CHCNAV

TX73

MCNAV TX73 EXCAVATOR GUIDANCE SYSTEM

MACHINE CONTROL & CONSTRUCTION

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ADVANCED 3D EXCAVATOR GUIDANCE

The MCNAV TX73 system streamlines construction processes, reducing time and costs while ensuring high-quality results. Equipped with a high-precision GNSS receiver and durable IMU sensors, it provides accurate bucket tip position guidance to the design models. Operators can efficiently reach target surfaces without staking, boosting productivity and efficiency.

Superior Visualization and Customization

· 3D views: high-fidelity CAD drawings with first-rate 3D visualization.
· Customizable shortcuts: tailor workflows with ease.
· Real-time progress monitoring: color-coded maps display project progress and results in real time.
· Versatile modes: seamlessly switch between 2D and 3D views.

User-Friendly Operation

· Intuitive calibration: guided calibration wizards simplify setup.
· Rapid start-up: begin operations immediately.
· Remote access and updates: use the iSite cloud platform for troubleshooting, data synchronization, and online updates.

Comprehensive Compatibility

· Attachment support: compatible with standard buckets, tilt buckets, tilt-rotators, and trapezoidal buckets.
· GNSS RTK integration: works with a wide range of radio protocols, including support for the Satel external radio module.
· Global coordinate systems: includes editable presets and supports various file formats such as *.dc, *.cal, *.jxl, *.lok, and *.loc.coordinate system files and design file formats.

Rugged and Reliable Hardware

· Durable design: industrial-grade components ensure long-term reliability.
· High-performance: the MC300 receiver offers seamless integration.
· Robust sensors: features an IP69K-rated IS300 IMU sensor.
· Premium antenna: IP68-rated GNSS antenna with a metal base ensures durability.

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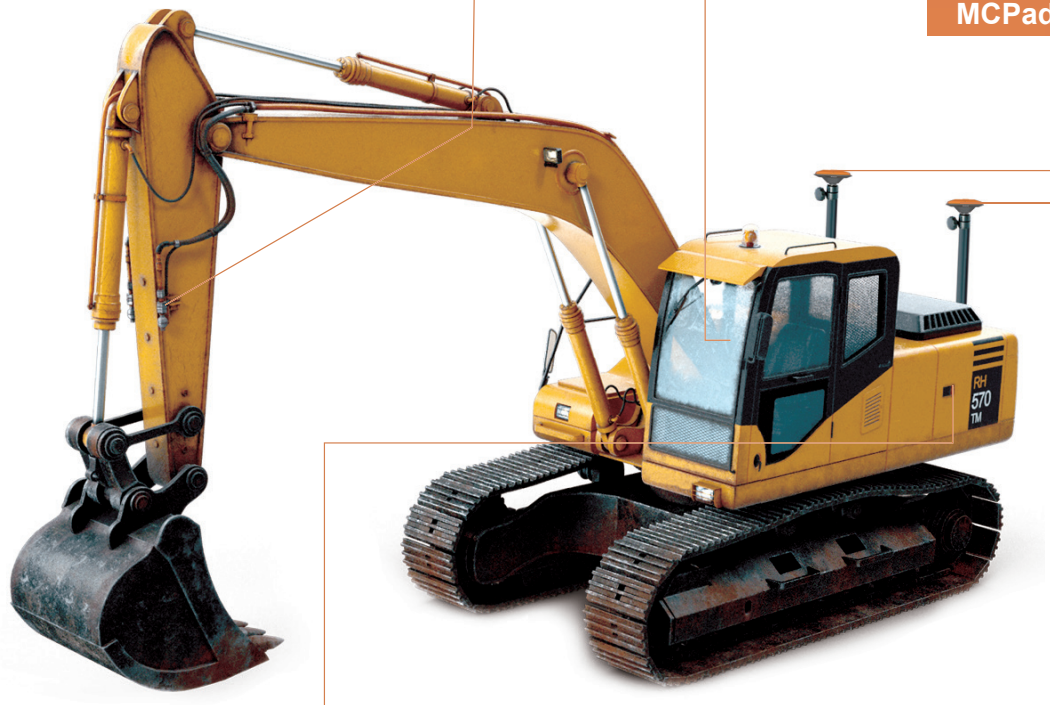
3D GUIDANCE SYSTEM FOR EXCAVATORS

IS300 IMU Sensor

MCPad300 Display



MC300 Receiver

AT315 GNSS Antenna

CHCNAV Machine Control Solution

TG63 Grader Control

TD63 and TD63 Pro Dozer Control

GNSS RTK Base and Rover

SPECIFICATIONS

System Benefits

1. High-fidelity CAD drawings and multiple view modes (3D, top, side, and large-font views).
2. Fully customizable interface to suit operator preferences.
3. Layer-based control for data visibility, elevation guidance, and horizontal alignment.
4. Broad attachment compatibility, supporting all common bucket types.
5. Flexible calibration for quick couplers, tilt-rotators, and buckets, allowing effortless reconfiguration.
6. Integrated global coordinate system presets and multi-format design file support, including *.LandXML, *.DWG, and *.DXF.
7. Compatibility with TT450S, Transparent, and Satel_3AS radio protocols.
8. On-the-go surface design capabilities for streamlined workflows.
9. Cloud-based platform with localized file distribution and global remote access.

MCPad300 Display

Size (W × L × H)	281 × 181 × 42 mm
Weight	1.5 kg
Screen	10.1" 1920 × 1200 pixels
System	Android 14 8-core up to 2.2 GHz 6G RAM + 64G ROM
Operation Temperature	-30°C to +60°C
Storage Temperature	-30°C to +70°C
Ingress Protection	IP67

IS300 IMU Sensor

Size (W × L × H)	48.9 × 109 × 27.3 mm
Weight	0.115 kg
Power	7–36 V DC
Static Accuracy (RMS)	±0.05°
Dynamic Accuracy (RMS)	±0.1°
Shock	50G / 11 ms
Vibration	7.7 Grms, 10-1000 Hz
Operation Temperature	-40°C to +75°C
Storage Temperature	-50°C to +85°C
Ingress Protection	IP69K

MC300 Receiver

Size (W × L × H)	215 × 154 × 58 mm
Weight	1.11 kg
Power	7–36 V DC
Real-Time Kinematics (RTK)	Horizontal: 8 mm + 1 ppm RMS Vertical: 15 mm + 1 ppm RMS
Operation Temperature	-30°C to +65°C
Storage Temperature	-40°C to +85°C
Ingress Protection	IP67

AT315 GNSS Antenna

Size (W × L × H)	40 × 140 × 55 mm
Weight	0.7 kg
Power	3.3–12 V DC
Gain	40 ± 2 dB
Noise Coefficient	≤2 dB
Shock	40G / 11 ms
Vibration	7.7 Grms, 10-1000 Hz
Operation Temperature	-40°C to +75°C
Storage Temperature	-50°C to +85°C
Ingress Protection	IP68

*Specifications are subject to change without notice.

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