

CHCNAV

EasyNAV

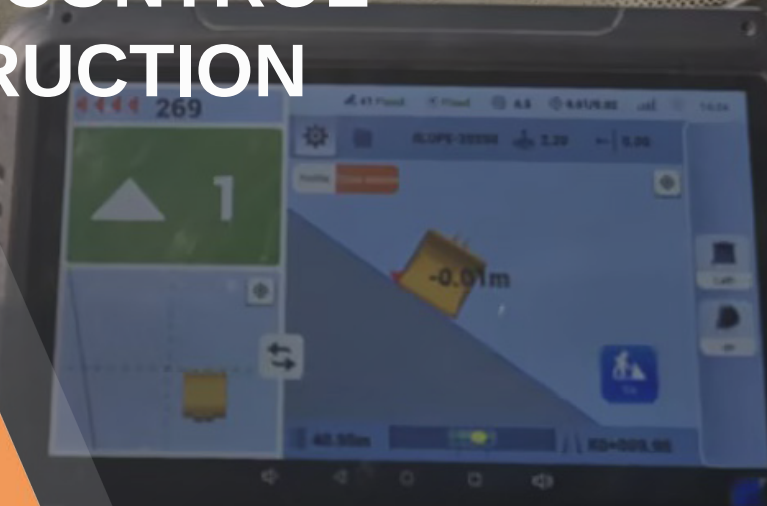
EMG100 3D EXCAVATOR SYSTEM



YOUR FIRST 3D MACHINE CONTROL SYSTEM



MACHINE CONTROL
& CONSTRUCTION



SIMPLEST 3D SYSTEM BEST IN-FIELD DESIGN WIDEST APPLICATIONS

The EasyNAV EMG100 3D Excavator System offers a high-precision, user-friendly solution with optimized components and software. Its integrated hardware and advanced excavator algorithm models allow for quick installation and calibration, ensuring centimeter-level accuracy perfect for small construction projects. With its powerful in-field design capabilities, the EMG100 minimizes the need for surveyors, enabling operators to complete tasks independently with precision and efficiency. This reduces labor costs while ensuring high-quality results, making the EMG100 an ultimate choice for streamlined and effective excavation projects.

Easy to Get

- **Cost-Effective Solution:** Affordable and accessible for all excavator owners, delivering excellent value.
- **Timely Delivery:** Strategically located regional warehouses ensure fast and reliable product availability.
- **Localized Support:** Comprehensive local after-sales services provide a worry-free ownership experience.



Easy to Operate

- **Quick Mastery:** Learn to operate the system efficiently in just 30 minutes, minimizing downtime.
- **Enhanced Flexibility:** Fully compatible with diverse excavators, including swing boom, tilt bucket, and offset boom models.
- **Wide Applicability:** Supports tasks like leveling, ditching, sloping, and more, managing complex job requirements with ease.



Easy to Set

- **Quick Installation:** Install and calibrate in just 2 hours with a single operator.
- **Minimal Tools Needed:** Simplified setup requires only common tools.
- **Quick Start:** Begin operation instantly with a single button press.



Easy to Profit

- **Reduced Labor Costs:** Minimizes the need for surveyors or assistants, significantly reducing expenses.
- **Increased Efficiency:** Boosts operational productivity by up to 30%.
- **Economical Maintenance:** Low-cost maintenance ensures maximum profitability throughout the system's lifecycle.





3D SYSTEM FOR EXCAVATORS



IMU Sensor



GNSS Antenna



Display



Ground Leveling



Road Construction



River Dredging



Leveling in Farmland



Ridging in Farmland



Foundation Building



Trenching



Slope Building in Pond

SPECIFICATIONS

Display	
Size (W × L × H)	281 × 181 × 42 mm
Weight	1.5 kg
Screen	10.1" 1024 × 600 pixels 750 cd/m²
System	Android 6 4 Cores 1.2 GHz 2 GB RAM + 16 GB ROM
Operation Temperature	-30°C to +70°C
Storage Temperature	-40°C to +85°C
Ingress Protection	IP65
GNSS Constellation	GPS, GLONASS, BeiDou, Galileo, QZSS, L-Band

Sensor	
Size (W × L × H)	48.9 × 109 × 27.3 mm
Weight	115 g
External Power Input	7–36 V DC
Static Accuracy (RMS)	±0.05°
Dynamic Accuracy (RMS)	±0.1°
Shock	50 g / 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

Antenna	
Dimensions	Ø150 × 61 mm
Weight	≤450 g
External Power Input	3.3–12 V DC
Gain	40 ± 2 dB
Noise Coefficient	±2 dB
Shock	30 G / 11 ms
Vibration	MIL-STD810H, 7.7 G
Operation Temperature	-40°C to +85°C
Storage Temperature	-55°C to +85°C
Ingress Protection	IP68

*Specifications are subject to change without notice.



©2025 Shanghai Huace Navigation Technology Ltd. All rights reserved. The CHCNAV and CHCNAV logo are trademarks of Shanghai Huace Navigation Technology Limited. All other trademarks are the property of their respective owners. Revision February 2025.