

# CHCNAV

## TD63

### 3D LEVEL GUIDANCE FOR BULLDOZER



## MACHINE CONTROL & CONSTRUCTION

# HIGH ACCURACY BULLDOZER GUIDANCE SYSTEM

The CHCNAV TD63 bulldozer guidance system for bulldozers improves the quality and efficiency of leveling operations. The high-precision dual-GNSS positioning system and INS sensor featuring the DO-Tech technology provide reliable 3D positioning and heading to indicate the blade's position, regardless of the machine's position. Real-time guide blade to the design surface allows finished level accuracy to be achieved in less time, increases efficiency and productivity by eliminating the need for manual staking.

The industrial touch screen keeps system operation at the operator's fingertips. The GradeNav2.0 software provides complete but user-friendly guidance to the machine operator. Detailed displays of job information, including project configuration, cutting and filling data, and geofencing areas are always accessible at a glance.

## +/-3 CM ACCURATE LEVELING

**High dynamic dual-GNSS + tilt sensors  
positioning performances**

DO-Tech CHCNAV technology combines dual-GNSS satellite positioning with tilt sensors to ensure ultimate accuracy in driving the excavator bucket tips to within  $\pm 3$  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.

## ROBUST DESIGN AND PROVEN RELIABILITY

**Extended durability in construction  
environments**

The TD63's industrial design is built to withstand the harsh environment expected on construction sites. Dust and waterproof components, rugged touchscreen, and durable. The TD63 excavator guidance system makes projects more productive and completed with fewer machines, providing an even faster return on investment.

## FLEXIBLE EXTENSION

**Can be used on graders with additional parts**

The system can be upgraded to TG63 by purchasing valve module and some cables to meet different leveling requirements.

## WORKING SITUATION ALL AT GLANCE

**Distinguish the accuracy with colors**

By setting different colors to represent different elevations, intuitive expression of the accuracy after construction, and in invisible area to accurately distinguish the completed place and unfinished place.

Boundary alarm by setting work area in advance, ensure the exactitude of construction.

## FAST, EASY-TO-USE

**Intuitive GradeNav2.0 software for quick  
learning**

GradeNav2.0 software runs on a 10" 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 leveling operations. The intuitive GradeNav2.0 software enhances the user experience in every way possible to complete projects quickly and accurately, even with less experienced machine operators.

Self-developed DO-Tech model algorithm improve the accuracy of leveling up to  $\pm 3$  cm which can fully meet the requirement of earthwork construction.

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 GUIDANCE SYSTEM FOR BULLDOZER



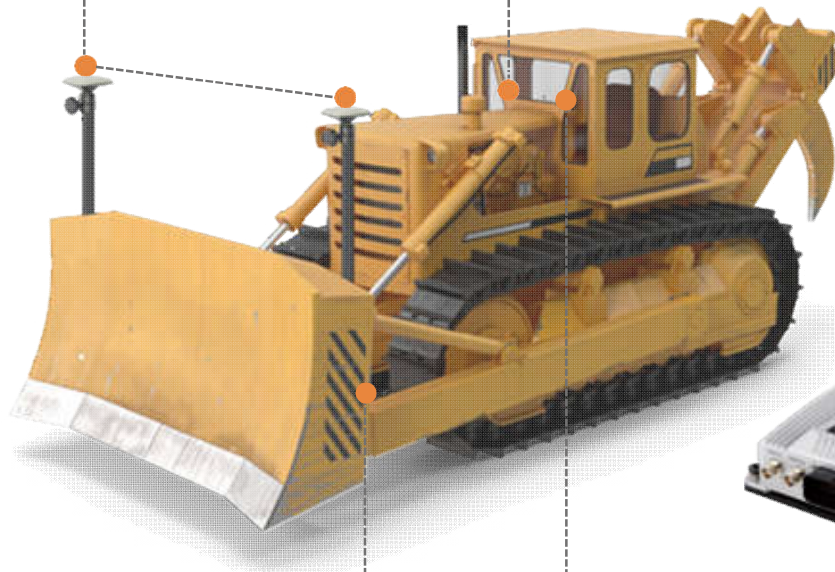
## GNSS Antenna

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



## Display Console

- 10.1" color touch screen
- Sunlight readable
- IP66 dust- and waterproof
- CAN Bus + RS232 – GradeNav2.0 software
- GR-Tech technology



## INS Sensor

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



## 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



## 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.

