

# GL412N/GL422N

## Applications

- Leveling concrete forms and footers
- General construction vertical alignment and plumb such as anchor bolt and form alignment
- Sports fields, tennis courts and driveways
- Grading and excavating
- Steep slope road embankments and ditch banks
- Ramps and drainage



## Versatile Grade Lasers with Vertical Alignment



The automatic self-leveling Spectra Precision® GL412N single grade and GL422N dual grade lasers are the most rugged, cost-effective lasers that do three jobs—level, grade, and vertical alignment. Even in harsh jobsite conditions, the GL412N/GL422N deliver consistently reliable and accurate performance, enabling you to work faster and smarter.

The rugged GL412N/GL422N lasers can withstand drops of up to 1 meter (3 feet) onto concrete and tripod tipovers up to 1.5 meters (5 feet). This strength, combined with full weatherproofing and dustproofing, reduces downtime and lowers repair costs over the life of the product.

Each GL412N and GL422N laser system now includes the advanced HL760 Digital Readout (DRO) receiver. The receiver provides automatic Grade Match which allows measurement of unknown grade values between two points over unknown ground and eliminates time consuming slope calculations. PlaneLok automatically locks on to an existing elevation or vertical alignment point which eliminates all drift or possibility of error due to improper calibration or weather. The new unique “Fingerprint” function only accepts the beam from the laser it is paired with. The CR600 receiver is also an option when a machine mounted display elevation is required.

### Key Features

- Automatic horizontal and vertical self-leveling
- Accuracy 1.5mm @ 30 m (1/16 inch @ 100 ft)
- Working range of 800 m (2,600 ft) diameter
- Radio communication between the HL760 DRO receiver and the laser provides automatic Grade Matching and PlaneLok
- “Fingerprint” function of the HL760 DRO receiver only accepts the beam from the laser it is paired with
- Height of Instrument Alert - unit stops rotating when jarred to avoid erroneous readings
- Long range RC402N Radio remote control
- Selection of Sensitivity - accurate even in high winds or on high vibration job sites
- Extremely durable and portable
- 5 Year warranty

### User Benefits

- Simplifies level, grade and vertical alignment setups
- Increases reliability, accuracy and durability
- Easy to transport, easy to carry, easy to store
- Energy-efficient design offers long battery life
- Highly durable design enables the GL412N/GL422N to survive a drop up to 1 m (3 feet) onto concrete
- Radio remote control allows operation of all laser functions from anywhere on the jobsite



# Versatile Grade Lasers with Vertical Alignment

## GL412N/GL422N Specifications

- Leveling accuracy<sup>1,3</sup>: ± 1.5 mm/30 m, 1/16" @ 100 ft, 10 arc seconds
- Operating diameter<sup>1,2</sup>: appr. 800 m (2600 feet)
- Grade range:
  - 10% to +15% (Dual Axes GL422N)
  - 10% to +15% (Single Axis GL412N)
- Rotation: 300, 600 rpm
- Laser type: red diode laser 650 nm
- Laser class : Class 2, <3.4 mW
- Self-leveling range: ± 5° (±9%)
- Leveling indicators: LCD indications and LED flashes
- Radio range (HL760): up to 100 m (330 ft)
- Power source: 10.000 mAh NiMH battery pack
- Battery life<sup>1</sup>: 35 hours NiMH; 50 hours alkaline
- Operating temp.: -20°C to 50°C (-4°F to 122°F)
- Storage temp.: -20°C to 70°C (-4°F to 158°F)
- Tripod attachments:
  - 5/8 x 11 horizontally and vertically
- Dust and waterproof: Yes - IP66
- Weight: 3.1 kg (6.8 lbs)
- Low voltage indication: LCD battery indicator
- Low voltage disconnection: unit shuts off
- Warranty: 5 Years

## HL760 Digital Readout Receiver Specifications

- Highly versatile receiver for basic and advanced leveling and aligning applications
- Works with GL412N/GL422N in automatic Grade Match and PlaneLok applications
- Key Features:
  - Digital readout of elevation
  - Exact distance from grade displayed
  - Anti-strobe sensor to prevent false reading from jobsite strobe lights
  - Large reception height to ease beam reception
  - Withstands a drop of up to 3 m (10 ft)
  - Fingerprint function - detects only the laser beam of the paired transmitter
- User Benefits:
  - No need to go "on-grade" to measure;
  - Saves considerable time
  - Reduces rework by allowing remote monitoring
  - Increases reliability, accuracy and durability

## RC402N Remote Control Specifications

- Operating range<sup>1,3</sup>: up to 100 m (330 ft)
- Power source: 2 x 1.5V AA alkaline batteries
- Battery life<sup>1</sup>: 130 hours
- Dust and waterproof: Yes - IP66
- Weight: 0.26 kg (0.57 lbs)

## HL760 Digital Readout Receiver Specifications

- Digital readout units: mm, cm, ft, in, frac. in
- Reception height: 127 mm (5 inches)
- Six On-grade sensitivities:
  - Ultra Fine 0.5 mm (~1/32 in)
  - Super Fine 1 mm (~1/16 in)
  - Fine 2 mm (~1/8 in)
  - Medium 5 mm (~1/4 in)
  - Coarse 10 mm (~1/2 in)
  - Calibration Mode 0.1 mm (~1/64 in)
- Battery life (2 x AA):
  - 60+ hours continuous operation
- Auto shut-off: 30 minutes/24 hours
- Operating temp.: -20°C to 50°C (-4°F to 122°F)
- Dust and waterproof: Yes - IP67
- Weight: 0.27 kg (9.5 oz)
- Warranty: 3 Years "No Excuses"

<sup>(1)</sup> at 21° Celsius (70° F)  
<sup>(2)</sup> under optimal atmospheric circumstances  
<sup>(3)</sup> along the axis



GL412N/GL422N features a strong metal sunshade



RC402N Radio Remote Control for all applications



CR600 Combination Receiver can be machine or rod mounted for increased productivity applications



HL760 Digital Readout Radio Receiver to measure and display beam location

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

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