

CHCNAV

TG63

3D GRADE CONTROL FOR MOTOR GRADERS



MACHINE CONTROL & CONSTRUCTION

HIGH ACCURACY AUTOMATIC GRADER CONTROL SYSTEM

The CHCNAV TG63 automatic grade control system for graders improves the quality and efficiency of grading operations. The high-precision dual-GNSS positioning system and inertial sensor featuring the GR-Tech technology provide reliable 3D positioning and heading to control the motor grader blade, regardless of the machine's position. Real-time automatic control of the blade to the design surface allows finished grade accuracy to be achieved in less time, increases efficiency and productivity by eliminating the need for manual staking.

The 10.1-inch industrial touch screen keeps system operation at the operator's fingertips. The GradeNav software provides complete but user-friendly control to the machine operator. Detailed displays of job information, including project configuration, cut and fill data, and geofencing areas are always accessible at a glance. For added safety, an optional rear camera is available to provide an even wider view of the job site for the operator.

+/- 2 CM ACCURATE GRADING

High dynamic dual-GNSS+INS positioning performances.

GR-Tech CHCNAV technology combines dual-GNSS satellite positioning with inertial navigation to ensure ultimate accuracy in driving the grader blade to within ± 2 cm, regardless of the machine's position. The multi-band GNSS sensor supports multiple correction sources, including RTK NTRIP and UHF base station, to match your operating conditions.

The high response valve module, with multiple pressure relief plugs, adjusts the blade position to maintain accurate grading. This ensures that the precision requirements of earthmoving operations are met at all times, and only the right quantity of material is moved.

ROBUST DESIGN AND PROVEN RELIABILITY

Extended durability in construction environments.

The TG63's industrial design is built to withstand the harsh environment expected on construction sites. Dust and waterproof components, rugged anti-glare touchscreen, and durable, high-response valve module ensure fast, reliable work year-round. The TG63 grader control system makes projects more productive and completed with fewer machines, providing an even faster return on investment.

SAFE OPERATION IN ALL SITUATIONS

Full control always at hand.

Because safety on the job site is critical, operators can quickly engage and disengage the automatic blade control mode by using the switches provided and mounted next to the outermost control handles in the cabin. The manual override mode allows operators to take control of the blade directly in the event of an emergency.

FAST, EASY-TO-USE

Intuitive GradeNav software for quick learning.

GradeNav software runs on a 10.1" industrial color display for optimal readability in jobsite environments. It supports common AutoCAD DXF design files, including surfaces, slopes, TINs, and road features, to manage all common grading operations. The intuitive GradeNav software enhances the user experience in every way possible to complete projects quickly and accurately, even with less experienced machine operators.

Several user-defined configurations can be set up to define the working parameters of the site and make the operator's job simpler and easier.



3D AUTOMATIC CONTROL SYSTEM FOR MOTOR GRADER



Display Console

- 10.1" color touch screen
- Sunlight readable
- IP66 dust- and waterproof
- CAN Bus + RS232
- GradeNav software
- GR-Tech technology



GNSS Receiver

- Full GNSS constellations
- Centimeter RTK accuracy
- Dual GNSS antenna inputs
- Integrated 4G and UHF modems
- CAN Bus protocol
- Built-in valve control module



GNSS Antenna

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



Rear View Camera

- 120° field of view



INS Sensor

- Built-in inertial navigation system
- 100 Hz update rate
- IP68 rating



Valve Module

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

ABOUT CHC NAVIGATION

More than just robust GNSS technology, CHCNAV Machine Control and Construction solutions are designed to be high productivity tools to get your projects done faster. Priced affordably so that all contractors can benefit from GNSS machine control, our solutions are suitable for operators of compact and heavy equipment requiring accurate surface grading and excavation, as well as site preparation for construction, roads or parking lots.

CHCNAV provides solutions across the entire construction site, from GNSS bases and rovers with CAD surveying software to advanced GNSS machine control technologies.

Save time. Increase Precision.



WWW.CHCNAV.COM | MARKETING@CHCNAV.COM

CHC Navigation Headquarter
Shanghai Huace Navigation Technology Ltd.
599 Gaojing Road, Building D,
Shanghai, 201702, China
+86 21 54260273

CHC Navigation Europe
Infopark Building , Sétány 1, 1117
Budapest, Hungary
+36 20 235 8248 +36 20 5999 369
info@chcnav.eu

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