixed screw pack	1	