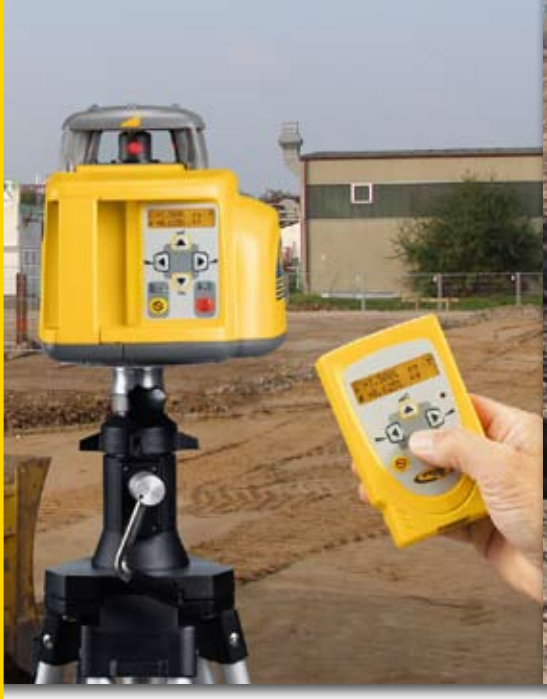
GL412 and GL422 Applications

- Leveling concrete forms and footers
- General construction vertical alignment and plumb such as anchor bolt and form alignment
- Grading and excavating
- Concrete sections with run-off for sports fields, tennis courts, driveways
- "Over the Top" sewer and storm drain pipe installations
- Steep slope road embankments and ditch banks
- Parking garages, ramps and drainage

Spectra Precision Laser GL412 and GL422



Rugged New Grade Laser with Two-Way Radio Remote Offers Superior Grade, Level and Vertical Capabilities

The Spectra Precision® Laser GL412 (single grade) and GL422 (dual grade) transmitters are cost-effective, automatic self-leveling lasers that do three jobs—level, grade and vertical alignment with plumb.

Both the GL412 and GL422 feature a 2-way, full-function remote control with a built-in back-lit grade display. You can do everything with the remote control that you can do at the laser keypad, including grade reverse on both axes, up to 100 m (330 ft) away from the laser—even from the cab of the machine! The ability to make grade changes from anywhere on the job greatly reduces setup time and speeds operation, especially when multiple job grade breaks are needed.

Additionally, the GL412 and GL422 Grade Lasers self-plumb in the vertical position, to allow an even wider range of applications such as anchor bolt installation, plus form, tilt up and curtain wall plumbing. Both units also incorporate automatic temperature and grade compensation for high accuracy in any weather or geographical location.

On both models, the laser beam can be turned off electronically on up to 3 sides of your choice. This capability eliminates interference with other crews on the job site by keeping the beam from straying into other work areas.

The GL422 offers two additional advanced features: pointing mode for "Over the Top" pipe laying applications and grade match where the laser can be used to measure the existing grade value between two known elevation points.

Use this versatile laser with a Spectra Precision Laser HL700 Laserometer at an operating diameter up to 800 m (2,600 ft), or use it with the CR600 machine-mounted laser receiver for fast and easy machine control display.

Spectra Precision Laser HL700 Laserometer

The Spectra Precision Laser HL700 Laserometer uses new technology to measure and display beam location and is ideal for use with the GL family of transmitters. The HL700 features a digital readout of elevation that shows exactly how far you are from on-grade allowing quick elevation checks without moving the rod clamp. The large 127 mm (5 inch) reception height speeds up beam pickup in grade match and alignment applications. An anti-strobe sensor stops construction lights from setting off the receiver, and makes it easier to identify true laser beam signals. The protective over molded housing withstands a drop of 3 m (10 ft) onto concrete. The highly visible LED display and dual sided LCD's allow you to work anywhere.

Spectra Precision Laser CR600 Receiver

Another receiver option is the Spectra Precision Laser CR600 Receiver. In addition to use as a handheld and rod-mounted receiver, the CR600 can be used as a machine control mounted receiver with 270-degree reception and a highly visible display for use on a backhoe, small excavator or skid steer. Rugged, accurate and easy to use, the CR600 provides high, low or on-grade information for all your grading and excavation applications.

Spectra Precision Laser GL412 and GL422

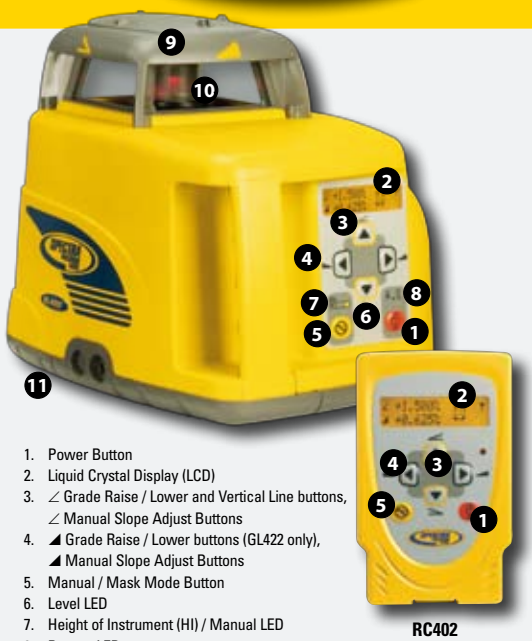
Maximum Versatility for Leveling, Grading and Vertical Alignment with Plumb

GL412 and GL422 Features

- Fast, easy horizontal level, grade and vertical plumb setup with no manual leveling
- Quick payback due to easy setups with the 2-way radio remote control, and single and dual grade application capability
- No rework due to automatic temperature and grade compensation
- Very long operating range – 800 m (2,600 ft) diameter (GL422 only) for increased machine control capability and fewer setups over the job site
- Very rugged with low service costs, takes a drop of up to 1 m (3 ft) onto concrete
- Mask mode eliminates interference with other crews on the job site
- Pointing mode allows "Over the Top" pipe laying for house connections
- Reduced material cost with virtually no downtime

Specifications

Laser type / class	<5 mW 635 nm, Class 3A/3R (GL422) 3 mW 650 nm, Class 2 (GL412)
Drop height on concrete	1 m (3 ft)
Operating diameter (w/ HL700)	800 m, 2600 ft (GL422) 600 m, 2000 ft (GL412)
Compensation method	H/V Electronic Self Leveling
Temperature compensation	Yes, every 5 °C
Level / vertical accuracy	10 arc seconds 1.5 mm @ 30 m (1/16" @ 100 ft)
Grade range	–10 to +15% Dual Axes (GL422) –10 to +15% Single Axis (GL412)
Grade accuracy	0.015% 3 mm@30 m (1/8" @ 100 ft)
Grade resolution	0.001% up to 9.999%, 0.01 % at higher grades
Grade compensation	Yes
Remote control type	Full 2-way communication, operation and security lock with transmitter
Remote control range (w/ RC402)	100 m (330 ft) radius
Rotation speed	0 (GL422), 300, 600 RPM selectable
Transmitter battery life (4 x D NiMHs)	27 hours
RC402 battery Life (2 x AA Alkaline)	130 hrs continuous 1 year under normal use
Mask mode	User selectable to any window 3 windows maximum
Standby mode	Yes
Display backlight	Yes, auto shutoff after 8 seconds
Mounting threads	5/8" x 11 Horizontal and Vertical
Operating temperature	–20° to +50°C (–4° to 122°F)
Dimensions	21L x 18W x 20H cm (8.3L x 7.1W x 7.9H in)
Weight	3.1 kg (6.8 lb)
Warranty	2 Years



RC402

1. Power Button
2. Liquid Crystal Display (LCD)
3. ∠ Grade Raise / Lower and Vertical Line buttons, ∠ Manual Slope Adjust Buttons
4. ◢ Grade Raise / Lower buttons (GL422 only), ◢ Manual Slope Adjust Buttons
5. Manual / Mask Mode Button
6. Level LED
7. Height of Instrument (HI) / Manual LED
8. Battery LED
9. Sunshade w/ Grade Sighting Guides and Open (∠) and Closed Axis (◢) Markings
10. Lighthouse
11. 5/8-11 Tripod Mount Screws (Horizontal and Vertical)

HL700 Laserometer Features

Digital readout of elevation shows how far from on grade without moving the rod clamp.

Large 127 mm (5 inch) reception height acquires the beam quickly and keeps you in the laser beam.

Extremely tough - can withstand a drop of 3 m (10 ft) onto concrete and has a 3 year warranty to back it up.

CR600 Receiver Features

Simultaneous 5-channel green and red LED display ensures that information can be read even in poor light, over long distances, and at an angle.

Magnetic mount is included for fast machine mounting and holds the receiver firmly in place.

The CR600 wraparound receiver cells offer continuous pickup through an operating range of 270° for reduced setups and improved productivity in machine applications.

HL700 CR600

Specifications	HL700	CR600
On-Grade Sensitivities	Ultra Fine 0.5 mm / 1/32 in	
	Super Fine 1.0 mm / 1/16 in	1.0 mm (1/32 in)
	Fine 2.0 mm / 1/8 in	1.5 mm (1/16 in)
	Medium 5.0 mm / 1/4 in	3.0 mm (1/8 in)
	Coarse 10.0 mm / 1/2 in	6.0 mm (1/4 in)
	Calibration 0.1 mm / 1/64 in	0.1 mm (0.004 in)
	Machine Fine	10 mm (3/8 in)
	Machine Coarse	25 mm (1 in)
Readout Units of Measure	mm, cm, ft, in, fractional in	
Operating Temperature	-20°C to 60°C (-4°F to 140°F)	-20°C to 50°C (-4°F to 122°F)
Battery Life	60+ hours continuous operation	100 hours normal operation
Auto Shut-Off	30 minutes/24 hours	30 minutes
Weight	0.27 kg (9.5 oz)	0.5 kg (1.1 lb)
Reception Height/Angle	127 mm (5 in) / 90°	114 mm (4.5 in) / 270°
Anti-strobe sensor	Yes	No
Dust and Waterproof	Yes (IP67)	Yes
Warranty	3 Years "No Excuses"	2 Years

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