

# Grade It

# Productivity is...

## Laser-based Grade Display Systems

### The Spectra Precision Laser CR600 receiver.

Ideal for contractors doing both site prep and general construction.

#### MEET JOBSITE ACCURACY REQUIREMENTS:

The adjustable bandwidth allows the operator to tighten the on grade band so that they can easily meet the wide variety of accuracy requirements with tighter tolerances — from rough grading through to form leveling.

#### APPLICATIONS:

##### > Machine:

Site Prep

Building and Housing Pads

Sewage and Storm Drains

##### > Off Machine:

General Construction

**FOCUS ON GRADING:** Super-bright colored LED elevation indicators visibly indicate grade elevation information to the operator — even in poor light and up to 100 meters (350 feet) in bright sunlight.

**WORK ACROSS THE JOBSITE:** Easy to use, the CR600 features wraparound receiver cells with continuous pick-up through an operating range of 270° resulting in less dead spots and improved productivity, especially for machine applications. And, the longer above grade receiver cells make it even easier to dig with a backhoe.

**DESIGNED FOR MACHINE OR ROD:** The CR600 can be either rod or machine mounted, making it ideal for a wide variety of applications. Using the magnetic mount, the CR600 receiver is easily moved between backhoes, small excavators, box blades or skid steer loaders. With such a high degree of flexibility, the CR600 needs to be tough enough for any job. The magnesium housing provides a strong, lightweight and fully waterproof housing that can survive up to a 3 meters (10 feet) drop.



## Productivity is...

Design >>>> Grade >>>> Check >>>> Track >>>> Build

**Productivity is the key to profitability... getting the job done faster, with less machine time and personnel. Only one company can support your productivity with the broadest, deepest and most advanced construction solutions in the industry.**

Productivity is...

#### DESIGN

software that helps you win bids and guide machines.

#### GRADE

control that is faster, more accurate and minimizes rework.

#### CHECK

all staking, grade specs and measurements yourself.

#### TRACK

your vehicle in real time to optimize vehicle and personnel.

#### BUILD

with precise laser tools for faster layout, leveling and alignment.



Staying in the cab and **ON GRADE**

### USE THE CR600 LASER RECEIVER WITH THE FOLLOWING TRANSMITTERS.



#### LL500 Laser Level

Most contractors involved in light or large commercial applications will have seen or used the LL500. Ideal for a variety of building applications, the LL500 is also suitable as an entry-level transmitter for flat machine display applications.



#### LL600 Laser Level

Reliable and accurate, the LL600 sends a continuous, 360-degree laser reference over a large work area. This automatic, self-leveling laser is easy to set up and use, handling a diameter range of up to 800 meters (2,600 feet). It is ideal for a variety of flat work such as site leveling and concrete pads.



#### 1242 Grade Laser

The Spectra Precision® Laser 1242 transmitter is a cost-effective automatic self-leveling laser that does two jobs—levels and grades. The single-axis grade range of 0.10 to 25 percent makes it also ideal for shorter range grading and excavating applications, such as parking lots and gas stations.



#### GL700 Series of Grade Lasers

From a single-grade transmitter to an advanced remote-controlled steep-grade transmitter, the GL700 series offers a powerful collection of features. The GL700 is ideal for simple single slope applications with excavators or performing dual or steep slope with dozers or graders.



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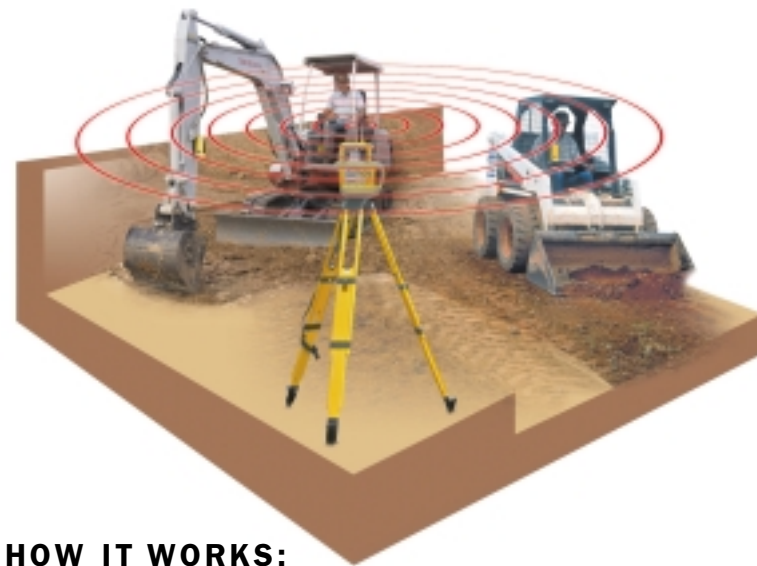
# Flexible Display Systems that Make the Grade

Grade It

## Spend less time walking the jobsite and more time in the cab being productive.

Using laser-based grade display systems to guide the cutting edge to grade, you can speed up grading operations, making you more accurate and more profitable. Laser-based display systems are highly flexible and can be used on a wide range of machines, including dozers, backhoes, scrapers, skid steers and excavators.

Versatile and affordable, these machine guidance systems can dramatically reduce your time and materials requirements in a variety of site prep/earthmoving and general construction applications.



### HOW IT WORKS:

Designed to provide visual guidance to machine operators for manual grading operations the system includes a laser transmitter that emits a rotating 360-degree beam of light and a laser receiver mounted to the machine. Depending on the transmitter, the laser beam can be either a flat plane for flat grade work or tilted for sloping work. A magnetically mounted receiver on your machine clearly displays your grade status - on - above - below.

## The Trimble LR400 receiver with the GL700 transmitters.

Ideal for contractors involved in a wide range of site preparation and earthmoving applications.

### APPLICATIONS:

- Site Prep
- Building Pads
- Sewage and Storm Drains
- Landfill Sites
- Balancing Materials

**IMPROVE YOUR PRODUCTIVITY:** The LR400 features large LED display arrows that indicate "high" or "low" with amber lights and "on grade" with green lights. This allows the operator to quickly and easily move the cutting edge to a desired elevation, especially on larger machines such as excavators, dozers and scrapers.

**FLEXIBILITY TO MEET YOUR NEEDS:** With adjustable accuracy bandwidths and distinct modes for specific types of applications and equipment, the LR400 can be configured to meet the machine needs and the accuracy requirements of the job. The LR400 can be powered using its own battery or using the machine's battery. And with the option to upgrade to grade control in the future, the LR400 and GL700 are ideal for contractors looking for an economical entry into laser-based systems.

### DESIGNED SPECIFICALLY FOR MACHINE USE:

The robust Trimble LR400 receiver combined with the GL700 transmitter is designed specifically for earthmoving applications performed with larger machines like dozers, scrapers and excavators. The receiver features center on grade for use with dozers and scrapers and an "excavator mode" for use with excavators and backhoes. Using the excavator mode, more above grade information is displayed making it easier for the operator to lower the bucket and cut to the correct grade.



### SPECIFICATIONS – CR600

#### APPLICATIONS

- General construction
- Machine display

#### DISPLAY

- 15 Channel Linear LCD
- 5 Channel LED

#### DEADBAND SETTINGS

- Ultra Fine: 0.1 mm, 0.004 in
- Super Fine: 1.0 mm, 1/32 in
- Fine: 1.5 mm, 1/16 in
- Medium: 3 mm, 1/8 in
- Coarse: 6 mm, 1/4 in
- Machine Fine: 25 mm, 3/8 in
- Machine Coarse: 25 mm, 1 in

#### PHOTOCELL RECEPTION

- 270°

#### PHOTOCELL LENGTH

- 11.4 cm, 4.5 in

#### MOUNTING

- Magnetic
- Rod

#### POWER

- AA Alkaline Batteries, 100 hr battery life
- Automatic shutoff after 30 minutes inactive

#### ENVIRONMENTAL

- Weather and dust resistant

### SPECIFICATIONS – LR400

#### APPLICATIONS

- Machine display
- Machine control

#### DISPLAY

- Sunlight viewable LED grade display
- Auto-dim LED display

#### DEADBAND SETTINGS

- Narrow: ± 4.5 mm, 0.015 in.
- Standard: ± 12 mm, 0.04 in.
- Wide: ± 24 mm, 0.08 in

#### PHOTOCELL RECEPTION

- Full 360° laser detection field of view

#### PHOTOCELL LENGTH

- 26.7 cm, 10.5 in detection window

#### MOUNTING

- Mounted with 1 m magnetic mast
- Semi permanent

#### POWER

- Vehicle power or external battery power pack
- Automatic shutoff after 60 minutes inactive

#### ENVIRONMENTAL

- Weather and dust proof

## GL700 SERIES: FOUR ROBUST MODELS, SO YOU CAN SELECT THE RIGHT LASER TRANSMITTER FOR THE RIGHT APPLICATION.

**Built for the jobsite:** The GL700 Series gives you the right laser for the right job... from an economical single-grade transmitter to an advanced, long-range, radio remote-controlled, steep grade transmitter. Further, the GL700 Series offers the most innovative collection of features ever available – Automatic Self-Leveling, Long-Range Remote Control, PlaneLok, Grade Matching and Automatic Axis Alignment – to let you get to grade faster and with more accuracy. On site, you'll find that the advanced features quickly translate into productivity and accuracy.



### GL710 Single Grade

An easy-to-learn, easy-to-use one-person grade laser, economical and accurate up to a 900 meters (3,000 feet) diameter. Ideal for general construction, site preparation, trenching and pipe laying applications.



### GL720 Dual Grade

This economical choice has +/-10% in the X axis grade range and -0.5 to +25% Y axis grade range with high accuracy up to 900 meters (3,000 feet) diameter. Ideal for general construction and machine control grade applications.



### GL722 Dual Grade

With long-range two-way Radio Remote and with the same range and base capabilities as the GL720, the GL722 includes the benefits of the full Radio Remote functions... plus Automatic Axis Alignment capability. Ideal for general construction, site preparation and road construction.



### GL742 Steep Grade Laser (to 110%)

The GL742 includes all the features of the GL722 – including full Radio Remote – with the increased capability of achieving a steep grade range of 110%. Ideal for all general construction and machine control applications, as well as steep slope applications such as highway embankments, seawalls and landfills.