

CHCNAV

NX510 Steer Ready

AUTOMATED STEERING SYSTEM



**PRECISION
AGRICULTURE**

HYDRAULIC COMPLIANT AUTOMATED STEERING SYSTEM

HYDRAULIC AUTOSTEERING WITH SIMPLIFIED RETROFIT

A cost-effective way to more efficient, accurate control

The NX510 Steer Ready system is designed to provide farmers with the flexibility to adapt faster, more accurate automated steering to their vehicles through the control of OEM's on-board steering valve with minor modifications. The compatibility with PWM and CANBUS technologies allows more users to benefit from the NX510 Steer Ready. By having access to an alternative hydraulic autosteering package for their fleet, farmers can improve their productivity and efficiency, which ultimately translates into more successful operations and a high return on investment.

2.5 CM PASS-TO-PASS ACCURACY

High accuracy in challenging environments

The NX510 Steer Ready System is a state-of-the-art guidance system that utilizes multiple correction sources and all GNSS constellations, including GPS, GLONASS, Galileo, Beidou and QZSS. With its built-in 4G and UHF modem, it easily connects to all industry-standard DGPS and GNSS RTK correction services, enabling precise, centimeter-level steering for agricultural vehicles. The CHCNAV terrain compensation technology ensures consistent and accurate performance even in sloping fields.

HIGH INTEGRATION, ENHANCED CONNECTIVITY

Fast installation and easy transferability between vehicles

The NX510 Steer Ready is designed with highly integrated components for quick and easy installation on most farm vehicles in less than 30 minutes. The streamlined installation process significantly reduces costly vehicle downtime, allowing operators to get back to work without delay. The kit also features enhanced built-in connectivity, including multiple CAN ports, serial ports, WiFi/Bluetooth, a dual 4G modem and a UHF radio modem. The connectivity options facilitate system configuration and operation by providing a high level of flexibility. In addition, the NX510 Steer Ready system is ISOBUS compliant, further enhancing its versatility in automating farm operations.

RUGGED DESIGN AND PROVEN RELIABILITY

Extended durability in farming environments.

Designed to withstand the challenges of typical agricultural environments, the NX510 Steer Ready is built to last. Its industrial design features dust- and waterproof components with an IP65 rating or higher, ensuring protection from harsh elements such as dust, moisture and dirt. Its rugged assembly allows for extreme temperature fluctuations, vibration and shock, making it a reliable solution for the most demanding agricultural conditions.

HYDRAULIC COMPLIANT AUTOSTEERING SYSTEM



Receiver

All-in-one receiver as smart brain.



Display

Rugged to adapt to a harsh working environment.



PLC ECU

Control the steering valve over PWM or CANBUS.



AgNav software

The user-friendly interface makes operation faster.

SPECIFICATIONS

Positioning Accuracy

Real time kinematics (RTK)	Horizontal: 8 mm + 1 ppm RMS Vertical: 15 mm + 1 ppm RMS Initialisation time: < 5 s Initialisation reliability: > 99.9%
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Velocity accuracy	0.03 m/s RMS
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Performance

Pass to pass accuracy	≤ ±2.5 cm
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Physical

External power	9 V DC to 36 V DC
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Environment	Operating: -20°C ~ +70°C Storage: -40°C ~ +85°C
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Display

Display	10.1" touch screen, 281 mm x 181 mm x 42 mm Android 6.01 Dust and Waterproof: IP65
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Rear Camera

Pixel	1280 x 720 pixels
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Camera angle of view	120°
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Receiver

Size	220 mm x 205 mm x 60 mm
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Weight	< 2 kg
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Power	9 V DC to 36 V DC
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Dust and waterproof	IP67
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Constellations

GPS	L1/L2/L5
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BDS	B1/B2I/B3I/B1C/B2a/B2b
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Galileo	E1/E5a/E5b/E6
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GLONASS	L1/L2
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SBAS	L1
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QZSS	L1/L2/L5/L6
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Communication and Data

WiFi/Bluetooth	Yes
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Serial port	RS232 x 2
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CAN ports	2
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NMEA output	1/2/5/10 Hz
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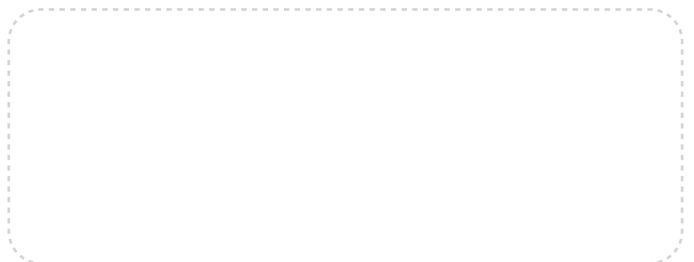
Correction formats	RTCM 3.0/3.1/3.2/3.3
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4G Network modem	Integrated in receiver and in display
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UHF module	Frequency: 410-470 MHz Protocol: TT450S/Transparent/CHC
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Output interface	3 x LEDs (power, satellite, RTK correction) 1 x UHF antenna connector
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* Specifications are subject to change without notice.



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