

## AGRICULTURAL LASER SYSTEMS



**Topcon offers a laser control system perfectly suited to your application and budget**



- RUGGED, RELIABLE, HIGH-VISIBILITY CONTROL BOXES
- EASILY UPGRADEABLE
- MODULAR DESIGN FOR “PLUG AND PLAY” FUNCTIONALITY
- WORLD’S MOST ADVANCED LASER TRANSMITTERS AND RECEIVERS
- COMPLETE INSTALL KITS PROVIDE EVERYTHING YOU NEED

# It's time.

Topcon's modular approach is unique in the industry. With Topcon, the components you purchase today will work seamlessly with the Topcon components you purchase tomorrow. And although the components will be a perfect fit for your current machine and application, they're also portable and flexible so you can use them on equipment year-round. Whether you start with manual laser indicate or automatic laser control, your Topcon system will perform day-in and day-out, ready to grow as your needs grow.

Four levels of Laser Control Systems to fit your needs:

## Dual Control

Topcon's 9164 Control Box offers an easy to use operator's interface with the capability of automatically controlling elevation on two scrapers independently, or slope and elevation on a single scraper. Use dual rigid masts on your scrapers for an economical solution, or a combination of the 9164 Control Box with TM-1 survey masts for ease and flexibility in survey operations. A remote switch box option places auto/manual control or other functions at the operator's fingertips for optimum system control.

## Single Control

Combine Topcon's 9256 Control Box with a TM-1 mast and LS-B2 laser receiver for automatic control and survey capabilities with a single scraper. The simple operation of the 9256 gives the operator easy, verifiable grade and hydraulic adjustment from the cab. Single control is perfect for field leveling or keeping your roads or ditch pads in shape.

## Economy Control

Economy control combines the advantages of Topcon's automatic laser control performance where surveying capabilities are not needed. Simply set the laser to the desired elevation, manually center the laser receiver to the beam and secure to the mast and start leveling. Economy systems can be equipped with proportional valves for smooth, fast control connected to simple on/off solenoid valves.

## Indicate Systems

Grade lights on Topcon's indicate system shows high/low/on-grade indication for manual grade control. Using Topcon's LS-B2 and RD-2 infra-red remote display system, grade indication is displayed in the cab wirelessly. The LS-B2 features four operator selectable levels of on-grade accuracy (deadband) for rough or finish work. The LS-B2 also features bright LED indication for use without the remote display. The LS-B2 can easily be moved from machine to machine, and can be used with the automatic systems listed above.

Topcon. It's time.



## AGRICULTURAL LASER SYSTEMS

Land Leveling/Surveying/Water Management



## Control Boxes

Whether you're looking for automatic or indicate control Topcon manufactures the World's most advanced, easy-to-use operator interfaces.

### Fully automatic, clearly superior

It's obvious from the first time you see them. Topcon's System Five is the easiest-to-use grade control interface available. Grade and slope are displayed in large, backlit characters, with details like slope being displayed from the operator's point-of-view. There's a "walk-through" calibration feature, and even an on-screen help feature that displays operation information with the touch of a button. And the software is easily upgradeable.



### 9164 Dual Function

Reliable, accurate survey and leveling interface for dual function automatic control, elevation on two scrapers, or elevation and slope on a single scraper. Perfect for surveying, grade verification and contouring.

- Unique multiple elevation offset capability
- Fast, smooth proportional control compatible with OEM tractor valves or any type of electrical control valve
- Hydraulic control adjustment capable right from the box



### 9256 Single Function

Single function control box for elevation or slope on a single scraper

- Automatic control for either elevation or slope on a single scraper
- Survey function adds, then averages elevations
- Tough, durable environmentally sealed switches
- Bright 3-color LED grade lights
- Dial grade knob with 0.1' detent increments

### Clear, easy-to-follow grade indicate



### RD-2 Infra-red Grade Display

- Mounts in the cab for easy reference
- Compatible with LS-B2 and LS-B4 laser receivers
- Sets any of four on-grade accuracies on receiver, remotely
- Economical



## Laser Transmitters

### RT-5Sw "Smart" slope laser

The RT-5SW was built from the ground up with long range, high precision dual slope applications in mind. There isn't another laser available that can deliver dual slopes this accurately or easily. It features a removable integrated RF remote controller ("RC300W") which is capable of two way communication up to 300 meters in range. And with the RT-5SW's unique Auto-Alignment feature, set up is fast and accurate!



- World's first 5 arc second repeatability system
- Two-way, RF remote delivers 300 meters (1000') of 360° communication
- 1200 meter (4000') diameter working range
- Auto alignment has range of up to 150 meters
- Grade matching function
- Electronic beam masking
- Long battery life; 30hrs on Ni-MH rechargeable, 40 hrs on Alkaline
- Dustproof/waterproof, rugged design

### RL-H1Sa/RL-H2Sa low-cost slope lasers

Unmatched accuracy and repeatability in low-cost slope lasers, Topcon's RL-H Series slope lasers far exceed the performance of competitive lasers. Using leveling mechanisms found in our market-leading survey products they break the 5 arc second barrier for repeatability, and provide 10 arc second accuracy across their entire grade range.



- World's most accurate grade repeatability
- 10 arc second accuracy across entire grade range
- Easy-to-see LCD for clear, verifiable slopes
- Electronic beam masking
- Adjustable rotation speed and HI alert

### RL-H3A High-speed self-leveling laser

You can rely on the RL-H3A's self-leveling to provide stable and accurate grade. There are no delicate wires or bearings to worry about. That's because Topcon combined the world's fastest leveling system with patented Liquid Compensation.



- One button operation
- High-speed self-leveling
- 1150' (350m) radius operating range
- 600 rpm rotation speed (perfect for grade checking and Machine Control applications)
- Uses rechargeable or alkaline batteries
- 60 hours from rechargeable batteries
- 120 hours from 4 "D" alkaline batteries

## Machine Control Receivers

### LS-B2 Laser Receiver

Mount it on your machine, select the accuracy, and go to work. No cords to rip or tear, just hours of uninterrupted production. The LS-B2 mounts directly to a pole on your bucket with an easy on/off locking system. With an LS-B2 manual grade system, the operator can see at a glance where the cut is and where it should be. Thinking of upgrading later? The LS-B2 is fully compatible with Topcon's System Five automatic systems.



- 360° receiving
- 4 selectable on-grade settings
- Alkaline or rechargeable battery operation
- Automatics built-in bright LED's adjust to ambient light
- Quick release clamp for fast setup
- Advanced photocells for maximum accuracy

### LS-B4 Laser Receiver

Use as a stand alone unit or as a plug-and-play addition to your Topcon System Five. Mounts quickly using the integrated handle/mounting bracket.



- 360° receiving
- Multi-colored display
- Alkaline or rechargeable battery option
- Selectable on-grade accuracy
- System 4 & 5 compatible

### Slope Sensor – accurate, reliable slope control



- Control slopes up to 100%
- Provides control on scrapers and blades
- Provides feedback for scraper control
- Designed to work with cross slope

### Get even more...

Pair your LS receiver with a Topcon RL-H3A, H1Sa, or H2Sa laser, you'll get time saving features like low battery and out of level indication right on the receiver. No more unexpected battery changes or working from an inaccurate laser.

## Electronic mast and Proportional Hydraulics:

### TM-1 Electric Mast

- Tough, rugged design with shock mount included
- Millimeter adjustment for accurate grade control
- Fast travel speed allows quick, accurate surveys
- Two models to choose from: 32" and 42" travel
- A third connector for second scraper and valve outputs means only one cable is required between the tractor and scraper, even with dual scrapers
- Operates with 12V or 24V systems
- Compatible with all Topcon machine control receivers and control boxes
- Multiple mounting options for versatility



### Hydraulic Interface

The proportional control valve has been the Topcon standard since 1989. Dramatically reduce maintenance costs on your machine's hydraulic system.

- Control to the center of deadband for tighter tolerances
- Speed, offsets, and smoothness of the hydraulic controls are made directly from the cab
- Topcon systems can control almost any valve on the market: proportional, Sauer-Danfoss, Servo, or even old "bang-bang" solenoid valves.



## 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 land forming to compliance reporting, through our authorized dealers of North and South America, Topcon provides innovative technology that helps farming professionals maximize efficiency, improve crop yield, comply with changing regulations, implement environmentally sustainable management practices and improve workplace safety. Our dealers are there to help you every step of the way.

Complete Precision Farming Solutions, field-to-fork: That's the goal of Topcon. When it's time for you to take your first or next step, it's time to turn to Topcon.

## The Leader in Customer Satisfaction...

To ensure that your equipment maintains peak performance your local Topcon dealer provides factory trained and certified service technicians.



Offices Worldwide



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## When you're ready for the next step...

### AGS Agriculture GPS+ System

The AGS-100 single bucket and AGS-200 dual bucket control system takes precision land leveling beyond the limits of laser control. No more drift, virtually endless range, and so simple to use that you'll start increasing productivity on day 1. Everything is controlled from the operator-friendly AGS-C control box. Survey the field, create a cut/fill field design map, and begin grading without leaving the cab! If desired, the survey data can be saved to a CompactFlash® card for more detailed farm design work with the new AGForm-3D PC office software package. Best of all, the AGS-C control box is not only compatible with your existing Topcon laser system, it's field upgradeable so you will be able to keep up with future innovations in all your precision farming applications.

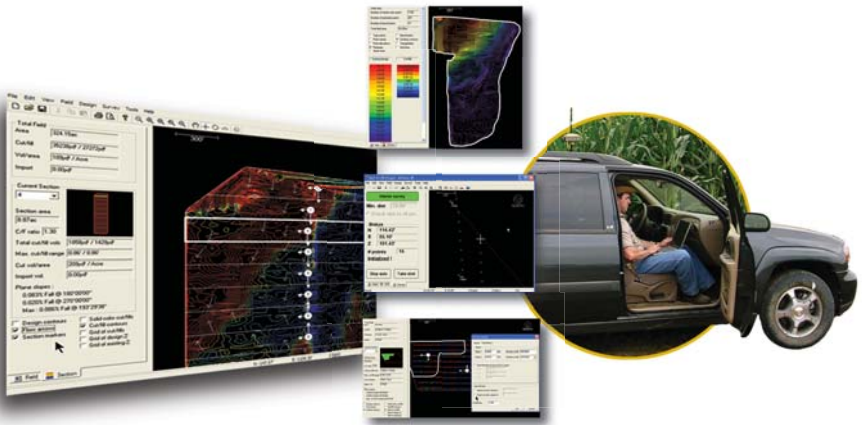


### AGForm-3D Field design software

AGForm-3D is the perfect field design software to accompany your AGS Agriculture GPS System. AGForm-3D lets you survey, view, and design the existing field to suit your needs, and it's quick and easy to transfer site survey files between your computer and the AGS-C control box. With AGForm-3D on your laptop computer and the HiPer Lite+ precision GPS receiver, you have a completely wireless ag survey system. Use AGForm-3D to view existing field contours and profiles, and then design the field as a single plane or break it into as many sections as needed.

- Easy to use, multiple format views of design & existing profiles / contours
- Minimize yardage by creating field sections
- Powerful tools let you add roads, ditches or sections of any shape
- Sub-region calculation tools help determine balance areas

When it's your time to put the latest technology to work in your fields, it's time for Topcon.



Your local Authorized Topcon dealer is: