



ADVANCED GRADE INDICATION FOR EXCAVATORS



Easy-to-use, affordable systems offer advanced grade control.

- CREATE, CUT AND CHECK COMPLEX DESIGNS FROM THE CAB
- WORK FROM AN EXISTING ELEVATION REFERENCE OR LASER
- EASILY UPGRADE TO X63 (X62 ONLY)
- EASY-TO-SEE CUT/FILL INDICATORS: X62 ON-SCREEN DISPLAY; X42 DETACHABLE LIGHT BAR
- INCREASE SAFETY BY REMOVING GRADE CHECKER FROM THE TRENCH

Topcon's X62 and X63 systems represent a giant leap in excavator grade indication. Completely user friendly and user definable, they're flexible enough to apply to even the most difficult jobs. Choose from X62 featuring the Windows based GX-60 Control Box - fully upgradeable to Topcon's X63 GPS+ excavator control, or the economical X42 system featuring Topcon's GX-40 Control Box with remotely positionable light bar grade indicator. Both systems include four TS-1 360° tilt sensors used to measure angles between the cab, boom, stick and bucket. Include Topcon's optional LS-B10W laser receiver and you have the industries most advanced laser indicate system.

With Topcon's X42/X62 2D systems, you'll eliminate over excavation and control material usage saving you time and money. That's because 2D gets you to grade fast and keeps you there, even in deep, blind cut situations or when digging under water. With these systems the operator can "see" bucket position at all times. Final grade, and the distance of the bucket teeth from it, is clearly displayed.

Pick a reference...

2D gives you the flexibility to use a wide array of references to work from: existing surface, a hub, a previous cut, or a rotating laser. It's as simple as choosing your reference and entering a cut and/or slope depth.

Create and cut complex designs... without leaving the jobsite

Finally, an indicate system that allows multiple elevation and slopes to be cut continuously, without resetting the machine or laser. With Topcon's X42/X62 2D systems an operator can create multiple elevation/slope designs right in the cab, then cut to the design without the hassles of starting and stopping to reestablish a reference.

2DXi - the system that grows as you grow

X62s GX-60 control box offers a fully upgradeable solution to Topcon's industry leading X63 GPS+ excavator system. With the addition of two MC-G3 antennas and software you'll realize the freedom and production that only the World's most advanced GNSS capabilities can bring.

With Topcon's 2D systems, work faster, with more consistency, and higher accuracy, while significantly increasing safety by keeping the grade checker out of the trench. That's Topcon innovation. It's time.

A combination of reliable, rugged components and unmatched innovation and performance. Topcon's 2D sets the standard for excavator indicate technology.



GX-60 Control Box

- Touch sensitive display
- 650 MHz, Windows XP operating system
- Bluetooth wireless technology
- USB, Ethernet, RS-485, CAN, & RS-232 ports with USB memory support
- Ambient Light Sensor for Sharp Contrast
- Internal backup battery
- 512 Mb Internal Compact Flash Drive
- Sealed Housing with Gortex Vent
- Audio Speaker



GX-40 Control Box

- USB, Ethernet, CAN & RS-232 capable
- Ambient Light Sensor for Sharp Contrast
- Sealed housing with Gortex Vent
- 32Mb Internal Compact Flash Drive
- 5" Diagonal Display
- Audio Speaker
- Adjustable on Grade Window
- Removeable RGB Light Bar
- Optional Remote Hot Shoe for Multiple Light Bars



TS-1 Tilt Sensor

- Environmentally sealed
- No moving parts
- 3-axis, 360° sensor
- CAN port interface
- No mechanical resonance
- 0.01 degree resolution



LS-B10W Laser Receiver

- Small, lightweight design
- 270° detection
- Rugged, waterproof design
- CAN support
- Bright indicator lights
- Magnetic: use anywhere



X62/X42
Excavator Indicate Systems



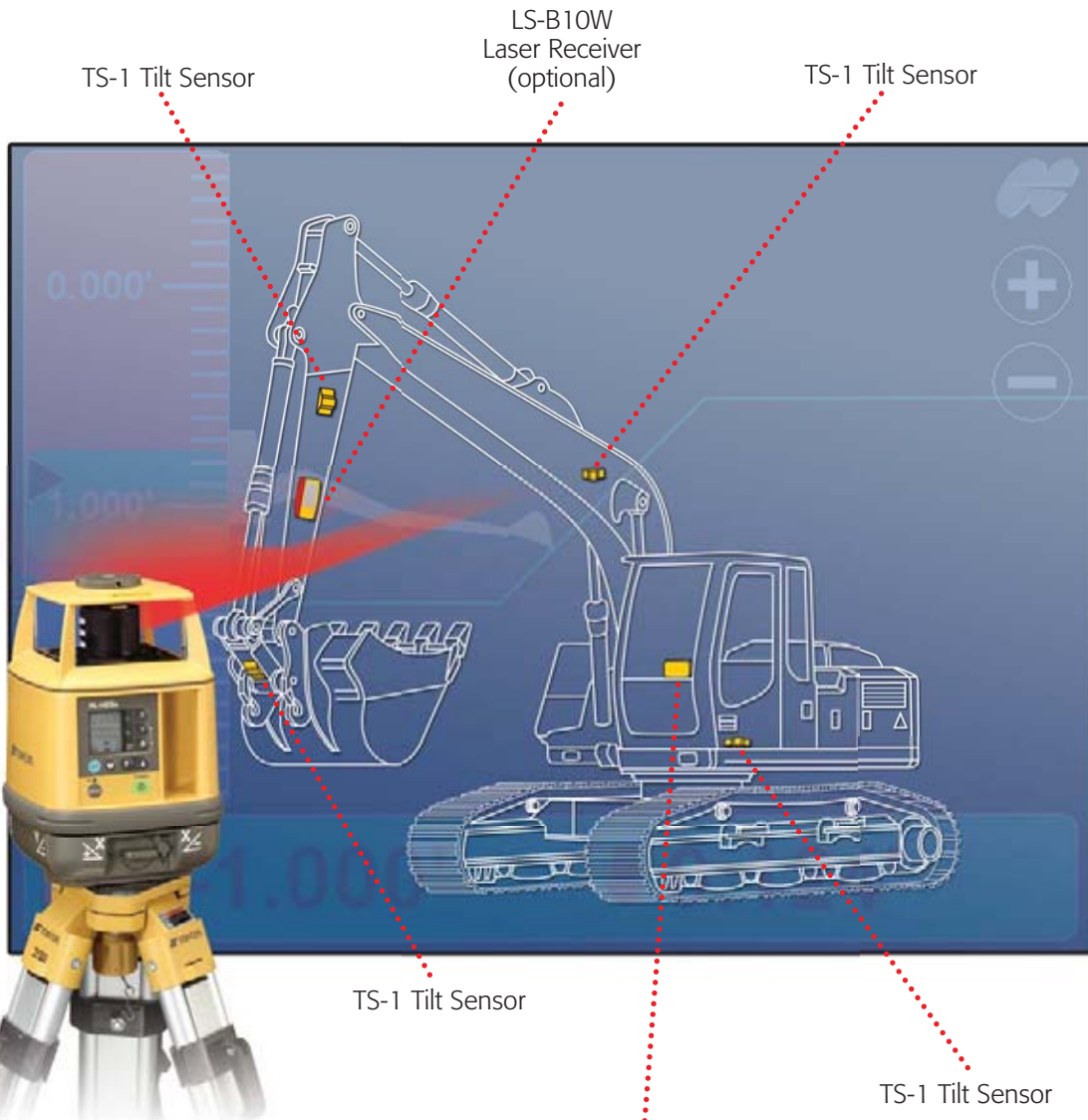
Create and cut complex designs – another Topcon World's First!



Multi-section jobs just got a whole lot faster and easier! Topcon's 2D let's the operator create complex designs involving several different elevations and slopes, and execute them continuously from a single reference. No more re-setting for each cut, or reestablishing a reference point when you move the machine.



Topcon's X62/X42 excavator indicate systems: flexible, reliable, durable, and easy-to-use. It's the world's most advanced indicate system, and everything you've come to expect from Topcon.



There's a Topcon laser that's a perfect match for your 2D system and your budget...

RT-5SW "Smart" Slope Laser



The RT-5SW is perfect for cutting steep slopes and/or long trenches or canals. It's 5 arc second accuracy is World First from Topcon, and it's removable interface is a radio remote capable of performing all functions of the laser.

RT-5SW features include:

- World's first 5 arc second repeatability system
- Two-way, RF remote delivers 1000' (300m) of 360° communication
- Set slopes up to +/-25% without tilting
- 4000' (1200m) diameter working range
- Auto alignment range of up to 500' (150m)
- Grade matching function
- Electronic beam masking
- 30hrs on Ni-MH rechargeable, 40 hrs Alk
- Dustproof/waterproof, rugged design

RL-H2Sa/RL-H1Sa



The dual slope RL-H2Sa features a precision electronic encoder that virtually eliminates grade errors and ensures 10 arc second accuracy over the entire grade range. Its precision leveling and grade setting system lets you adjust grade in 0.001% increments. The RL-H1Sa features the same precision in an economical single slope laser.

Both of these RL-H Series lasers feature a range of power management options: NiMH rechargeable battery pack featuring 30 hours of operation, alkaline batteries, or a 12vDC connection that recharges the battery at the same time.

Features include:

- Single (RL-H1Sa) and dual (RL-H2Sa) slope capabilities
- 10 arc second accuracy & 5 arc second repeatability
- Survey-accurate encoders
- Compact and portable with integrated handle

RL-H3A Series



The RL-H3A is the World's fastest leveling General Construction laser. With a focused beam capable of distances up to 2300' and 60 hours off operation from four "D" size alkalines,

you'll set it up once and work all day long. It's the ultimate in affordable machine compatible laser technology.

LS-B10W Laser Receiver

Adding the LS-B10W to your 2D excavator system puts the power of laser accurate grade at the operator's finger tips. Simply mount the sensor on the stick and entering the distance from the laser beam to the design grade and go to work. Every time the LS-B10W passes down through the laser beam it reestablishes the benchmark insuring you always cut the proper depth. Back up the machine to start your next cut and the system automatically compensates for any change in the excavator position. Think how much money you can save on setting stakes and the time you will save grading utilities and slopes!



GX-60 Control Box (X62 upgradeable to X63)
or
Economical GX-40 Control Box (X42)

The Leader in Positioning Technology...

Topcon offers positioning products that deliver unparalleled site-wide performance and integration. Topcon's history of technological advances and our reputation for superior reliability means there's no other company positioned to provide you with a better "Total Positioning Solution."

From survey to inspection Topcon, through our 170+ dealers throughout North and South America, provides the innovative technology that gives surveyors, civil engineers, contractors, equipment owners, and operators the competitive edge by addressing such critical issues as increasing profits, quality craftsmanship, improving productivity, lowering operating costs, and enhancing job site safety.

Full positioning integration field-to-finish: That's the goal of Topcon. When it's time for you to step up to the next level, it's time to turn to Topcon.

The Leader in Customer Satisfaction...

To ensure that your Topcon product maintains peak performance, your local Topcon dealer offers factory trained and certified service technicians. If service isn't available in your area, our factory offers a repair and return policy second to none.

Offices Worldwide

TOPCON CORPORATION

75-1 Hasunuma-cho, Itabashi-ku • Tokyo 174-8580, Japan
Phone: 3-3558-2520 • Fax: 3-3960-4214 • www.topcon.co.jp

Topcon Europe Positioning B.V.

Essebaan 11, 2908 LJ Capelle a/d IJssel • THE NETHERLANDS
Phone: 010-4585077 • Fax: 010-4585045 • www.topconeurope.com

Topcon Corporation Beijing Office

Block A No.9, Kangding Street, Beijing Economic
Technological Development Area, Beijing 100176 • CHINA
Tel: +86-10-6780-2799 • Fax: +86-10-6780-2790



Topcon Positioning Systems, Inc.

7400 National Drive
Livermore, CA 94550
www.topconpositioning.com



ISO 9001:2000
FM 68448

Specifications subject to change without notice

©2007 Topcon Corporation All rights reserved.

P/N: 7010-0830 Rev. B Printed in U.S.A. 02/08

X63 GPS+ Excavator Control

When you're ready, upgrade X62 to the World's most advanced 3D excavator system, Topcon's X63...

Experience the benefits of Topcon's satellite positioning based X63 GPS+ excavator grade control. X63 provides all of the advantages of satellite positioning technology with the superior performance and usability of Topcon's X62 machine control. In addition to X62 features like complex designs, viewable bucket position, and increased crew safety, X63 enables the operator to "see" his machine's exact position within the site. X63 also provides for multiple angle views of the machine, perfect when more detailed information is required on complex jobs. Choose from plan, profile, sectional and dual grade indication.

How does X63 do it?

X63's satellite positioning works in conjunction with digital site designs loaded in to the GX-60 Control Box. Combining digital site design information with positioning information from Topcon's World First dual constellation GPS+ receiver technology, X63 locates and tracks the excavator so the operator knows exactly where the machine is located and where the work needs to be done. Combine this with X63's precision depth and slope indication and you have the World's most advanced GPS+ based excavator system!

X63 GPS features include:

- Same easy to use 3DMC software used in System Five 3D box!
- Multiple views (plan, profile, section) display real time movement of the Bucket, Stick, Boom and entire machine.
- Easy to use color Cut/Fill Indicator for instant grade verification.
- Elevation reference lets you control grade on the left, right, or middle of your bucket.
- State of the art CAN based Tilt sensors: same rugged sensors used with Topcon's X62/X42 excavator systems
- Easy to install, mount almost anywhere!
- New graphical Machine builder specific for Excavators.
- Change buckets on the fly. Store up to six different sizes.
- GPS+ (GPS/GLONASS) receiver insures maximum productivity.
- Compatible with GR-3, Legacy, HiPer+ & HiPer Lite+ receivers.



Your local Authorized Topcon dealer is: