



2D Construction Solutions



SYNERGY 
POSITIONING SYSTEMS

www.synergypositioning.co.nz
info@synergypositioning.co.nz
Phone 0800 867 266

Topcon Enterprise Solutions

The global construction, geospatial, and agricultural industries are rapidly changing thanks to quantum leaps in communication and measuring technologies that literally transform our perspectives of time and space. These advancements are reshaping the way things are designed, built, grown, and managed.

Topcon works to stay a step ahead of customer's needs by creating solutions that embrace and extend these advancements into the way they work, everywhere they work. Our integration of high-accuracy positioning, high-speed imaging, cloud-based information management, and down-to-earth simplicity creates higher productivity and better results with lower environmental impact.

**YOUR PRODUCTIVITY.
TECHNOLOGY.**

Engineering

Real-time data for up-to-the-minute design, management, and inspection.



The connected strategy

Site Management

Unified control of equipment, scheduling, grade management and more.

Utilities and Infrastructure

Existing, planned and placed — always connected to the design model.

Building

Layout, structure, MEP, finish and all details in between — controlled from one source.

2D Construction Solutions

Since the industrial revolution, contractors have been responsible for creating the modern world we live in.

This creation involves many applications and specialty contractors, from bulk earth moving to placing utilities, from interior construction to excavating foundations; no matter the specific need, Topcon has advanced construction positioning technologies designed specifically for each phase of the job.

Tolerances and accuracies needed for modern job sites continue to raise demand for technological advancements. With the ever increasing capabilities and benefits from technology, and the increased need for contractors to stay competitive, the way we are managing our job site has changed. Incorporating Topcon solutions into your work portfolio will enable you to finish jobs quicker and more accurately, no matter the size.







General Building Construction

Precision job site measuring tools

General construction building requires accurate positioning technologies for each application. Knowing the correct elevation, slope, and alignment is critical in ensuring a high level of work quality. With Topcon's full line of laser technologies, you will always maintain the highest level of accuracy on your building sites.

Topcon's laser solutions help you quickly perform building solutions and quality control is managed along the way. The success of your project is based on productivity, accuracy, and coordination. When incorporating Topcon laser technologies into your general building construction, you know all of these criteria will always be met.





2D Excavator Control

Precision positioning excavators, backhoes and front loaders

Over and under excavation is a common occurrence on all construction sites. Topcon's excavator systems provide operators the correct elevation and slope information at all times which leads to an instant increase in productivity, labor and fuel savings and less wear and tear on your machines. You will also reduce material waste — no more having to backfill or bring in extra bedding material due to over excavation.

Topcon 2D Excavator machine control systems are fully upgradeable to 3D excavator control systems; so as your workload increases due to increases in productivity, you will be ready to tackle 3D jobs with minimal upgrade costs. A true investment that is ready to grow when you are!





2D Dozer and Grader Control

Accurately cut any job design

Managing the material on your jobsites poses problems for any operator. Whether you are trying to manage your initial rough grading with dozers and scrapers, or working to control the final few passes with a grader, Topcon has a unique 2D machine control solution designed for your needs.

Control the cutting edge of your machine with high vertical accuracy and maintain your slopes and elevations for any number of applications. Any Topcon 2D Machine control system has the ability to be upgraded to a full 3D system, making your machines fully automated finishing tools. The same components used between 2D and 3D systems make upgrading affordable and there is no need for re-learning a new system.





2D Paver Control

Higher quality, smoother roads

2D asphalt paving has been one of Topcon's specialties for over 25 years. Whether you are paving miles of new highway, overlaying existing roads, or doing a small parking lot job, Topcon's 2D paving solution will guarantee a high quality of work every time.

Tracking curbs and matching joints are no issue for Topcon's sonic tracker technology, a Topcon world's first brought to you before any competitor in the market. Go with the trusted leader for your 2D paving jobs, and let Topcon guide you to the tolerances you need to stay competitive.

Topcon continues its long tradition of innovation with the P-32/P-32+ asphalt paver systems. For decades, the Topcon System Five solution for paving has been the industry's premier non-contacting screed control system. Featuring durable and time-tested components, (Sonic Trackers, cross slope sensors, control boxes and the Trackerjack laser receiver), Topcon has introduced the successor of System Five with the introduction of the P-32/P-32+ asphalt paver system.



2D Hardware Components

Topcon continues to be the world leader high-end, high feature and benefit, self-leveling lasers.

Topcon's innovative products include the world's first green beam laser, the world's first SmartLine auto alignment system, and the world's first millimeter accurate zone laser. These products are accompanied by a quality range of advanced laser technologies allowing contractors to choose the best laser for their specific needs.

Ranging from simple self-leveling rotating lasers and pipe lasers to vertical interior lasers and high-end dual slope lasers; Topcon products are built to last, built to be precise, and are fully designed to make you more productive. All Topcon lasers come with a five year guarantee, the best in the industry.



Multi-purpose Laser RL-H4C

The workhorse of our fleet which continues set the standard for self-leveling general construction lasers. Grading, excavating, and general construction projects are perfect applications for the RL-H4C. With the added slope matching feature you can check grade on all of your flat and slope work.

- Easy to Use
- Long Range Operation
- All Weather Dependability



General Dual Slope Laser RL-SV2S

Designed for a variety of tasks, the RL-SV2S can be used for horizontal, sloping, and vertical laser application. Slopes up $\pm 5\%$ can be used in either the X or Y axis, turn it on its side and use it for layout and alignment jobs.

- High-Powered
- Long Battery Life
- Tough IP66 Construction rating



High Accuracy Slope Lasers

RL-200 1S/2S

Topcon's RL-200 series sets new standards for simplicity and accuracy. Rugged, light weight, and compact, it's twice the laser and an amazing affordable price.

- Wide Grade Range; up to 25% Slope
- Remote Control Capabilities
- Highest Accuracy Laser



General and Interior Laser

RL-VH4DR

Compact in design with integrated handle and weighing only 5.7 pounds, the RL-VH4DR is truly portable and easy to set up. If you're looking for exceptional value and more options in your construction laser then look no further.

- SmartScan Beam Control
- Horizontal and Vertical Orientation
- Remote Control Capabilities



Pipe Lasers

TP-L4 Series

Topcon's TP-L4 Series of alignment lasers offer a combination of features and technologies that are proven to meet the demands of contractors. Whether in the trenches, over the top, or laser guidance in mining and tunneling the TP-L4 is the industry standard.

- Ultra Visible
- Reliable Green Beam
- SmartLine Auto Alignment System
- Tough and Reliable



Laser Sensors

LS-B100 Series

Topcon's LS-B100 series are value-priced laser receivers for any machine application, featuring simple, secure mechanical mounting, 360° beam detection, adjustable on-grade accuracy, alkaline or rechargeable battery operation, water and dust proof cast construction, and bright multi-color LED displays.

- On Grade Matching
- Universal Mounting
- Large Working Range

2D Hardware Components

Topcon set the standard for machine control over 25 years ago, and continues to improve technologies to meet the needs of the customers.

Topcon's full line of 2D machine control components give you affordable options. Whether you want to outfit your finishing machines, or just your dozers and scrapers; maybe you have a box blade or a skid steer you want to get more productivity out of? With Topcon 2D machine control, the options for better grade control are limitless.

Ranging from easy to use control boxes in the cab of your machine, to high precision sensors mounted onto the implements of your equipment, each unique Topcon 2D machine control product gives you unmatched precision measurements. Increase your productivity and quality of your work instantaneously, all while making your operators more confident no matter the workload.

The same basic components are used on all Topcon 3D machine control solutions, guaranteeing your investment with Topcon is a wise choice. Once your workload increases, upgrade for very little cost with no new learning curve at all, something that continues to set Topcon apart from the competition.



In-cab Touch Screen Display

GX-60

This construction tough, touch screen, in cab display shows the operator the position of his machine implements. Real-time cut fill and grade verification is right at the operator's fingertips.

- 6.5" Color, Touch Screen Operation
- Fully Functioning Windows Computer
- Rugged, Cast Aluminum Housing



Low-Cost Touch Screen Display

GX-30

This indicate, touch screen, in cab display lets the operator see his machine in real time. Easily switch from both 2D and 3D operating modes for a large variety of applications.

- 4.3" Color, Touch Screen Operation
- Easy to Use
- Upgradeable Systems



Multi-Machine Rugged Display

9164

A proven workhorse, in-cab control box used for a variety of applications. Whether running your dozer, grader, scraper, or even paver, this box can make any machine more productive.

- Easily Upgradeable
- Bright LCD Screen
- Easy-to-use interface



Paver Control Interface

GC-35

This 2D asphalt paver control box is rugged and waterproof with an IP67 environmental rating. There is no need to worry about getting caught in a rainstorm, overspray from a water truck or putting wet control boxes into a carrying case.

- Backward compatible with System Five Box
- Easy performance menu
- Able to operate both sides from one control Box



Sonic Tracker Sensor

ST-3

A newly re-designed sonic tracker joins the fleet along with the time tested original sonic tracker from Topcon. With a smoother and faster response paired with a twice as fast detection speed you will be saving even more time on you big asphalt paving jobs.

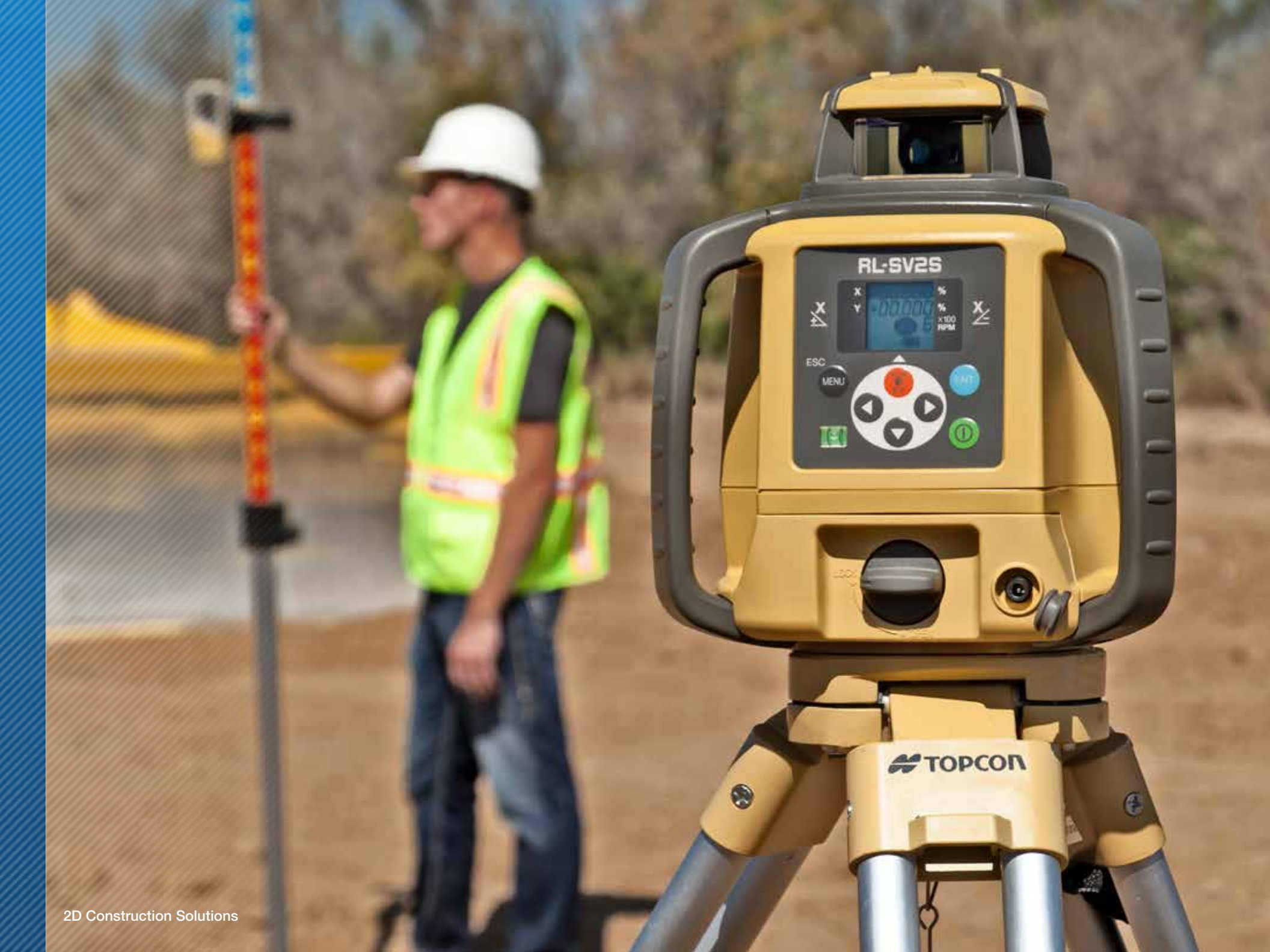
- Waterproof & IP-67 rated
- Flat detection range on stringline
- Side way offset indication



Dual Port Slope Sensor

Topcon's new dual port slope sensor improves your accuracy over an extended temperature range. With its exclusive anti-slosh ceramic technology you will not find a more accurate measuring device on the market.

- Rugged Cast Housing
- Insensitive to vibration
- Higher Accuracy



General Construction Laser for Multiple Applications

Multipurpose laser designed to do it all

The RL-SV2S is specifically designed for a variety of tasks. The RL-SV2S can be used for horizontal, vertical, and sloping laser applications. Slopes up to $\pm 5\%$ can be used in either X or Y axis. Turn it on its side and use it for layout and alignment jobs. With an operating range of over 2400' (diameter) the RL-SV2S has the power to cover even the biggest projects. The RL-SV2S comes with a five year guarantee.

With an IP66 rating, the RL-SV2S is "jobsite tough" and can withstand dust, a sudden shower, and even torrential rainfall. The RL-SV2S comes with a Five Year Guarantee. Topcon is backing up this reliable, accurate laser with the best factory warranty in the industry.

Use the RL-SV2S for a wide array of general construction needs. Compact, rugged, and very light-weight, the RL-SV2S is ideal for any flat plane or sloping jobs.



- Long Range Operation (800m)
- Horizontal, Multi-Slope & Vertical Applications
- Extra Long Battery Life (120 hours)
- Tough IP66 Construction Rating
- Included Remote Control





Multipurpose, In-Cab Display

Cut complex designs with simple control

The GX-30 control box, and other measuring devices that are paired with it, ensure you are always moving the right amount of material. Over and under excavation in utilities and under-cutting final grade are two prime examples of how the GX-30 can eliminate re-work on any construction site.

Operators rely on this intuitive, touch screen display to guide them on a variety of different machines and applications. Having important information and control at your fingertips is key in increasing productivity.



GX-30



- Touch screen display
- Quick view changes
- Ruggedized housing
- Easy interface
- Upgradeable to 3D





Superior 2D Asphalt Paving

Advanced Screed Control

The P-32 system is a complete asphalt paving solution. Topcon continues their long tradition of innovation with the new P-32 asphalt paver systems. For decades the Topcon system for paving has been the industry's premier non-contacting screed control system and nothing changes with the introduction of the P-32 system. A reliable, full feature system ready to tackle any of your 2D asphalt paving needs.

The GC-35 control box, paired with a sonic tracker and slope sensor, allow you to accurately control your paving and milling machines for asphalt paving.



GC-35



ST-3



- 3.5 in. Color Graphic LCD
- Compatible with Previous Generation System Five Configurations
- Waterproof and IP67 Rated
- Ruggedized Cable Design with Strong Strain Relief
- Operates Two Sides from One Control Box





Easily Upgrade to 3D Automatic Control

Low-cost upgradeability

With Topcon, we ensure your major 2D investment is a wise decision. Easily upgrade to a full 3D automatic control system utilizing the same basic components as your existing 2D system. The same intuitive operating system is used across all platforms, not requiring the operator to learn a whole new system.



- Low-cost upgradeability
- Gain real-time positioning
- Increase productivity, increase profits
- Added capability of machine management



TotalCare

This online resource comes with real live people ready to help. Get expert training from Topcon University's large collection of online materials, and expert help directly from Topcon Technical Support.

Access software and firmware updates, current publications, and guidance from the experts at Topcon all right from your computer or mobile device.

Please visit the TotalCare website to learn more.

topcontotalcare.com





SYNERGY 
POSITIONING SYSTEMS

www.synergypositioning.co.nz
info@synergypositioning.co.nz
0800 867 266

Specifications subject to change without notice. All rights reserved. 11/14 P/N: 7010-2067 RevA ©2014 Topcon Corporation
The *Bluetooth*® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Topcon is under license.
Other trademarks and trade names are those of their respective owners.