

# GCS21 Grade Control System



## **ADVANCED LASER BASED GRADE CONTROL**

Modular system

Easy to use

Lower your operating costs

# Flexible System for Precision Grade Control

The Trimble GCS21 Grade Control System is a highly flexible, configurable system for machine guidance and machine control. Designed to meet your grade-control requirements today and in the future, this advanced “plug and play” laser-based system is easy to use and can be configured with a range of laser receivers, control options and unique features to suit your specific needs. Ideal for a range of construction earthwork applications and machines, including dozers, scrapers and motorgraders, the GCS21 reduces rework and operating costs to improve profitability.

## Flexible Options

A number of options are offered with the GCS21, allowing you to customize the configuration for maximum versatility. With these options and the Controller Area Network (CAN), you have “plug and play” expandibility that allows you to create a system that precisely meets your needs.

Start with the LR21 digital linear laser receiver as a stand-alone battery powered display system for machine guidance. The return on your investment will be immediate as your operators get to grade faster with improved accuracy.

With the addition of the SCB21 display, the SRB21 and the proportional valve controls, you can upgrade your GCS21 system to automatic for even greater productivity. The SRB21 provides component interface and valve drive for automatic blade control. These combined with the electric mast option allow you to raise or lower the laser receiver from within the cab. The end results are improved operator accuracy, less rework and reduced material overages.

The optional SR21 laser receiver offers a range of advanced patented and innovative features designed to further improve efficiency and accuracy. The long length of the SR21 allows operators to work through grade changes up to 10 times greater than with traditional receivers, without the need to raise or lower the laser receiver. When combined with the remote control

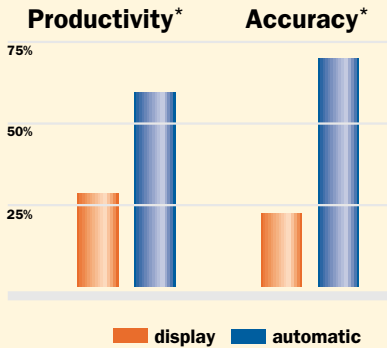


● The electric mast gives precise material control and positions the LR21 above the cab for 360° operation

● Fine tune system performance from the cab to match jobsite conditions.



● With a range of advanced, patented and innovative features, the SR21 allows machine operators to improve their efficiency, getting to grade faster and more smoothly.



\* Findings observed by U.S. Army Mobility Technology Center are in comparison to conventional grading methods.

features available on the Spectra Precision Laser GL722 transmitter, you have a powerful and highly productive system for a range of grade work!

### Innovative Features, Increased Productivity and Improved Accuracy—A Better Bottom Line for You

With a range of unique and innovative features, the GCS21 system will save you time and increase your material yield, meaning you'll reduce downtime and maintain precise control of your material without the operator leaving the cab. Using the AutoBench feature,

operators can automatically set the ongrade position on the receiver with the press of a button. You'll get to grade faster than ever and more precisely with the ability to make as small as 1-millimeter adjustments to the blade elevation. Like all Trimble machine control systems, an independent grade checker is not required. Your costs are reduced with the elimination of communication errors, rework and idle machine time. With the GCS21, you can ensure precision, maximum productivity and profitability on all your earthwork jobs.



- The long length of the SR21 allows operators to work through grade changes up to 10 times greater than before.
- AutoBench—a unique Trimble feature—automatically sets the ongrade position to anywhere on the length of the 1- or 2-meter receiver with the simple press of a button, eliminating the need to set the ongrade position manually.
- Solid state construction, no moving parts and internally shock mounted to reduce maintenance and wear and tear.



- Know job progress at any moment with elevation readout that displays blade's position relative to grade and indicates mode which shows the amount of cut or fill required at any location.
- Eliminate time spent searching for the beam with automatic laser search and audible "lost beam" indicator.



- Simultaneously monitor the grade reference and watch the machine's cutting edge with the RD21 remote display.
- Take full advantage of the LR21 receiver's 360° reception capabilities with the RD21 in the cab and the LR21 positioned above the cab.

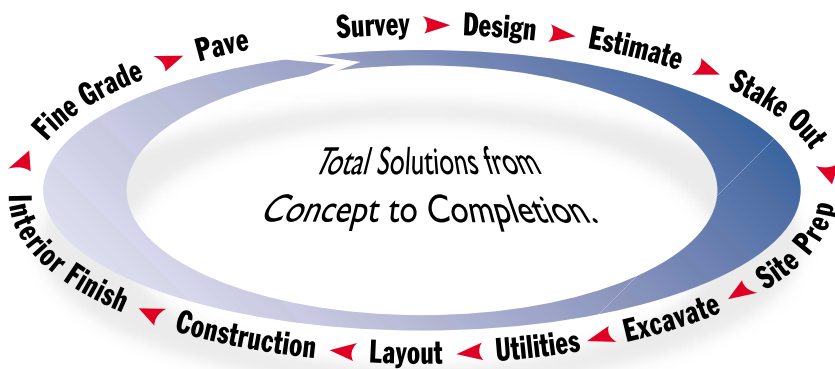


- The LR21 receiver can function as a stand-alone grade display receiver or as a component of a fully automatic GCS21 system.
- Visibility ensured at any time of day with "Super Bright" LED, the industry's first dual-color grade display, and automatic LED and LCD display intensity adjustment.
- Match jobsite tolerances for maximum productivity with three selectable "on grade" accuracies.
- Adjust and display elevation from the cab with either the manual or electric mast.

## Total Solutions from Trimble

The construction industry is more demanding and competitive than ever before. Trimble, by combining with Spectra Precision, the pioneer of the machine control industry, helps you improve your process and productivity with the most complete range of earthmoving and grade control solutions. Trimble's innovative solutions are based on decades of construction industry experience in positioning technologies including laser, total station and GPS with control systems, wireless communications, and software. All this results in a line of rugged, field-proven products—from practical solutions for the general contractor to the most sophisticated machine control systems.

Streamline your process, minimize downtime, lower costs and boost profitability with Trimble, the world leader in construction solutions. Every Trimble purchase is supported by the industry's largest global service and support system, with partners who understand the technology, the applications and your business needs. From concept to completion, Trimble positions you for success.



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