CHCNAV

TD63 PRO

3D AUTOMATIC CONTROL FOR DOZERS

MACHINE CONTROL & CONSTRUCTION

CHCNAV

HIGH ACCURACY AUTOMATIC GRADING SYSTEM FOR DOZERS

The TD63 PRO automatic 3D dozer control system improves the quality and productivity of earthmoving and fine grading operations. Powered by a high-precision dual GNSS positioning and IMU sensor, the TD63 PRO guarantees unmatched accuracy in 3D positioning and heading to control the dozer blade, regardless of the machine's position.

Automatic, real-time blade control to the design surface allows finished grade accuracy to be achieved in less time by eliminating manual staking and minimizing errors and rework. The TD63 PRO connects seamlessly to advanced cloud-based management systems to transfer files from the office to the jobsite, streamlining workflows and increasing overall productivity and output.

HIGH ACCURACY AUTOMATIC CONTROL

- Achieve centimeter-level precision with fully automated blade control
- Consistent accuracy on both sides of the blade tip
- Dual GNSS and 100 Hz IMU technology ensure precision in any machine position
- Intelligent hydraulic control guarantees accuracy at different speeds
- High-performance GNSS receiver for precise positioning on any jobsite

EASY TO USE AND EFFICIENT

- Intuitive, user-friendly MCNAV software
- Powerful 10.1" touchscreen Android tablet for user-friendly interactions
- Singular blade sensor for streamlined installation
- Fast installation process, completed in less than 6 hours
- Quick calibration in just 30 minutes
- Easily switch between 2D and 3D dual modes
- Mount and dismount masts quickly and easily
- Optional camera for added security

COMPATIBILITY ACROSS THE BOARD

- Compatible with all bulldozer models with hydraulic pilot valves
- Supports TT450S, Transparent and Satel_ 3AS radio protocols
- Accepts various coordinate calibration file formats such as crd, dc, cal, lok, jxl, loc, etc.
- Provides flexibility for radio communications via fixed or mobile base stations and network data transfers
- Covers the full satellite constellations: GPS, GLONASS, Galileo, Beidou and QZSS
- Supports design file formats including .rodx, .dxf, and .landxml
- Fast and easy surface design in the field

SAFE AND RUGGED DESIGN

- Rugged and shock-resistant IMU sensor with IP67 and 50 G ratings
- Industrial-grade antennas with metal housing, anti-interference protection, and IP68 rating
- Ruggedized cables designed to resist wear and operate in a wide range of temperature environments

3D AUTOMATIC CONTROL SYSTEM FOR DOZERS

Display

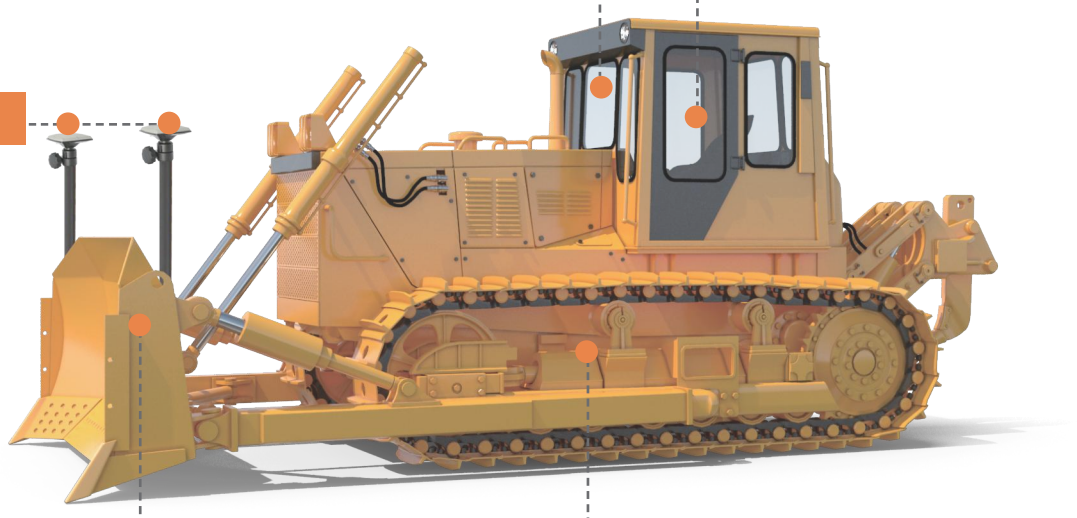
- Android 10.1" touch screen
- Sunlight readable
- IP65 dust and waterproof
- CAN Bus + RS232
- MCNAV Software

GNSS Receiver

- Full GNSS constellations
- Centimeter RTK accuracy
- Dual GNSS antenna inputs

GNSS Antenna

- IP68 & MIL-STD 810E
- Quick release mounts



IMU Sensor

- Integrated inertial navigation system
- 100 Hz update rate
- IP67 rating

Valve Module

- High dynamic response
- Pressure compensated flow control
- Integrated pressure relief protection

SPECIFICATIONS

Display	
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 1.5 GHz RAM: 2 G ROM: 16 G Android: V6.0.1
Operation temperature	-20°C ~ +70°C
Storage temperature	-40°C ~ +85°C
Ingress protection	IP65

Receiver	
Size (W*L*H)	207*136.5*61 mm
Weight	1.2 kg
External power input	7~36 V DC
Real time kinematics (RTK)	Horizontal: 10 mm + 1 ppm RMS Vertical: 15 mm + 1 ppm RMS
Operation temperature	-25°C ~ +75°C
Storage temperature	-30°C ~ +85°C
Ingress protection	IP65

Sensor	
Size (W*L*H)	97*72*37 mm
Weight	400 g
External power input	6 ~ 36 V DC
Static accuracy (RMS)	±0.1°
Dynamic accuracy (RMS)	±0.3°
Shock	50 g/6 ms
Vibration	5 grms,10 ~ 400 Hz, 4 H/axis
Operation temperature	-40°C ~ +85°C
Storage temperature	-50°C ~ +85°C
Ingress protection	IP67

Antenna	
Size (W*L*H)	140*140*55 mm
Weight	700 g
Power	3 ~ 6 V DC
Gain	40 ±2 dB
Noise coefficient	≤2 dB
Shock	50 g / 6 ms
Vibration	5 grms, 4 ~ 250 Hz, 0.5 H/axis
Operation temperature	-20°C ~ +70°C
Storage temperature	-50°C ~ +85°C
Ingress protection	IP68

* Specifications are subject to change without notice.

WWW.CHCNAV.COM | MARKETING@CHCNAV.COM

CHC Navigation Headquarter
Shanghai Huace Navigation Technology Ltd.
577 Songying Road, Qingpu,
201703 Shanghai, China
+86 21 54260273

CHC Navigation Europe
Infopark Building, Sétány 1,
1117 Budapest, Hungary
+36 20 421 6430
Europe_office@chcnav.com

CHC Navigation USA LLC
6380 S. Valley View Blvd, Suite 246,
Las Vegas, NV 89118, USA
+1 702 405 6578

CHC Navigation India
409 Trade Center, Khokhra Circle,
Maninagar East, Ahmedabad,
Gujarat, India
+91 90 99 98 08 02