

# GL700 Series

## Applications

- Grading and excavation
- Site preparation
- Road, runway, and landfill construction
- Agricultural land levelling and drainage
- Laser based machine control
- General construction vertical alignment such as anchor bolt and form alignment
- Sports fields, tennis courts, driveways and landscaping



## Highest Accuracy, Longest Range Grade Lasers



The automatic self-leveling Spectra Precision® GL700 Series grade lasers help you precisely control difficult tasks like long-range, high accuracy elevation control and fine grading for major construction projects. The GL700 Series gives you the right laser for the right job... from a single grade transmitter to an advanced, long-range radio remote controlled steep grade transmitter. The GL700 Series offers the most innovative collection of features available - Long Range Remote Control, Grade Matching and Automatic Axis Alignment, and - to get you to grade faster and with more accuracy.

The grade laser is an easy-to-use tool that allows you to take accurate elevation measurements with grade up to 1500 ft (450 m) away using a receiver. The exclusive automatic alignment features allow for quick and easy setup. The exclusive temperature and grade compensation systems are designed for superior accuracy so that your grade laser can be used for general construction, machine-control, and applications requiring tight tolerances under all environmental conditions.

### Key Features and Benefits

- Better than 5 arc second servo deadband accuracy for demanding high accuracy requirements
- Active temperature compensation provides accurate stable results regardless of temperature changes
- Automatic self-leveling over the entire grade range simplifies setup and ensures repeatable accuracy
- Large displays make the numbers easy to read, even when set-up on a tall tripod
- Intuitive, simple controls makes using the lasers easy to use and easy to learn
- Fully sealed, rugged aluminum housing and protective lens hood allow work in all weather conditions
- Machine Control compatible and works with all laser-based machine control systems
- Multiple rotation speeds - RPMs - allow for optimal machine control performance
- Long battery life and flexible power options keep the unit working throughout the day
- Grade Bump allows simplification of raising or lowering grade remotely
- Grade Reverse mirrors the grade setting with the push of a button
- Field calibration makes it simple to check and adjust the calibration in the field either at the laser or via the remote control
- Advanced functions and long range radio remote control of the GL722 make it ideal for large-scale, high accuracy applications
- Systems come complete with receiver and rod clamp, NiMH rechargeable batteries and charger, and rugged waterproof carrying case



# Highest Accuracy, Longest Range Grade Lasers



## GL710 Single Grade

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

The GL710 includes the HL700 digital readout receiver and C70 rod clamp



## GL720 Dual Grade

The GL720 features +/- 10% in the X axis grade range and -0.5 to +25% Y-axis grade range with high accuracy up to 3,000 foot (900 meter) diameter. The GL720 is ideal for general construction and machine control grade applications.

The GL720 includes the HL700 digital readout receiver and C70 rod clamp



## GL722 Dual Grade

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

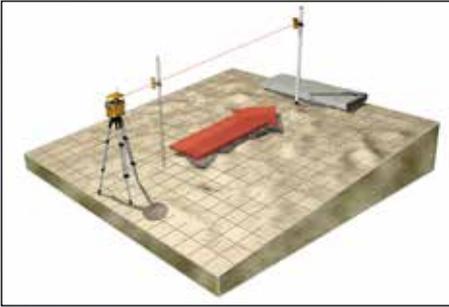
The **GL722IR** is a Class 1 laser. This type of infrared beam is required in special applications where a visible beam is a safety hazard, distracting, or otherwise not permissible.

The GL722 and GL722IR include the CR600 combination receiver, C50 rod clamp and C51 magnetic mount.



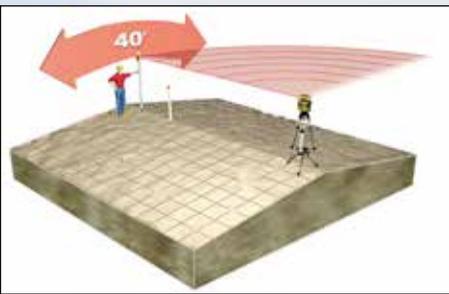
Model	GL710	GL720	GL722
Range (Diameter)	3,000 ft (900 m)		
Radio Remote	No	No	Yes
Auto Axis Alignment	No	No	Yes
Grade Match	No	No	Yes
Axis Grade Range X	NA	-10 to +10%	-10 to +10%
Axis Grade Range Y	-0.5 to +25%	-0.5 to +25%	-0.5 to +25%
Infrared Laser (IR) Class 1	No	No	Yes

# Advanced GL722 Features for Enhanced Productivity



## Grade Match

Grade Match Mode allows you to match the laser to an existing slope. Simply set your receiver at the same height as the transmitter then after going to your remote point, press a button on the wireless remote to enable the transmitter to automatically match and display the grade... without returning to the laser transmitter.



## Automatic Axis Alignment

Works up to 500 feet (150 meters) from the transmitter. Allows simple alignment of either side of any grade axis to the desired remote point. This simple, one-person operation lets you roughly align the transmitter to within 40 degrees of the remote point. You can then go to your remote point and, with a simple button press on the wireless remote, the axis is automatically aligned. The remote provides immediate confirmation of the alignment. Automatic Axis Alignment simplifies setup and ensures repeatable accuracy.

## Extend the Productivity of Your Laser

Add an LR machine display receiver to your machine and put a laser grade checker on board.

- Check grade from the cab
- Specific grading, excavating, and combination models
- Wireless remote display puts grade information in the cab
- Keep personnel safe and out of the trenches



# Highest Accuracy, Longest Range Grade Lasers

## GL700 Series Laser Specifications

Model	GL710	GL720	GL722
Leveling Accuracy <sup>1,2</sup>	3/64 in @ 100 ft, 1.2 mm @ 30 m, (8 arc seconds)		
Range (Diameter) <sup>1,3</sup>	3,000 ft (900 m)		
Axis Grade Range X	NA	-10 to +10%	-10 to +10%
Axis Grade Range Y	-0.5 to +25%		
Grade Resolution	0.001%		
Self-Leveling Range	Up to ±14°		
Laser Type / Class	658 nm IED Class 2 (GL722IR 785 nm IEC Class 1)		
Power Source	NiMH 6 x D cell		
Battery Life <sup>1</sup>	30 hrs		
Rotation Speeds	300, 600, 900 rpm		
Radio Remote	No	No	Yes
Auto Axis Alignment	No	No	Yes
Grade Match Mode	No	No	Yes
Water Resistant	Completely sealed and waterproof		
Size L x W x H	7.75 x 10.0 x 11.75 in (20 x 25 x 30 cm)		
Weight	18.5 lb (8.4 kg)		

## RC703 Wireless Remote Specifications

General	Radio Type, 2.4 GHz digital, encrypted to each laser	
Operating Range <sup>1,3,4</sup>	750 ft (225 m) general operation	500 ft (150 m) automatic alignment
Battery Life <sup>1</sup>	100 hrs	
Warranty	2 Years	

## Receiver Specifications

Model	HL700	CR600
Operating Range (radius) <sup>5</sup>	1500 ft (460 m)	
Laser Detection Height	5 in (12.7 cm)	4.5 in (11.4 cm)
Accuracy Selections	5	5
LED and LCD Indicators	Yes	Yes
Digital Readout	Yes	No
Battery Life <sup>1</sup>	60+ hrs	100+ hrs
Warranty	3 Years	2 Years

<sup>1</sup> at 21°C/70°F

<sup>2</sup> along the axis

<sup>3</sup> under optimal atmospheric conditions

<sup>4</sup> when product is setup at a min. height of 3 ft / 1 m

<sup>5</sup> laser dependent



RC703  
Remote Control

GL722

GL722 features long range radio remote control



HL700 Digital Readout Receiver  
includes the C70 rod clamp



CR600 Combination Receiver  
includes the C50 rod clamp and  
C51 magnetic machine mount



Worldwide Charger 1445-2093



Rugged waterproof carrying case

## Contact Information:

### AMERICAS

Spectra Precision (USA) LLC  
3625 Logistics Lane, Suite 200 • Dayton, Ohio 45377 • USA  
Phone (Toll Free in USA) +1-888-527-3771  
[www.spectraprecision.com](http://www.spectraprecision.com)

### EUROPE, MIDDLE EAST, AFRICA

Spectra Precision (Kaiserslautern) GmbH  
Am Sportplatz 5 • 67661 Kaiserslautern • Germany  
Phone +49-6301-711414 • Fax +49-6301-32213

To locate your nearest distributor, please visit the Dealer Locator section at [www.spectraprecision.com](http://www.spectraprecision.com)  
Specifications and descriptions are subject to change without notice.

© 2023, Spectra Precision (USA) LLC. All rights reserved. Spectra Precision and the Spectra Precision logo are trademarks of Spectra Precision (USA) LLC, registered in the United States Patent and Trademark office and in other countries. All other trademarks are the property of their respective owners.

PN 022507-623A (09/23)



**FRONTIER PRECISION**  
CIVIL CONSTRUCTION

7125 Old Seward Highway, Suite 100, Anchorage, AK 99518  
907.522.1600 | [sales@frontierprecision.com](mailto:sales@frontierprecision.com)

[www.frontierprecision.com/solutions/civil-construction](http://www.frontierprecision.com/solutions/civil-construction)

