CHCNAV

EasyNAV

3D SYSTEM FOR EXCAVATORS

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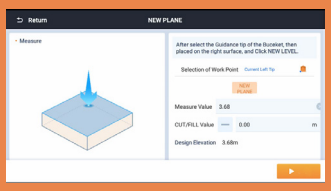
MACHINE CONTROL & CONSTRUCTION

INTEGRATED DESIGN
WIDE COMPATIBILITY
SIMPLE SETUP
EASY TO USE

The EasyNav eMG100 3D System for Excavators is the world's simplest high-precision 3D excavator system, designed for seamless integration and ease of use. It features a 10.1-inch tablet with a built-in GNSS receiver, two IS300 IMU sensors, and two GNSS antennas. This system can be installed and calibrated quickly to provide centimeter-level precision guidance. With just one click, operators can set up the system. Important real-time data is shown clearly to help operators dig accurately in one go, ensuring high quality, efficiency, and less downtime on the job site.

EASY AND SIMPLE SETUP

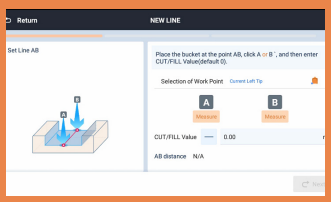
The best suited system for small excavators:
- Installation can be completed within one hour.
- Calibration can be completed within 15 minutes.
- Learn how to use it in 30 minutes.



Elevation Measuring

PRACTICAL FUNCTIONS

Making excavation simpler than ever:
- High accuracy up to ±3 cm.
- Set up the AB baseline quickly and easily.
- Provides precise real-time offset guidance.
- Effectively measures elevation and slope for complex work.
- Indicates excavator orientation, bucket angle, and real-time cut-and-fill volume.

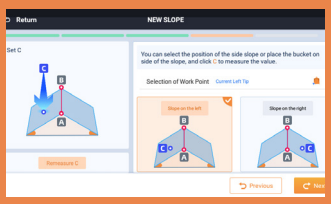


AB line Establishing

WIDE ADAPTABILITY

Adaptable to different machines and settings:
- Supports swing boom and triple boom configurations.
- Supports tilt bucket with an additional IMU sensor*.
- Supports creating multiple bucket profiles for quick switching.
- Supports CORS.
- Supports multi-brand radio base stations*.

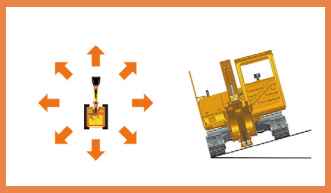
**Optional*



Slope Designing

SIMPLIFIED OPERATION SYSTEM

Easier to use for everyone:
- Connect to CORS and the base station with a single click.
- Surface design is possible on the job site with minimal experience required.
- No need to input complicated CAD files or set up coordinate systems.
- Easy-to-understand indicators with large numbers and graphics.


High Accuracy in any posture

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3D SYSTEM FOR EXCAVATORS

GNSS Antenna

IMU Sensor

Tablet

Ground Leveling

Road Construction

River Dredging

Leveling in Farmland

Ridging in Farmland

Foundation Building

Trenching

Slope Building in Pond

SPECIFICATIONS

Tablet	
Size (W*L*H)	281*181*42 mm
Weight	1.5 kg
Screen	10.1" 1024*600 pixel 750 cd/m^2
System	4 Cores 1.2 GHz RAM: 2 G ROM: 16 G Android: V6.0.1
Operation temperature	-30°C ~ +70°C
Storage temperature	-40°C ~ +85°C
Ingress protection	IP65
GNSS Constellation	GPS, GLONASS, BeiDou,Galileo,QZSS, L-Band

IMU Sensor	
Size (W*L*H)	48.9*109*27.3mm
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, 4 H/axis
Operation temperature	-40°C ~ +75°C
Storage temperature	-50°C ~ +85°C
Ingress protection	IP69 K

Antenna	
Dimensions	φ150*61mm
Weight	≤450 g
External power input	3.3~12V DC
Gain	40 ±2 dB
Noise coefficient	±2 dB
Shock	30 g / 11 ms
Vibration	<std-mil-810H> 7.7G
Operation temperature	-40°C ~ +85°C
Storage temperature	-55°C ~ +85°C
Ingress protection	IP68

* Specifications are subject to change without notice.

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