

# CHCN<sup>AV</sup>

# X10

## AUTO STEERING SYSTEM



## PRECISION AGRICULTURE

# HIGH PRECISION LARGE-SCREEN AUTOMATED STEERING

X10 is CHCNAV electric auto-steering system for agricultural machinery automation, using the latest generation of integrated GNSS high-precision positioning module and the high definition large-screen display, with a large torque electric steering wheel as well as very sensitive IMU sensor. By combining with GNSS+INS terrain compensation technology, the system will ensure the accuracy and straightness in any field conditions, allowing 24/7 all-time operation. It effectively improves land utilization and productivity, reduces the cost of fuel, seed, chemical and operation loss during field management and harvest, by its excellent performance in ditching, planting, spraying, harvesting and so on.

## HIGH PRECISION

All modes support high-precision operations with sub-inch accuracy, covering wide speed range of 0.3~20 KM/H for different farming activities.

## MULTI-VEHICLE SUPPORT

Support various type of vehicles, including front wheel steering, rear wheel steering, articulated and tracked type vehicles.

## SOFTWARE OPERATING EASE

Commonly used functions can be activated in just 2-3 steps, very intuitive interface can largely reduce user's learning curve.

## DIVERSE GUIDELINE PATTERNS

Support 9 types of guideline (AB line, A+ line, 2 types of curve, 2 types of circular curve, irregular harrowing line, custom line, 90-degree line).

## EASY INSTALLATION

Installation and calibration within just 30 minutes, the system is easy to operate and can be switched on and off with one click.

## OPTIONAL FUNCTIONS

Optional feature and items would highly enhance the capacity of the system, like ISOBUS, external radio and wheel angle sensor.

**ELECTRIC  
AUTO-STEERING  
SYSTEM**



**OPTIONAL FUNCTIONS**



Small size, easy to install;  
Support TT450, Transparent,  
Huace, etc protocols

**ISOBUS**

High-definition interactive  
interface; Compatible with  
multiple ISOBUS implements



Non-contact angle sensor, easy  
to install; Improve performance  
in tough environments

# SPECIFICATIONS

Display	
Power supply	9 V - 36 V
Screen	10.1 inches Resolution: 1024 x 600 600 nits
System	Android 6.0.1 Built-in speaker
Communications	BT4.0, BLE
Weight	1.5 kg
Size (W x H x D)	281 mm x 181 mm x 42 mm
GLONASS	L1/L2
Galileo	E1/E5a/E5b
BDS	B1/B2/B3
GPS	L1/L2/L5
Data output	NMEA-0183
Working temperature	-20°C ~ +70°C
Storage temperature	-40°C ~ +80°C
Dust and waterproof	IP65

Motor Drive	
Input voltage range	9 V - 32 V
Rated torque	7.5 N.m
Peak torque	> 18 N.m
Wheel diameter	410 mm
Motor height	87.5 mm
Dust and waterproof	IP65

IMU Sensor	
Type	IMU
Roll angle accuracy	0.1°
Pitch angle accuracy	0.1°
Acceleration output noise	0.7 mg
Raw data output frequency	100 Hz
Dust and waterproof	IP67
Working temperature	-20°C ~ +70°C
Storage temperature	-40°C ~ +80°C

Rear Camera	
Power	12 - 24 V
Angles	120°
Pixel	1280 (H) x 720 (V)
Dust and waterproof	IP67
Working temperature	-20°C ~ +70°C
Storage temperature	-40°C ~ +80°C

\* Specifications are subject to change without notice.

(1) Accuracy and reliability are determined under open sky, free of multipaths, optimal GNSS geometry and atmospheric condition. Performances assume minimum of 5 satellites, follow up of recommended general GPS practices. (2) New features to be provided through future firmware upgrade.



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