



# X-32 / X-33 / i-33

2D AND 3D INDICATE SYSTEMS  
FOR DOZERS AND EXCAVATORS





## 2D and 3D Excavator/Dozer Indicate Systems

- Cut grade fast and accurate the first time
- Cut to flat, vertical and 3D surfaces
- Bright, easy-to-use color touch screen
- Upgradeable systems
- Improve job safety

Topcon's X-32 system represents a giant leap in excavator grade indication. The X-32 features the Windows® CE based GX-30 control box – fully upgradeable to Topcon's X-33 GNSS excavator system. The X-32 system includes four TS-i3 tilt sensors used to measure angles between cab, boom, stick and bucket. Include Topcon's optional LS-B10W laser receiver or compass and you have the industry's most advanced 2D indicate excavator system.

Topcon's X-33 system consists of two GNSS antennas, four TS-i3 tilt sensors, the MC-i3 GNSS receiver and Topcon's GX-30 color, touch screen control box. The GX-30 allows the operator to "see" the exact position of the machine on site and the bucket position at all times. When detailed information is required you can select to visualize plan, profile or sectional view and use the dual grade indicators for elevation control.

Topcon's i-33 system will revolutionize the use of GNSS indicate systems on your job sites. You can configure the i-33 system with a single GNSS or dual GNSS antennas and install it on different machines that require elevation indication. Installation requires minimal welding on the machine, which makes the i-33 easy to switch between a dozer, scraper, or motor grader.

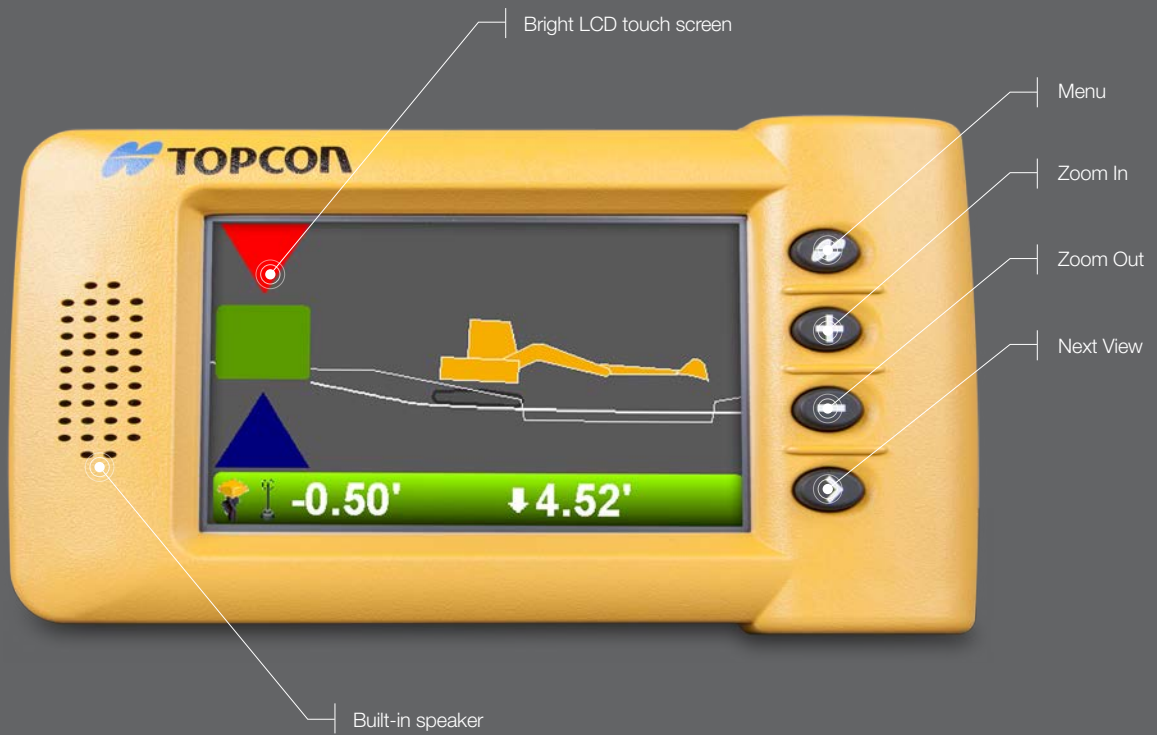
### Create and cut designs... without leaving the jobsite

Finally, an indicate system that allows multiple elevations, slopes and complex designs to be cut continuously – without resetting the machine, laser or waiting for a surveyor putting elevation stakes on site. With Topcon's X-32, X-33, i-33 systems, the operator can create multiple elevation/slope designs right in the cab or use 3D models created for your job site. No hassles or waiting anymore, just start cutting or digging to the correct elevation. You can eliminate re-work, cut to grade fast and accurate, the first time.



### The system that grows as you grow

The GX-30 control box offers a fully upgradeable platform from 2D excavator to 3D excavator or 3D indicate system for different machines on your job site. Equip multiple machines with sensors, cables, brackets and move the control box, GNSS receivers and antennas between all machines. The same equipment can be used on dozers, excavators, scrapers, motor graders, and on rental equipment.



GX-30 Control Box	
Display	4.3 in. LCD Touch Screen
Operating System	Windows® CE 6.0
Processor	Marvell® XScale™ PXA300 624 MHz
Memory	RAM: 256 MB Flash: 4 GB
Keypad	Four backlit, programmable function keys
Ports	1x Ethernet 1x Serial 2x USB
Power	6 to 32 VDC
Temperature	Operating: -20°C to 70°C Storage: -40°C to 85°C
Humidity	0 to 95%, non-condensing
Vibration	4g 10 - 1500 Hz
Shock	40g, 11ms, any axis
Dust/Water Rating	IP32
MC-i4 Receiver	
Supply Voltage	9 to 32 VDC
GNSS	Single or Dual
Ports	RS232 RS232/RS485 10/100 Ethernet CAN J1939 CAN J1939 / CANOPEN
Connectors	Deutsch DTM06 12 pin (power, ground, serial) Deutsch DTM06 12 pin (Ethernet and CAN) RP-TNC (cellular radio) RP-TNC (LPS, or Wi-Fi, or UHF radio (optional)) 2x TNC for GNSS (optional)
Shock	25 g, 11 ms, any axis
Weight	1 kg
Dust/Water Rating	IP67
TS-i3 Sensor	
Axis	Single/Dual
Resolution	0.01 degrees
Accuracy	0.1 degrees
Power	10 to 30 VDC
Shock	25 g, 11 ms, any axis
Dust/Water Rating	IP69K



### GX-30

- Windows® CE
- LCD Touch Screen
- USB or Sitelink3D™ file transfer
- User friendly software interface

### PG-S3

- Ruggedized housing to work with any machine control system
- Lightweight
- Full constellation tracking
- Fence Antenna™ technology

### MC-i3 / MC-i4

- Network modem, UHF and spread spectrum radio options available
- Vanguard Technology™
- Sitelink3D™ ready
- Single or Dual GNSS options

### TS-i3

- Environmentally sealed
- No moving parts
- Single or dual axis sensors
- LED status indicator



For more information:  
[topconpositioning.com/xi-series](http://topconpositioning.com/xi-series)

Specifications subject to change without notice.  
 ©2016 Topcon Corporation All rights reserved.  
 7010-2133 B 2/16

