

# LL500

## Applications

- Checking and adjusting elevations
- Taking grade shots
- Excavating cutting depth
- Basement excavation
- Digging septic tanks
- Checking foundations
- Digging footings
- Setting forms
- Checking sub-base materials
- Screeding concrete
- Slope on grade



## Rugged, Reliable Laser Leveling Systems



### Setting the Industry Standard

Accurate, stable and very reliable, the Spectra Precision® Laser LL500 is the ideal one-person leveling system for a range of everyday elevation measurements on the construction site.

Designed for use on the jobsite, and reliable even in the harshest of conditions, today more contractors around the world use Spectra Precision Lasers to increase productivity and profitability.

### One Laser Levels Your Entire Work Area

The LL500 transmitter sends a continuous, self-leveled 360-degree laser reference over a work area, up to a 500-meter (1,600-foot) diameter. With the LL500, you can perform any two-person leveling task with just one person. Simply set up the laser transmitter anywhere on your job site; it transmits a laser beam to provide an elevation reference that can be picked up by one or more laser receivers, including our innovative HL700 or CR600, whether they are handheld, attached to a grade rod or mounted on a machine.

### Key Features

- 1,650 ft (500 m) working diameter which increases productivity by reducing need for multiple set-ups on a large job site
- Self-leveling with built-in 'out-of-level' shut off that maintains accuracy over the entire work area, and minimizes errors
- High accuracy laser, 1/16 in per 100 ft (1.5 mm per 30 m) with temperature compensation provides highly stable, repeatable accuracy even under large temperature changes
- Uses alkaline or rechargeable batteries—so you are less likely to run out of power and the unit keeps working with no downtime due to power loss
- Visible 'spotting' beam for determining receiver mounting placement making it faster to find the on-grade position
- Comes with a choice of HL700 or CR600 receivers allowing you to choose the best option to suit your application
- 5 Year warranty

### User Benefits

- Temperature compensation allows you to meet your toughest accuracy requirements in any type of variable environmental conditions
- Reduces the amount of time required for each grade shot, so more grade shots are taken for increased accuracy
- Eliminates rework caused by miscommunication or out-of-level instruments with built-in out-of-level warning and shut-off
- Immediately locates the laser plane with the visible spotting beam



# Rugged, Reliable Laser Leveling Systems

## LL500 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. 500 m (1600 feet)
- Self-leveling range: ± 11 arc minutes
- Temperature Compensation: Yes
- Laser type: 670 nm
- Laser class : Class 2
- Compensation Type: Wire Hung, Air Damped
- Power source: 4x D-Cell Alkaline or NiMH batteries
- Battery life<sup>1</sup>: 100 hours NiMH
- 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
- Dust and waterproof: Yes - IP54
- Weight: 3.6 kg (8 lbs)
- Warranty: 5 Years

## HL700 Digital Readout Receiver

- 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
- CAPTURE function remotely acquires and retains a measurement when the display is difficult to see
- Extremely tough - can withstand a drop of 3 m (10 ft) onto concrete and has a 3 year warranty to back it up
- 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)
- User Benefits:
  - No need to go "on-grade" to measure;
  - Saves considerable time
  - Reduces rework by allowing remote monitoring
  - Increases reliability, accuracy and durability

## CR600 Receiver

- 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, especially in machine applications

## CR600 Receiver Control Specifications

- Seven On-grade sensitivities:
  - Ultra Fine 0.1 mm (0.004 in)
  - Super Fine 1 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 10 mm (~3/8 in)
  - Machine Coarse 25 mm (~1 in)
- Reception height: 114 mm (4.5 inches)
- Operating temp.: -20°C to 50°C (-4°F to 122°F)
- Battery life<sup>1</sup> (3 x AA): 100 hours at normal operation
- Auto shut-off: 30 minutes
- Reception Angle: 270 degrees
- Dust and waterproof: Yes
- Weight: 0.5 kg (1.1 lbs)
- Warranty: 2 Years

## HL700 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<sup>1</sup> (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: 0.37 kg (13.1 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



LL500 - Setting the Industry Standard



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



HL700 Digital Readout Radio Receiver to measure and display beam location

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