CHCNAV

NX610

AUTOMATED STEERING SYSTEM



AGRICULTURE



NX610 AUTOMATED STEERING SYSTEM

The CHCNAV NX610 Automatic Steering System ensures seamless connectivity to GNSS RTK networks and CHCNAV satellite correction services. Featuring PointSky technology, it delivers ±2.5 cm accuracy, even in areas with limited GNSS RTK coverage, making it ideal for precision agriculture anywhere. The system's compact drive wheel motor saves cab space and enhances operator comfort. Its next-generation 10-inch HD display, with a faster, more powerful processor, expanded memory, 3D visualization, and customizable interface, provides an ergonomic and intuitive user experience, streamlining operations for improved efficiency.

COMPREHENSIVE GNSS RTK MODES

The NX610 Automatic Steering System supports multiple GNSS positioning modes to maintain accuracy across diverse operating conditions. Compatible with SPP, DGPS, RTK, E-PPP, H-PPP (Galileo E6-HAS), and PointSky technologies, it provides exceptional flexibility. Each mode enhances positioning performance, achieving up to ±2.5 cm accuracy for all agricultural tasks even in challenging environments or regions with limited network coverage. The NX610's multimode capability allows it to adapt to local GNSS infrastructure and varying terrain, ensuring optimal performance in any field.

VERSATILE GUIDELINE PATTERNS FOR ANY TERRAIN

The NX610 supports multiple guidance modes to suit various operating scenarios and field layouts. These include AB line, A+ line, curve, circular curve, irregular rake line, 90-degree line, boxed line, all-path line, and path planning line. The NX610 ensures reliable navigation even in complex or irregularly shaped fields, giving farmers the flexibility to manage diverse agricultural landscapes with ease.

EXCEPTIONAL PERFORMANCE AT ALL SPEEDS

Delivering superior accuracy across the full speed range, from 0.1 to 30 km/h, the NX610 consistently maintains ±2.5 cm precision at any operating speed. It is perfectly suited for a wide variety of farming operations, including seeding, spraying, tilling, and land preparation, enabling precise crop management and more efficient use of inputs and resources.

BROAD COMPATIBILITY ACROSS VEHICLE TYPES

Designed for broad compatibility with a wide range of agricultural vehicles, the NX610 integrates with front-wheel steering, rear-wheel steering, articulated vehicles, tracked machinery, rice transplanters, and self-propelled sprayers. Regardless of vehicle type or steering configuration, farmers can equip their entire fleet with high-precision automated steering to enhance operational efficiency.

USER-FRIENDLY INTERFACE FOR EASY OPERATION

The NX610 features an intuitive interface designed for quick and efficient setup with minimal steps. Its streamlined design shortens the learning time, enabling operators with limited training to use the system effectively. Clear icons, simple navigation, and a customizable layout provide easy access to key functions, enhancing usability and improving the overall operator experience.











U-turnX



Cloud Service



Implement Guidance



Panoramic View



PointSky

SPECIFICATIONS

| ixels |
|--|
| |
| 400~2.4835 GHz 50~5.850 GHz .2 |
| /B2/B3/B4/B5/B7/B8/B12/ /B20/B25/B26/B28 8/B39/B40/B41 2/B4/B5/B6/B8/B19 B5/B8 |
| 5 × 40.95 mm |
| |
| |
| °C |
| °C |
| |
| |
| I, B3I,B1C, B2a, B2b |
| 1, B31,B10, B2a, B2b L2P(Y)/L2C, L5 1, L2 E5a, E5b, E6 2, L5 |
| L2P(Y)/L2C, L5 1, L2 5a, E5b, E6 |
| L2P(Y)/L2C, L5 1, L2 5a, E5b, E6 2, L5 RTK, E-PPP, H-PPP, |
| L2P(Y)/L2C, L5 1, L2 55a, E5b, E6 2, L5 RTK, E-PPP, H-PPP, CNAV-PPP) |
| L2P(Y)/L2C, L5 1, L2 E5a, E5b, E6 P, L5 RTK, E-PPP, H-PPP, CNAV-PPP) R mm + 1 ppm RMS mm + 1 ppm RMS 2.5 cm (CEP95) m (RMS) E: < 5 min /B2/B3/B4/B5/B7/B8/B12/ /B20/B25/B26/B28 8/B39/B40/B41 P/B4/B5/B6/B8/B19 B5/B8 |
| L2P(Y)/L2C, L5 1, L2 E5a, E5b, E6 P, L5 RTK, E-PPP, H-PPP, CNAV-PPP) mm + 1 ppm RMS mm + 1 ppm RMS 2.5 cm (CEP95) m (RMS) E < 5 min /B2/B3/B4/B5/B7/B8/B12/ /B20/B25/B26/B28 8/B39/B40/B41 P/B4/B5/B6/B8/B19 |
| L2P(Y)/L2C, L5 1, L2 E5a, E5b, E6 P, L5 RTK, E-PPP, H-PPP, CNAV-PPP) Rmm + 1 ppm RMS mm + 1 ppm RMS 2.5 cm (CEP95) m (RMS) E: < 5 min /B2/B3/B4/B5/B7/B8/B12/ /B20/B25/B26/B28 8/B39/B40/B41 P/B4/B5/B6/B8/B19 B5/B8 |
| L2P(Y)/L2C, L5 1, L2 E5a, E5b, E6 P, L5 RTK, E-PPP, H-PPP, CNAV-PPP) R mm + 1 ppm RMS mm + 1 ppm RMS 2.5 cm (CEP95) m (RMS) E: < 5 min /B2/B3/B4/B5/B7/B8/B12/ /B20/B25/B26/B28 8/B39/B40/B41 P/B4/B5/B6/B8/B19 B5/B8 |
| L2P(Y)/L2C, L5 1, L2 15a, E5b, E6 2, L5 RTK, E-PPP, H-PPP, CNAV-PPP) 15 mm + 1 ppm RMS 16 mm + 1 ppm RMS 17 mm + 1 ppm RMS 18 mm + 1 ppm RMS 19 mm (RMS) 10 mm (RMS) 10 mm (RMS) 11 mm (RMS) 12 mm (RMS) 13 mm (RMS) 14 mm (RMS) 15 mm (RMS) 16 mm (RMS) 17 mm (RMS) 18 mm (RMS) 19 mm (RMS) 19 mm (RMS) 10 mm (RMS) 10 mm (RMS) 10 mm (RMS) 10 mm (RMS) 11 mm (RMS) 11 mm (RMS) 12 mm (RMS) 12 mm (RMS) 13 mm (RMS) 15 mm (RMS) 16 mm (RMS) 17 mm (RMS) 17 mm (RMS) 17 mm (RMS) 18 mm (RMS) 19 mm (RMS) 19 mm (RMS) 19 mm (RMS) 10 mm (RMS) 10 mm (RMS) 10 mm (RMS) 11 mm (RMS) 11 mm (RMS) 12 mm (RMS) 12 mm (RMS) 13 mm (RMS) 14 mm (RMS) 15 mm (RMS) 15 mm (RMS) 16 mm (RMS) 16 mm (RMS) 17 mm (RMS) 17 mm (RMS) 18 mm (RMS) 19 mm (RMS) 19 mm (RMS) 19 mm (RMS) 10 mm (R |
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| Electric Steering Wheel | | |
|---|------------------------|--|
| Motor Type | Torque Motor | |
| Rated Torque | 7 N·m | |
| Rated RPM | 120 RPM | |
| Rated Current | 15 A | |
| I/O | 1 × CAN / Tractor horn | |
| Power Supply | 9–36 V DC | |
| Dimensions of Motor | Ø165 × 58 mm | |
| Weight (Motor) | ≤ 3.8 kg | |
| Dimensions of Steer Wheel | D: 400 mm / 360 mm | |
| Working Temperature | -40°C to +85°C | |
| Storage Temperature | -40°C to +85°C | |
| Dustproof and Waterproof | IP65 | |
| Camera | | |
| Resolution | 720 × 1080 pixels | |
| Video Output Interface | AHD | |
| White Balance | Automatic | |
| Exposure Control | Automatic | |
| Field of View | 150° | |
| Working Temperature | -20°C to +70°C | |
| Dustproof and Waterproof *Specifications are subject to change with | IP67 nout notice. | |

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