



# 2D CONSTRUCTION SOLUTIONS



## 2D CONSTRUCTION SOLUTIONS

Keep your projects on time and under budget. We have the leading-edge hardware, software, and mobile solutions you need to increase efficiency, improve accuracy, and better manage resources.

Our extensive industry knowledge and expertise help you get the job done right and stay on top. Get accurate, flexible 2D construction solutions that help you:

- Broaden your scope of work
- Increase site safety
- Become more efficient on grading projects

We offer a range of options for 2D construction including general building, excavation, dozing, grading, and paving control. Our systems easily guide you to grade through advanced technology. With the option to promote your system to full 3D functionality at any time, you can easily add on new components as you expand.

Most importantly, you get peace of mind. All of our products are rigorously tested and easy to use, so you're up to speed quickly and keep going even in the most challenging of settings.

**WITH YOU ALL THE WAY.**









## General Building Construction

Your success is based on productivity, accuracy, and coordination and that's what we deliver. With beam control that locks onto signals automatically for hands-free operation, easily complete measurements and avoid costly revisits by getting it right the first time.

Easily correct elevation, slope, and alignment for maximum quality with our laser technology. You'll always maintain the highest level of accuracy on various project sites with built-in quality control every step of the way.









## 2D Excavator Control

Eliminate over and under excavation and control material usage, saving time and money. Our systems help you excel in trenching for utilities, cutting slopes, making grades for building pads, and a variety of other construction applications.

With our excavator systems you're able to visually verify correct elevation and slope information at all times. Increase your productivity while your work hours, fuel costs, and wear and tear on machines decreases. You'll also reduce material waste — no more having to backfill or bring in extra bedding material to compensate for over-excavation.

With the future in mind, all of our 2D systems are upgradeable so it's an investment that will grow with you. You'll be ready to tackle 3D jobs when needed.







## 2D Dozer and Motor Grader Control

Tackle sites with slopes and flat areas for building pads and road construction with our tried and true 2D components such as sonic trackers and lasers. Accurately cut any job design and easily manage material for initial rough grading with dozers and scrapers. Or finesse final grading and control your cutting edge with high vertical accuracy.

For full efficiency and productivity, all of our 2D and 3D systems share the same components. So upgrading as your needs change is affordable and doesn't require having to learn an entirely new system.









## 2D Paver Control

Helping you make high quality roads has been our specialty for over 25 years, and our 2D paving solutions produce a polished finish every time — pave miles of perfectly smooth highway, overlay an existing road, or complete a small parking lot job.

Our Sonic Tracker technology, a world's first, make tracking curbs and matching joints visual and easy. The long tradition of innovation we've built continues with our rugged, field proven systems. Featuring durable and time-tested components such as Sonic Trackers, cross slope sensors, control boxes, and the Trackerjack laser receiver, they're the new standard for asphalt paver systems.



## High Performance Positioning

We have a laser to match all of your job site needs, from layout to grade control. Get the maximum impact and value through advanced technology, state-of-the-art accuracy, and exceptional range capabilities.

Choose from our world-class lasers to find the best fit for you. Our innovative product line includes the world's first GreenBeam® laser, the world's first SmartLine® auto alignment system, and the world's first millimeter accurate zone laser.

All of our laser transmitters are easy-to-use, durable, and backed by our best in the industry five-year guarantee.

### RL-H4C

#### Multi-Purpose Laser

The workhorse of our fleet continues to set the standard for self-leveling general construction lasers. Grading, excavating, and general construction projects are ideal for the RL-H4C.

- Elevation alert
- Simple, intuitive manual slope capability
- Automatic cross axis self-leveling



### RL-SV2S

#### General Dual Slope Laser

Built for multitasking, the RL-SV2S can be used for both construction and interior jobs. Perfect for horizontal, sloping, and vertical laser applications. Slopes up to +/- 5% can be used in either the X or Y axis.

- Horizontal, single and dual slope
- Vertical functionality
- Full function radio remote





## RL-200 1S/2S High Accuracy Slope Laser

Our RL-200 series is easy to operate, with a rugged, lightweight, and compact housing. These high accuracy lasers provide twice the power at an affordable price.

- Wide grade range (up to 25% slope)
- Increased working diameter - 1100 meters
- IP66 environmental rating



## RL-VH4DR General and Interior Laser

Dependable, accurate, and affordable, the RL-VH4DR is where value and ease come together.

- Horizontal and vertical orientation
- Autoscan beam control
- Remote control capabilities



## TP-L5 Series Pipe Lasers

Brings more to the table than any other alignment laser on the market. Offering a series of alignment lasers and features for guidance in the trenches, over the top, or within mining and tunneling applications.

- Ultra-visible GreenBeam® technology
- SmartLine® auto-alignment system
- Built-in vertical plumb beam



## LS-B100 Series Laser Sensors

A value priced laser series that offers repeatable grade control solutions for dozers, scrapers, excavators, backhoes, and drag-boxes.

- 360° detection
- On-grade matching
- Adjustable display range



## Ultimate 2D Control

Get the ultimate in machine control technology with a full line of affordable options.

Outfit your finishing machines or dozers and scrapers. Increase the productivity of a box blade or skid steer. The options for improving grade control are limitless.

Each solution provides unmatched precision, increased quality, and confidence. These 2D machine control components share the same foundation as our 3D machine control solutions, so you're able to quickly upgrade at minimal cost and with no learning curve.

### GX-55

#### Tactile Control Box

Delivers the highest quality graphical interface experience for modern machine control. The GX-55 can handle rugged field conditions while instantly displaying real time location and project design information.

- Large 6.5 inch sunlight viewable color LCD with touch-screen
- Integrated grade indicator LEDs



### GX-30

#### Economical Touch-Screen Display

The compact touch-screen in-cab display lets you see your machine in real time as well as easily switch from 2D to 3D for a variety of applications.

- 4.3 inch color display with, touch-screen operation
- Visual control made easy with 3D-MC software
- Future ready upgradeable systems from 2D to 3D





## 9164 - Box

### Multi-Machine Rugged Display

A proven go-getter, this control box can be used for various applications. Whether running a dozer, grader, scraper, or paver, this controller makes any machine more productive.

- Easily upgradeable
- Bright LCD screen
- Easy interface



## GC-35

### Paver Control Interface

With an IP67 environmental rating, this 2D asphalt paver control box is rugged and waterproof.

- Backward compatible with System Five box
- Easy performance menu
- Operate both sides of the screed from one controller



## ST-3

### Sonic Tracker Sensor

This proven Sonic Tracker sensor saves time on large asphalt paving jobs offering doubled detection speeds along with a smooth and fast response.

- IP67 environmental rating
- Flat detection range on stringline
- Side way offset indication



## 9621 - Sensor

### Paving Slope Sensor

Our dual port slope sensor improves accuracy over an extended temperature range. Exclusive antislash ceramic technology makes this one of the most reliable measuring slope sensors available.

- Rugged cast housing
- Insensitive to vibration
- Higher accuracy





## RL-SV2S

### General Dual Slope Laser

Specifically designed for a variety of tasks, the RL-SV2S can be used for horizontal, vertical, as well as dual slope laser applications. Slopes up to +/- 5% can be used in either X or Y-axis, and you can turn the unit on its side for layout and alignment jobs. With an operating range of over 800 meters in diameter, the RL-SV2S has the power to cover even the largest projects backed by the best five-year warranty in the industry.

With an IP66 rating, the RL-SV2S is "job site tough" to withstand dust and is waterproof even in torrential rainfall. Its reliable accuracy makes the RL-SV2S a good choice for virtually any general construction project, including flat plane and sloping jobs.

- Long-range operation out to 800 meters
- Horizontal and vertical dual slope applications
- Extended battery life at up to 120 hours
- Tough IP66 construction rating
- Remote control included







## TP-L5

### Pipe Lasers

This series of alignment lasers offer a unique combination of features and technology that are proven to meet the demands of contractors more than any other alignment lasers on the market. No matter your specific application - trenches, sewers, over-the-top measuring, or mining and tunneling - the TP-L5 Series is the industry standard.

Our patented GreenBeam® technology provides the brightest, most visible laser beam available. It's easily viewable in the brightest of outside conditions. The RC-200 remote puts all of the features at your fingertips whether you're near the laser or more than 200 meters away. Accelerate production by making setup and alignment automatic.

- World's first ultra-visible reliable GreenBeam®
- World's most accurate grade and leveling
- World's first SmartLine® auto-alignment system
- Tough cast aluminum housing
- Built-in vertical plumb







## X-52 Excavator System

### 2D Machine Control System

This streamlined and modern excavation system that gets you to grade as a cost effective 2D solution. Our rugged LS-B10W laser receiver combined with compact TS-1 tilt sensors lets you stay on grade without having to ever re-string. The GX-55 control box actively guides your bucket where it needs to be – increasing your productivity so you can be ahead of schedule.

The X-52 excavator system 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. Simply choose your reference and enter a cut and/or slope depth for immediate results.

- Increase productivity
- Work from an existing elevation or laser
- Create, cut and check complex design from the cab
- Lightbar grade for visual guidance
- Easily upgradeable to full 3D solution
- Improves job safety









## P-32 Paving System

### Paver Control Interface and Sonic Tracker Sensor

Control both sides of the screed with a digital LCD display using clear grade and function icons. A rugged, field proven system with component reliability for over 25 years, our P-32 paving system builds on technology from our previous System Five configuration, and works with most full-size asphalt pavers.

When paired with a Sonic Tracker and slope sensor, the GC-35 controller works with a variety of paving and milling machines. You can tackle any 2D asphalt paving job with the industry's premier non-contacting screed control system in a reliable, fully-featured package.

- 3.5 inch color LCD
- Compatible with previous generation System Five configurations
- IP67 environmental rating
- Rugged cable design with strong strain relief
- Operate two sides of the screed from one controller









## Easy To Upgrade

Help ensure your major investment is a wise decision. Our solutions allow you to easily upgrade to a full 3D automatic control system utilizing the same initial components as your existing 2D system. You'll benefit from the same intuitive software interface across all platforms, keeping learning curves down and profit margins up.

Upgrading to 3D offers you features such as:

- Constant real-time positioning
- Expand the machine's full potential anywhere on the job site
- Fully upgradable machine control features











## With You All The Way

No matter what size your company is, what role you have, or what phase of a project you are working on — we've got the solutions and services to help you get the job done right the first time.

## Topcon Enterprise

We're dedicated to helping you solve your workflow challenges, and get the most out of your Topcon solutions.

Topcon Enterprise gives you access to a large collection of online materials, software and firmware updates, current publications, tech tips, and guidance from the experts - all from your computer or mobile device.







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