

# Build a Stronger Business with Spectra Precision Products

## The Broadest Line

From lasers to construction accessories, Spectra Precision Laser has more choices for your customer. Better choices, too, because we build our products to be the toughest on earth.

## An Entire Industry. Invented Here.

There's a reason Spectra Precision Laser is the strongest name in the industry. We invented the industry. From day one, we have pioneered every major development in laser positioning for construction. That's why you'll find our products on more job sites around the world than any other brand.

## A Partnership for Success

We can help you grow your business. We have the breadth of products, the quality and the support you demand... and the attitude to do whatever it takes to make you more successful.



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# 2015 CONSTRUCTION DISTRIBUTOR CATALOG



INTERIOR LASERS  
LASER LEVELS  
GRADE LASERS  
MACHINE RECEIVERS  
RECEIVERS  
OPTICAL





## Introduction

Warranty . . . . .	4
Service . . . . .	4
Timeline. . . . .	5

## Lasers

Buying guide . . . . .	6
------------------------	---

### Laser Levels

LL100N . . . . .	8
LL300N . . . . .	9
LL300S . . . . .	10
LL400HV . . . . .	11
LL500. . . . .	12

### Horizontal and Vertical Lasers

HV101 . . . . .	13
HV302 . . . . .	14
HV301G. . . . .	15

### Grade Lasers

GL412N. . . . .	16
GL422N. . . . .	17
GL612. . . . .	18
GL622 . . . . .	19

### Grade Lasers and Laser Accessories

GL710, GL720, GL722 . . . . .	20
-------------------------------	----

### Universal Laser

UL633 . . . . .	22
-----------------	----

### DigiRod

DR400 . . . . .	24
-----------------	----

### Pipe Lasers and Accessories

DG711 . . . . .	25
DG511 . . . . .	25

## Laser Receivers

HR150U Receiver. . . . .	26
HR220 Line Generator Receiver. . . . .	26
HR320 Receiver . . . . .	27
HL450 Digital Readout Receiver. . . . .	27
HL700 Digital Readout Receiver. . . . .	28
HL760 Radio Digital Readout Receiver . . . . .	28
HL750U Universal Radio Digital Readout Receiver . . . . .	29
CR600 Combination Receiver . . . . .	30

## Optical Instruments

Automatic Level . . . . .	31
DET-2 Construction Theodolite . . . . .	32

## Laser Tools

LP30, LP50 Laser Pointers . . . . .	34
LT20 2 Plane Crossline Laser . . . . .	35
5.2XL Point and Crossline Laser . . . . .	36
LT56 3 Plane Crossline Laser . . . . .	37
QM55 Quick Measure Laserr . . . . .	38
QM75 Quick Measure Laser. . . . .	38
QM95 Quick Measure Laser. . . . .	39
1.5PL Precision Line Laser . . . . .	40

## Laser Display Receivers

LR20 Receiver and RD20 Accessories . . . . .	41
LR30 and LR30W Receiver . . . . .	42
LR50 and LR50W Receiver . . . . .	43
LR60 and LR60W Receiver . . . . .	44

## Specifications

Laser Levels, Display Receivers . . . . .	46
Grade & Universal Lasers . . . . .	47
Pipe Lasers . . . . .	47
Laser Tools . . . . .	47
Laser Applications. . . . .	48



# INTRODUCTION



Welcome to our latest catalog where you can see our wide variety of positioning tools ranging from various lasers to optical instruments. This catalog is special as we are celebrating a significant event, the 50th Anniversary of the invention of construction laser. It was an exciting beginning in 1965 for Bob Studebaker in Dayton, Ohio when he introduced the construction laser to the world. Bob's invention transformed the way work was done and is still done on construction jobsites worldwide. The company Bob worked for, LaserPlane – Spectra Physics, would become part of Trimble Navigation in 2000. Over the 50 years, we have continued to follow Bob's lead and bring forth new and innovative products to the construction industry. On page (or below) is a timeline that shows many of the innovations Spectra Precision has introduced to construction professionals. The evolution of the laser has now made it hard to find a jobsite that doesn't utilize a laser sometime during the project. Our products help our customers do their work faster with proven accuracy. Our toughness allows us to offer the best warranties in the industry. We invented and continue to reinvent our industry.

Our products are supported by a worldwide network of distribution partners. Our partners provide product and application information for our customers. To give you further access to information anywhere, we have continued to increase our presence online with a new website that is mobile device enabled. The website contains a wealth of information including literature, dealer locator, product selector guide, electronic catalog and instructional videos. By leveraging online content, you can find the information you need, when you need it.

**Although much has changed, our goal remains the same across our business and throughout Trimble....  
we will transform the way the world works.**

## Warranty/Service

### Shockproof Products Built for the Construction Environment

Spectra Precision products are designed to be used in the tough construction environment where performance in arduous conditions is expected. Environmental conditions are often harsh, with water, mud and concrete being encountered on a daily basis. At Spectra Precision this is considered with every product. Products occasionally get dropped or knocked over; all Spectra Precision products that show the "Shockproof" icon are ruggedized and designed to withstand a 1m (3ft) drop onto concrete and tripod tip-over up to 1.5m (5ft) resulting in reduced downtime and lower repair costs.

### Industry Leading Warranty and Service Support

The warranty program from Spectra Precision provides comprehensive coverage and simplicity. There are three options available depending on product:

- Standard Warranty – with 1, 3 or 5 year coverage
- "No Excuses" free over the counter exchange
- Supplemental Over the counter exchange

Standard warranty covers manufacturing fault and where any product has the "shockproof" warranty, parts and labour to repair the product are covered if it is dropped or knocked over within the specified heights.

Products shown as having "No-excuses" free over the counter exchange can be exchanged for a new product with any Spectra Precision dealer as long as the product is within the terms of warranty.

Supplemental over the counter exchange is an instant, over-the-counter exchange policy, which can be transacted worldwide by ANY Spectra Precision dealer without a receipt. Any product will be replaced that has failed due to normal use for the same price as a typical repair, with a NEW unit from your local dealer's inventory for the specified period.

### Worldwide Service Network

In addition to factory service centres in Dayton, OH, Kaiserslautern, Germany and Shanghai, China – where specialist reprogramming and component level repairs can be undertaken, Spectra Precision has a comprehensive worldwide approved service provider network with over 170 service centres. All authorised service providers are factory trained and take part in regular training to update their skills and knowledge. Each service provider invests in specialist equipment to make sure that all service and repairs are carried out to the highest standards.

What does this mean to the Spectra Precision user? – live, experienced service technicians are available via phone, email and in person during normal business hours all around the world whether it is for technical advice, service or repairs.



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AT [SPECTRALASERS.COM](http://SPECTRALASERS.COM)



**2014**

**LT56**

rugged universal layout laser tool



**2015**

**QML800**

X Marks the Spot



**2002**



**DG711**

pipe laser with anodized aluminum housing

**2008**



**LL100/HV101**

new generation of fully automatic lasers

**2009**



**GL522**

dual grade lasers with extended functions, and with HL750 radio receiver and radio control

**2010**



**5.2XL**

combination point and crossline laser

**2012**



**UL633**

the MOST versatile construction laser... EVER!

**2013**



**DR400**

the Rod-Less Grade Checker

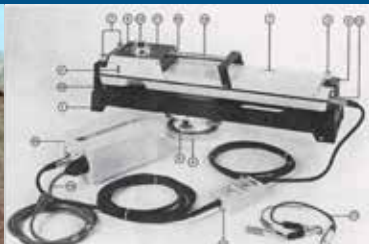
**1965**



**Bob Studebaker**

with the 1st rotating laser in the world

**1973**



**Rotolite**

1st rotating laser for interior work

**1976**



**945U**

1st electronic automatic self-leveling rotating laser with slope adjustment

**1981**



**EL-1**

1st electronic automatic self-leveling rotating laser level with a laser diode... still produced.

**1984**



**Pipemaster**

1st pipe laser with internal battery and infrared remote control

## Buying Guide

### 1. What do lasers do and how does that relate to what I need to do with them on the jobsite?

Simply, laser levels can provide a reference for:

- Horizontal Level
- Vertical Alignment
- Slope
- Automatic Grade
- 90 Degree Setting Out
- Plumb

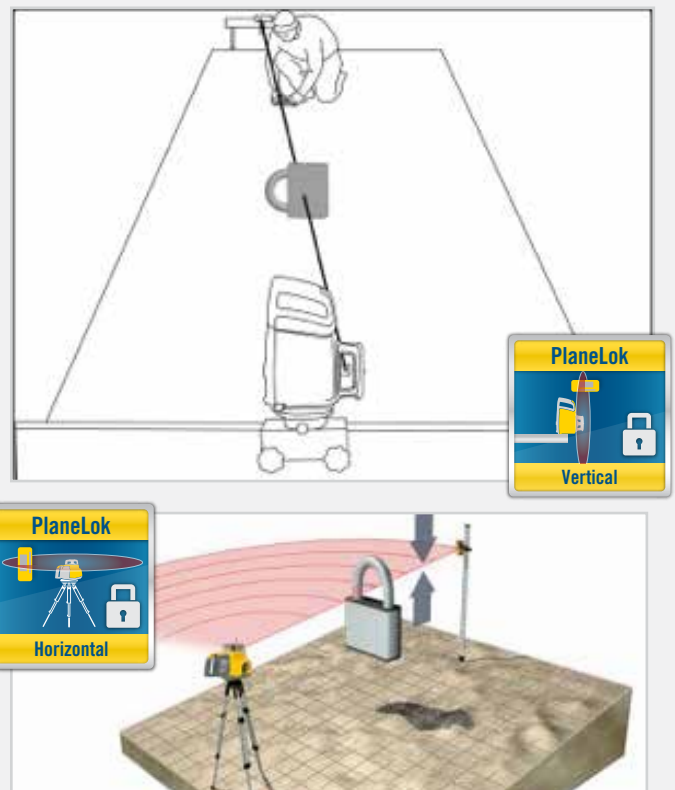
Some lasers have only one of the features and some have all.



### 2. How does distance impact the way the laser functions?

Accuracy of the laser changes over distance. Over longer distances even the curvature of the Earth has an impact. Additionally the receiver you use can affect the accuracy. Depending on your requirements there are a number of things you can consider to improve accuracy.

- **Planelok** – a radio in the laser and the receiver, communicate and keep the laser beam locked to a fixed elevation or direction (in vertical). The laser works to keep the beam in a fixed position on the receiver. This not only improves accuracy but is best used for applications requiring higher accuracy such as concrete pads. This function can also eliminate beam drift that can be caused by vibrations or changing temperatures throughout the day.



- **Tolerance Setting (Receivers)** - Tolerance is an accuracy setting on the receiver. Spectra Precision lasers allow tolerance adjustment from fine to rough level. This can be helpful, for example by using a wider tolerance while moving dirt and a narrow tolerance while doing concrete or other fine grade. Spectra Precision receivers all maintain their tolerance accuracy over the full operating range of the receiver which, combined with digital readout and industry leading robustness assists greatly with improving accuracy.



### 3. Are there industry standards for accuracy?

No. However, at Spectra Precision we work to our own standards that require all products leaving the factory to be set to a tighter specification than our published specification to allow room for possible shift during transportation and during jostling. In most cases our products have a higher accuracy performance than that specified.

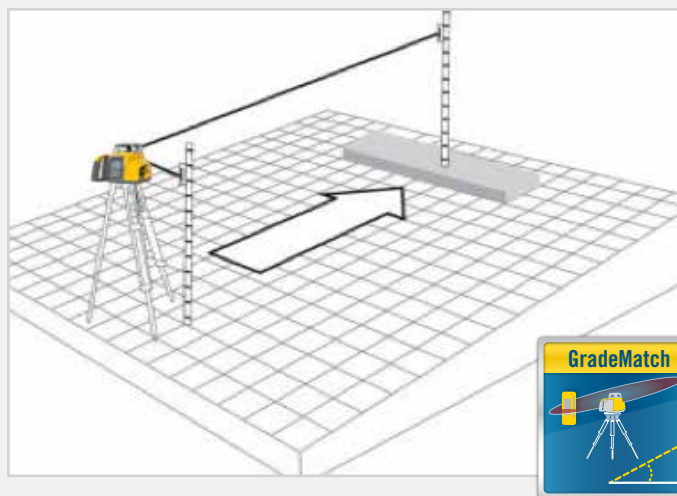
### 4. Where can I use lasers?

Lasers can be used externally with a receiver and internally visibly with or without a receiver (depending on light conditions). Spectra Precision exterior lasers have a visible beam allowing the user to be able to see where the laser is in order to get the receiver to the on-grade position faster.

### 5. What is Grade Matching?

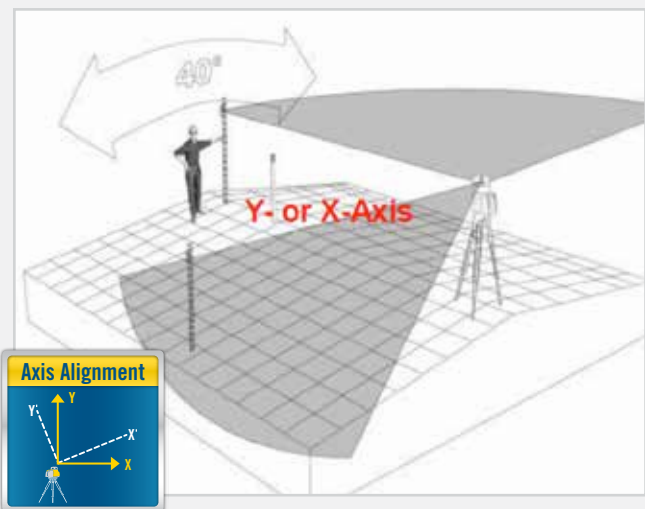
Grade Matching allows a user to match the fall of the ground or between two existing elevations without complex calculations.

- **Manual Grade Matching** – once the height of the laser has been measured, the user takes the receiver and the rod to the elevation that needs to be matched. Then the laser is sloped until the beam reaches the on-grade position on the receiver. Once complete the grade has been matched.
- **Automatic Grade Matching** – same process as manual grade except that the laser and the receiver communicate via radio and the beam is automatically driven to the on-grade position on the receiver. Some models of laser will also then display the actual grade.



### 6. What is Automatic Axis Alignment?

When working with grade it is vitally important that the grade axis is aligned correctly. Any slight mis-alignment can cause error, particularly over distance. Automatic Axis Alignment allows the user to align the laser to the grade hub automatically to providing a simple but accurate set-up. The laser communicates to the receiver and aligns to the receiver that is placed on the grade hub (this can be in a range of +/-40 degrees)



### 7. Can a laser be knocked over or dropped?

Spectra Precision lasers are designed to be used on the jobsite where they may get knocked over or dropped. If a laser has the "Shockproof" icon it can be dropped 1m onto concrete or withstand a 1.5m pushover on a tripod. What does this mean in real terms? While we can't guarantee that the laser's calibration will not be changed we do guarantee that the most expensive internal components will still work – reducing the lifetime running cost of the laser.



### 8. How can I distinguish between multiple lasers being used on the same jobsite?

With the new HL760, Spectra Precision introduces a new function called "Fingerprinting" that links the receiver with a particular laser. Once the receiver is paired with the laser transmitter the receiver has the ability to filter out other lasers that strike the receiver and only accept the laser that it is paired with. All lasers marked with the Fingerprint icon have this ability when used with HL760 receiver.





## LL100N

### Affordable, Easy to Use Laser Level



#### Key Features and Benefits

- When system case configuration purchased - includes LL100N laser, HR320 receiver, C59 receiver clamp, tripod and choice of grade rod - a complete leveling crew in case
- Easy to transport, easy to store, easy to use
- Fully automatic self-leveling rotating laser provides fast and accurate setup
- Robust design withstands a 3 ft (1 m) tripod tip over and still remains functional, reducing costs for downtime or repair
- 3 Year No-Downtime warranty keeps productivity high and operating costs low
- One-person elevation control up to a 1,150 ft (350 m) diameter

#### Applications

- Checking/setting elevations, concrete forms, footings, and foundations for smaller job sites
- Ideal for patio decks, terraces, swimming pools, septic systems, and leach fields
- Estimating cut and fill

Part No.	Receiver	Rod	Tripod	Case
LL100N	HR320	No	No	Small Hard Case
LL100N-3	HR320	GR153 Metric	Q104025	System Case
LL100N-5	HR320	69188 Cut & Fill Metric	Q104025	System Case

All part numbers include LL100N transmitter, HR320 receiver, C59 Adapter for receiver, case, retail carton graphics, 2 D and 2 AA Alkaline batteries



# LL300N

## Medium-Range, Highly Accurate Leveling Solution



### Key Features and Benefits

- Available with a choice of system case (with receiver, tripod and choice of grade rod) or small carry case with receiver and clamp.
- Fully automatic self-leveling provides fast and accurate setup
- Rechargeable battery pack or alkaline batteries keeps the unit working with no downtime due to power loss
- Optional RC601 remote control allows easy grade matching using the remote control from rod position
- 1300 ft (400 m) operating diameter
- Single-axis manual slope mode with 'cross-axis' self-leveling allowing grade matching for basic slope work, while maintaining accuracy in the cross-axis
- Built to withstand severe drops of up to 3 ft (1 m) directly onto concrete, or up to 5 ft (1.5 m) when pushed over on a tripod means less downtime and cost due to damage caused by an accidental drop or tip-over
- Comes with a choice of HL450 or HR320 receivers allowing you to choose the best option to suit your application

### Applications

- Checking/setting elevations, concrete forms, footings, and foundations for small and medium sized jobs
- Basic slope work such as driveways and ramps
- Excavating, digging footings, and septic tanks with CR600 receiver

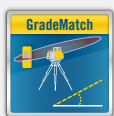
Part No.	Receiver	Power	Rod	Tripod	Case
LL300N	HL450	4 D Alkaline	No	No	Small Hard Case
LL300N-4	HL450	Rechargeable pack*	No	No	Small Hard Case
LL300N-5	HL450	Rechargeable pack*	69188 Cut & Fill Metric	Q104025	System Case
LL300N-6	HL450	Rechargeable pack*	GR153 Metric	Q104025	System Case
LL300N-8EU	HR320	Rechargeable pack*	No	No	Small Hard Case

All part numbers include LL300N transmitter and case. \*Rechargeable pack comes with NiMH batteries and charger.



## LL300S

### Medium-Range, Highly Accurate Leveling Solution



#### Key Features and Benefits

- Available in system case with receiver, tripod and choice of grade rod
- Fully automatic self-leveling provides fast and accurate setup
- Rechargeable battery pack or alkaline batteries keeps the unit working with no downtime due to power loss
- Optional RC402N remote control allows easy grade matching using the remote control from rod position
- 2,600 ft (800 m) operating diameter
- Single-axis manual slope mode with 'cross-axis' self-leveling allowing grade matching for basic slope work, while maintaining accuracy in the cross-axis
- Built to withstand severe drops of up to 3 ft (1 m) directly onto concrete, or up to 5 ft (1.5 m) when pushed over on a tripod means less downtime and cost due to damage caused by an accidental drop or tip-over
- Comes with a choice of HL450 or HL760. Fingerprinting function can be used when used in conjunction with HL760 receiver.

#### Applications

- Checking/setting elevations, concrete forms, footings, and foundations for small and medium sized jobs
- Basic slope work such as driveways and ramps
- Excavating, digging footings, and septic tanks with CR600 receiver

Part No.	Receiver	Power	Rod	Tripod	Case
LL300S	HL450	4 D Alkaline	No	No	Small Hard Case
LL300S-4	HL450	Rechargeable pack*	No	No	Small Hard Case
LL300S-5	HL450	Rechargeable pack*	69188 Cut & Fill Rod Metric	Q104025	System Case
LL300S-6	HL450	Rechargeable pack*	GR153 Metric	Q104025	System Case
LL300S-7	HL760	4 D Alkaline	No	No	Small Case
LL300S-47	HL760	Rechargeable pack*	No	No	Small Case
LL300S-57	HL760	Rechargeable pack*	69188 Cut & Fill Metric	Q104025	System Case
LL300S-67	HL760	Rechargeable pack*	GR153 Metric	Q104025	System Case

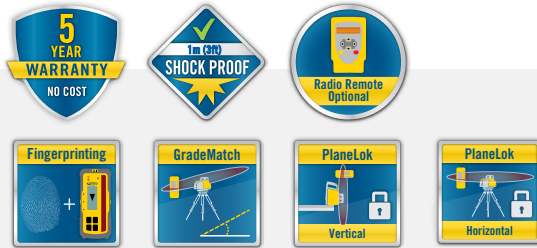
All part numbers include LL300S transmitter and case. \*Rechargeable pack comes with NiMH batteries and charger.





# LL400HV

## Longest Range, Highly Accurate Horizontal/Vertical Leveling Solution



### Key Features and Benefits

- 2,600 ft (800 m) working diameter which increases productivity by reducing need for multiple set-ups on a large job site
- Fast setup, minimal training time and automatic self-leveling minimize operating costs and boost productivity
- Highly rugged design and patented lighthouse seal protects the rotor head and glass and offers superior drop and weather protection for reduced downtime
- Single-axis slope mode provides grade matching with self-leveling cross axis for improved accuracy
- Automatic Grade Match and PlaneLok capability using the optional RC402N remote control
- Energy-efficient design offers choice of NiMH rechargeable or alkaline batteries for lower operating costs
- Temperature calibrated for high accuracy over wide temperature changes
- IP66 dust- and water-proof to withstand harsh jobsite conditions
- Flexible power options and minimal power costs due to long battery life
- Customizable with choice of HL760 or CR600 receivers. Fingerprinting function can be used when used in conjunction with HL760 receiver.

### General Construction Applications

- Checking/setting elevations, concrete forms, footings, and foundations for large commercial jobs
- Basic slope work such as driveways and ramps

### Machine Control Applications

- Excavating for forms or footers with CR600 receiver
- Sub-base leveling with skid steer loaders and CR600 receiver
- Long range machine control applications

Part No.	Receiver	Power	Rod	Tripod	Retail Package
LL400HV	HL760	4 D Alkaline	No	No	No
LL400HV-4	HL760	Rechargeable pack*	No	No	No
LL400HV-5	HL760	Rechargeable pack*	69188 Cut & Fill Metric	Q104025 in System Case	Yes
LL400HV-6	HL760	Rechargeable pack*	GR153 Metric	Q104025 in System Case	Yes
LL400HV-14	CR600	Rechargeable pack*	No	No	No

All part numbers include LL400HV transmitter and case. \*Rechargeable pack comes with NiMH batteries and charger.



## LL500

### Longest Range, Highly Accurate Leveling Solution



#### Key Features and Benefits

- 1,600 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

#### General Construction Applications

- Checking/setting elevations, concrete forms, footings, and foundations for medium to large commercial jobs

#### Machine Control Applications

- Excavating, digging footings, and septic tanks with CR600 receiver
- Sub-base leveling with skid steer loaders and CR600 receiver
- Longer range machine control applications

Part No.	Receiver	Power
LL500	HL700	4 D Alkaline
LL500-4EU	HL700	NiMH*

All part numbers include LL500 transmitter and case. \*NiMH pack comes with charger.



## HV101

### Economical Solution for Leveling, Aligning, and Plumb Applications



#### Key Features and Benefits

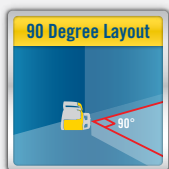
- Fully automatic self-leveling in both horizontal and vertical provides fast, accurate setup
- Robust design withstands a 3 ft (1m) drop on concrete and still remains functional, reducing costs for downtime or repair
- Multiple scanning angles and rotation speeds to match various conditions
- Complete GC packages include everything you need for both interior and exterior work in a convenient system case
- Rotor cage can be removed for exact beam spotting
- Simple controls allow operators to carry out many functions with “one-touch” commands
- Included Remote Control offers scanning, rotation speed, slope settings, and alignment control for fast one man setups
- 3 year “over-the-counter” exchange warranty program eliminates downtime

#### Applications

- Leveling of ceiling grids
- Installation of interior fittings (cabinets, lighting etc.)
- Transferring points from the floor to the ceiling
- Short range leveling for decks and patios

Part No.	Receiver	Grade Rod	Tripod	Wall Mount	Remote	Case
HV101	No	No	No	M101	RC601	Small Hard Case
HV101-4	HR150U	No	No	M101	RC601	Small Hard Case
HV101-GC-Pack	HR320	69188 Cut & Fill Metric	69191	No	RC601	System Case

All part numbers include HV101 transmitter, remote control, case and 2 D Alkaline batteries.



## HV302

### General Purpose Construction Laser for Medium-range Interior and Exterior Applications



#### Key Features and Benefits

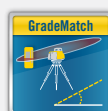
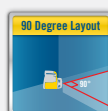
- Composite material housing is rugged, lightweight and IP66 weatherproof making it easy for contractor carry and use in demanding jobsite conditions, reducing repair downtime
- Fully automatic self-leveling in both horizontal and vertical for fast, accurate setup in horizontal and vertical applications
- Single-axis manual slope mode with 'cross-axis' self-leveling allows grade matching for basic slope work, while maintaining accuracy in the cross-axis
- Automatic Grade Match and PlaneLok using RC402N
- Highly visible 3A/3R beam and superior scanning functions making it easier for interior layout and aligning over longer range job sites (visible diameter of 330 ft (100 m))
- Long-range remote control operation allows convenient access to key functions across the job site
- Flexible power options, including rechargeable battery pack, AC power and alkaline batteries, combined with low battery warnings, reduces downtime by having multiple power options

#### Applications

- Interior and exterior, light to medium commercial, and residential construction
- Leveling and aligning of forms and footers
- Leveling and aligning of interior walls
- Installation of ceilings and raised floors
- Interior finishing work

Part No.	Receiver	Wall Mount	Ceiling Target	Remote
HV302	HL450	No	No	No
HV302-1	No	M302	Yes	RC402N
HV302-2	HR150U	M302	Yes	RC402N
HV302-GC-Pack-2EU	HR320	No	No	RC402N
HV302-7	HL760	No	No	No

All part numbers include HV302 transmitter, case and NiMH battery pack and charger.





# HV301G

## Rugged Green Beam Laser System for Interior Construction



### Key Features and Benefits

- High visibility green beam is four times more visible than standard red beam lasers allowing work at longer distances and in brighter conditions
- Automatic self-leveling in horizontal and vertical applications increases productivity with fast setups and minimal training
- 360 degree remote is standard and allows operation of key functions over the jobsite
- Scanning function positions the beam in the work area
- Includes all the features and functions of the HV301
- Durable construction can withstand tough jobsite conditions
- Temperature compensation for accurate use throughout the day
- Intuitive one-touch operator controls allow anyone to get to work quickly

### Applications

- Installation of ceilings
- Layout, leveling, and aligning of interior walls
- Interior finishing work
- 1 m (4 ft) marks
- Installation of raised access floors

Part No.	Receiver	Wall Mount	Ceiling Target	Remote
HV301G	No	M300	Yes	RC601
HV301G-2	HR150U	M300	Yes	RC601

All part numbers include HV301G laser glasses, transmitter, case and NiMH battery pack with charger.





## GL412N

### Versatile Single Grade Laser with Vertical Alignment



RC402N Remote Control



#### Key Features and Benefits

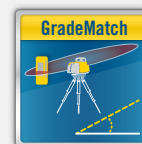
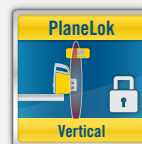
- GL412N is single grade plus horizontal and vertical. Simple, accurate dial in grade from -10% to +15%
- Up to 2,600 ft (800 m) working diameter which increases productivity by reducing need for multiple set-ups on a large job site
- Fast setup, minimal training time and automatic self-leveling minimize operating costs and boost productivity
- Highly rugged design and patented lighthouse seal protects the rotor head and glass and offers superior drop and weather protection for reduced downtime
- 2-way full function remote control allows grade changes to be made from anywhere on the jobsite
- Temperature calibrated for high accuracy over wide temperature changes
- IP66 dust and water-proof to withstand harsh jobsite conditions
- Customizable with choice of HL760 or CR600 receivers
- Mask mode eliminates interference from other crews on the jobsite
- Automatic Grade Match and PlaneLok

#### Applications

- Leveling concrete forms and footers
- General construction vertical alignment and plumb such as anchor bolt and form alignment
- "Over the top" sewer and storm drain pipe installations
- Driveways and ramps
- Grading and excavating
- Trenching

Part No.	Receiver	Clamp	Remote
GL412N	HL760	C70 Adapter for receiver	RC402N
GL412N-14	CR600	C50 Rod Clamp and C51 Magnetic Mount	RC402N

All part numbers include GL412N transmitter, case and NiMH rechargeable battery pack and charger.



# GL422N

## Versatile Dual Grade Laser with Vertical Alignment



RC402N Remote Control



### Key Features and Benefits

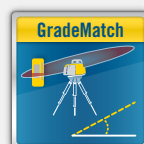
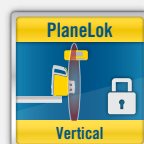
- GL422N is dual grade plus horizontal and vertical. Simple, accurate dial in grade from -10% to +15%.
- Up to 2,600 ft (800 m) working diameter which increases productivity by reducing need for multiple set-ups on a large job site
- Fully automatic self-leveling in both grade axis, horizontal, and vertical which provides fast, accurate setup in all applications
- Highly rugged design and patented lighthouse seal protects the rotor head and glass and offers superior drop and weather protection for reduced downtime
- 2-way full function remote control allows grade changes to be made from anywhere on the jobsite
- Temperature calibrated for high accuracy over wide temperature changes
- IP66 dust- and water-proof to withstand harsh jobsite conditions
- Customizable with choice of HL760 or CR600 receivers
- Mask mode eliminates interference from other crews on the jobsite
- Automatic Grade Match and PlaneLok

### Applications

- Leveling concrete forms and footers
- General construction vertical alignment and plumb such as anchor bolt and form alignment
- "Over the top" sewer and storm drain pipe installations
- Sports fields, tennis courts and driveways
- Grading and excavating
- Steep slope road embankments and ditch banks
- Ramps and drainage

Part No.	Receiver	Clamp	Remote
GL422N	HL760	C70 Adapter for receiver	RC402N
GL422N-5EU	HR320	C59 Rod Clamp	RC402N
GL422N-14	CR600	C50 Rod Clamp and C51 Magnetic Mount	RC402N

All part numbers include GL422N transmitter, case and NiMH rechargeable battery pack and charger.



## GL612

### Versatile Automatic Single Grade Laser for Level, Grade, and Vertical Alignment



RC602 Remote Control



#### Key Features and Benefits

- GL612 is a single grade laser with a compensated grade range of -25% to +25%. Vertical and horizontal setups are also compensated
- Quick setups with the 2-way radio remote control
- Electronic Leveling Vibration Filter dampens vibrations typically experienced on tall tripods, in high winds, or on high vibration jobsites
- Very rugged with low service costs; takes a 3 ft (1 m) drop on concrete
- Mask mode eliminates interference with other crews on the jobsite
- Radio communication between the laser and HL750 Laserometer allow advanced features and remote display capabilities
- Grade Match displays the existing grade over unknown ground and eliminates time consuming and error prone calculations, time spent searching for grade plans, and over excavating
- 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
- 5 Year "No Cost" Warranty

#### General Construction Applications

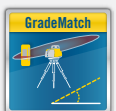
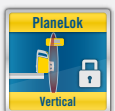
- Leveling concrete forms and footers
- General construction vertical alignment and plumb such as anchor bolt and form alignment
- "Over the top" sewer and storm drain pipe installations
- Driveways and ramps
- Grading and excavating

#### HL750 Applications

- Trenching
- Remote grade checking with cable free remote display
- Wireless monitoring of foundations and steel erections
- Risk free monitoring of tilt up wall position

Part No.	Receiver	Clamp	Remote
GL612-EU	HL750	C70 Adapter for receiver	RC602
GL612-14	CR600	C50 Adapter for receiver and C51 mag. Mount	RC602
GL612-1EU	2 x HL750	2 x C70 Adapter for receiver	RC602

All part numbers include transmitter, case and NiMH rechargeable battery pack and charger.





# GL622

## Versatile Automatic Dual Grade Laser for Level, Grade, and Vertical Alignment



RC602 Remote Control



### Key Features and Benefits

- GL622 is a dual grade laser with a compensated grade range of -25% to +25%. Vertical and horizontal setups are also compensated
- Quick setups with the 2-way radio remote control, and single and dual grade application capability
- Electronic Leveling Vibration Filter dampens vibrations typically experienced on tall tripods, in high winds, or on high vibration job sites
- Very rugged with low service costs; takes a 3 ft (1 m) drop on concrete
- Variable rotation speeds increase versatility for indoor applications.
- Automatic Axis Alignment is easy to setup for increased accuracy.
- Grade Match displays the existing grade over unknown ground and eliminates time consuming and error prone calculations, time spent searching for grade plans, and over excavating
- 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
- 5 Year "No Cost" Warranty

### General Construction Applications

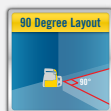
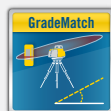
- General construction vertical alignment and plumb such as anchor bolt and form alignment
- "Over the top" sewer and storm drain pipe installations
- Sports fields, tennis courts and driveways
- Grading and excavating

### HL750 Applications

- Remote grade checking with cable free remote display
- Wireless monitoring of foundations and steel erections
- Risk free monitoring of tilt up wall position

Part No.	Receiver	Clamp	Remote
GL622-EU	HL750	C70 Adapter for receiver	RC602
GL622-14	CR600	C50 Adapter for receiver and C51 Mag. Mount	RC602
GL622-1EU	2 x HL750	2 x C70 Adapter for receiver	RC602

All part numbers include transmitter, case and NiMH rechargeable battery pack and charger.





## GL710, GL720, GL722

### Precision High Accuracy, Extra Long Range Grade Lasers



#### Key Features and Benefits

- Temperature compensation provides accurate stable results regardless of temperature changes
- Long battery life and flexible power options keep the unit working throughout the day
- Large displays make the numbers easy to read, even from a short distance
- Better than 5 arc second servo deadband accuracy for demanding high accuracy requirements

#### GL710 Single Grade Laser

- Up to a 3,000 foot (900 meter) diameter. With -0.5 to 25% grade range, the GL710 is a great choice for general construction, site preparation, trenching and pipe-laying applications

#### GL720 Dual Grade Laser

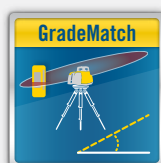
- The GL720 features +/- 10% in the X axis grade range and -0.5 to +25% Y-axis grade range with high accuracy up to 3,000 foot (900 meter) diameter. The GL720 is ideal for general construction and machine control grade applications

#### GL722 Dual Grade Laser

- 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, Grade Match and PlaneLok capability. Ideal for general construction, site preparation and road construction.

#### Applications

- General construction
- Site preparation
- Trenching
- Road construction
- Machine control



Part No.	Grade	Receiver	Clamp
CTO-GL710 available versions -NL, -FR, -IT	Single	HL700	C70 Adapter for receiver
CTO-GL720 available versions -NL, -FR, -IT, -DE, -SE, -ES	Dual	HL700	C70 Adapter for receiver
CTO-GL722 available versions -NL, -FR, -IT, -DE	Dual	CR600	C50 Adapter for receiver and C51 Mag. Mount

All part numbers include transmitter, case and NiMH rechargeable battery pack and charger.

### Accessories and Components for Rotating Lasers

#### Cases



All rotating lasers are housed in a jobsite-tough carrying case with customized pockets to hold all accessories

#### Wall Mounts



M101 wall mount for HV101



M300 wall mount for HV301/HV301G



M201 wall mount

#### Remote Control



Remote Control for HV101, HV301, HV301G, LL100, LL300, and LL400

#### Laser Glasses



Model Number: Q100206

Increases the visibility of the laser beam under bright light conditions

#### Target



Model Number: 1176-6  
Magnetic Visiline Target

- Optically enhanced, patented – increases beam visibility by 2.5 times.
- Half translucent, half reflective
- Magnetic mounting, magnet is permanently molded in for extra durability

#### Clamp



Model Number: 4852-14  
Batter Board Clamp

- Allows attachment of lasers or theodolites to batter boards for accurate vertical alignment
- 3 point contact for secure, sturdy grip
- Quick release clamp for quick instrument attachment

## Universal Laser UL633

The Most Versatile  
Construction Laser, Ever



### Key Features

#### Total Control of X/Y Axes

- Unlimited Automatic Dual Axis Features
- High Precision Axis Alignments
- Simplified Grade Match: measures and displays the existing grade over unknown ground
- Complete PlaneLok: automatically locks on the laser beam to an existing elevation
- All functions flexible from 10° to 170°
- Horizontal Angle Measurement capability

#### Total Control of Z Axis

- Automatic Detection of plumb beam
- Spot Align: aligns the plumb beam to a desired position
- Spot Match: displays the measured Z-axis grade value
- SpotLok: locks automatically the plumb beam to the SF601 center point

- Manual Detection of plumb beam - Spot Search
- Complete Cross Axis Compensation

#### Versatile Communication Links

- Radio (2 radio channels)
- IR

#### Built for Today's Jobs

- Fully automatic up to +/-25% grade on X/Y/Z axes
- Withstands a 3 ft (1 m) drop onto concrete
- Long operating range - 2,600 ft (800 m) diameter
- Intuitive keypad
- Mask mode
- Various power options
- Automatic temperature compensation
- Electronic leveling vibration filter

### User Benefits

- Versatility to fit any construction application
- Quickly adapts to site requirements
- Simplifies 90° layout applications
- Reduces time to do slope work and pipe installation

### Applications

#### General Construction

- Leveling concrete forms and footers
- Vertical alignment such as anchor bolts and form alignment

#### Machine Guidance Compatible

- Dual slope grading and steep slope excavating
- Slope work for sports fields, tennis courts, driveways, parking garages, ramps

#### Pipe and Drainage Installations

- Automatic Alignment for pipe laying
- Measuring unknown slopes in existing pipes

#### Interior

- Layout of walls
- Installation of drop ceilings



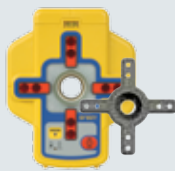
Part No.	Receiver	Spot Finder SF601	Clamp	Remote
UL633-EU	HL750	No	Rod Clamp with Bubble Vial	RC603
UL633-1EU	2 x HL750	No	Rod Clamps with Bubble Vial	RC603
UL633-14EU	HL750	Yes	Rod Clamp with Bubble Vial	RC603
UL633-24EU	2x HL750	Yes	Rod Clamps with Bubble Vial	RC603

All part numbers include transmitter, case and NiMH rechargeable battery pack and charger.

#### Accessories and Components for Universal Laser



RC603 Combined Radio/IR Remote Control for all applications including pipe laying



SF601 Spot Finder for manual and automatic detection of the plumb beam



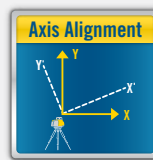
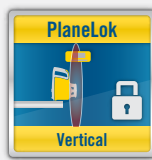
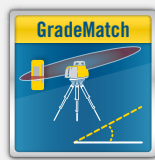
Q104865 Adapter for SF601 allows various setups



HL750 Laserometer to measure and display beam location



1243-0101 Sighting Scope



# DIGIROD - THE ROD-LESS GRADE CHECKER

## DR400

### The Rod-Less Grade Checker



DR400 in Laserometer Mode with traditional rod clamp

#### Key Features

##### DigiRod

- Check heights without grade rods
- Tilt compensation ensures accurate readings
- Large, easy to read, graphical display
- Multiple units of measure - m / ft / in
- Non-contact elevation measurement
- Anti-strobe sensor
- Extremely durable and portable
- 5 Year warranty

##### Stand Alone Handheld Distance Meter

- Range up to 160 ft (50 m)
- Accuracy of  $\pm 1/16$  in (2.0 mm)
- Multiple units of measure

##### Stand Alone Laserometer

- Digital readout of elevations
- 5 On-Grade Accuracies
- Large 5 inch (12.7 cm) reception height

#### User Benefits

- Check elevations quickly without conventional grade rods
- Increase worker safety by reducing the need to enter trenches
- Eliminate calculation errors and out of plumb errors
- Eliminate tool marks on screeded concrete
- Increase productivity with quicker elevation checks

#### Applications

- Excavations
- Foundations, concrete forms and footings
- General grading
- Utilities installation
- Surveying
- Cut / Fill, Direct and Indirect measurements
- Laser Distance Meter
- Distance measuring by one person to 160 ft (50 m)
- Estimating
- As-built Verification

#### Accessories and Components for DigiRod



Model Number: 0400-1930  
Clip on pouch for DR400



Model Number: Q100206  
Laser Glasses

Increases the visibility of the laser beam under bright light conditions



Model Number: C70  
Clamp with Bubble Vial



Model Number: 0400-1900  
Handle for DR400

## DG711, DG511

Toughest Lasers You Will Find In a Pipe



### Key Features and Benefits

- Rugged design is built for long lasting performance and reliability in the destructive underground environment
- DialGrades feature the largest automatic self-leveling range in the industry providing quick, easy setups
- The DG711 features Line Alert where the beam flashes to notify you that the setup line has been disturbed, eliminating the necessity of rework
- Maximum legal strength red laser beam and pipe targets with optical elements to enhance beam brightness make the beam easily visible in a variety of conditions
- Remote Controls for line and power included, DG711 remote control is full function with grade control and Line Set/Check function
- A full range of setup accessories and power options are available and are easy and straightforward to use

### Applications

- Installation of gravity flow sanitary pipelines
- Storm sewer pipelines
- Pipe jacking
- Tunnel boring

Part No.	Accessory	Power
DG511	Standard Package	NiMH Recharge
	available versions -NL, -DE, -ES, -FR, -IT, -SE	
DG711	Standard Package	NiMH Recharge
	available versions -NL, -DE, -ES, -FR, -IT, -SE	



1230/1237 Metal Invert Plate



P21 Power Cable



1239 Extended Height Vertical Pole

### Pipe Laser Accessories



929 Blower



1017 Manhole Mount



936 Adjustable Large Pipe Target



P20/P20B Alkaline Battery Pack



956 Optically Enhanced Target



1161 Heavy-Duty Wood Tripod



1233 Sighting Scope



1244 T-Bar



## HR150U Receiver

Interior Receiver with Highly Visible LEDs and Built-in Magnetic Mount



### Applications

- Interior and exterior leveling and aligning
- Soffit, curtain wall or glazing applications
- Ceiling grid and raised floor installations

### Key Features and Benefits

- Features a 3-channel dual-sided LED with a green on-grade display that can be easily seen indoors or outdoors over long distances
- Built-in magnet and level bubble allows the receiver to mount to ceiling grid or drywall track without the need for additional accessories
- Marking notches on both sides to easily mark alignments and elevations
- Can be used with any brand rotating red, green or IR laser
- Strong composite housing and optional lanyard offers protection against damage due to dropping
- For interior or exterior short-range general construction applications, with a general purpose rod clamp standard
- The perfect entry level receiver for smaller job sites
- Includes C61 rod clamp



## HR220 Line Generator Receiver

Special Line Generator Receiver for use with Crossline Lasers



### Applications

- Extends versatility of laser line generators
- Longer distance interior layout and exterior leveling
- Ceiling grid and raised access floor installations

### Key Features and Benefits

- Five channel LCD on the front for general exterior leveling
- Simultaneous LED display shows green on grade, red too high and blue too low
- Built in magnet allows the receiver to be easily mounted to ceiling grid or drywall track without the need for additional accessories
- Works with 5.2XL, 1.3XL, 1.5PL line generating lasers
- Snap in rod clamp allows for quick switching from rod mounted to handheld
- Integrated level bubbles for adjusting the receiver into a plumbed position
- Durable in wet and dusty conditions; the housing and battery compartment are waterproof and dust-proof to IP67



## HR320 Receiver

Tough Receiver for Exterior Leveling and Alignment Applications



### Applications

- Measuring cut and fill for small site preparation
- Exterior leveling, aligning and marking
- Checking elevations

### Key Features and Benefits

- Dual LCD's on front and rear are ideal for general exterior applications
- Two on-grade sensitivities (fine and coarse) allow getting to grade fast
- Snap-on rod clamp (included) allows quick switching from rod-mounted to handheld applications
- Strong, IP67 waterproof housing protects the unit from dust, moisture, and accidental drops
- Loud 100 db loud speaker can easily be heard on the noisiest job sites. 3 adjustable speaker levels (loud, low, and off)
- Includes C59 rod clamp



## HL450 Digital Readout Receiver

Ideal for use with any Rotating Transmitter



### Applications

- Checking elevations
- Basement excavation
- Digging septic tanks
- Checking foundations
- Digging footings
- Setting forms
- Checking sub-base materials
- Screeding concrete

### Key Features and Benefits

- Digital readout of elevation allows faster readings by displaying the exact numerical distance from grade, eliminating the need to move the receiver to get to "on-grade"
- Anti-Strobe Sensor stops construction strobe lights from setting off the receiver, and eliminates phantom strikes for easier identification of true laser beam signals
- Large 4-inch (10.2-cm) reception height allows faster readings by acquiring the beam quickly, and makes it easier to stay in the beam
- Withstands direct drops up to 5 feet (1.5 meters) on to concrete providing less downtime due to damage and service requirements
- Full weather and dust proof design, including the battery compartment assures a longer product life and/or repair costs
- Approximately 60-hour battery life with 2 x AA batteries keeps work going on the jobsite
- Automatic power shutoff (after 30 minutes) reduces annual battery cost
- Rod clamp included



## HL700 Digital Readout Receiver

Highly Versatile Receiver for Basic and Advanced Leveling and Aligning



### Applications

- Checking elevations
- Basement excavation
- Digging septic tanks
- Checking foundations
- Digging footings
- Setting forms
- Checking sub-base materials
- Screeding concrete

### Key Features and Benefits

- Digital Readout of Elevation provides a numeric display of  $\pm 2$  inches ( $\pm 5$  cm) and shows exactly how far the elevation is from on-grade
- A large 5 inch (12.7 cm) reception height, more than double the industry standard, allows quick acquisition of the laser beam
- Unique anti-strobe sensor stops construction strobe lights from setting off the receiver, and eliminates phantom strikes for easier identification of true laser beam signals
- Multiple on-grade sensitivities to customize accuracy needs to application
- Designed to survive the tough construction site conditions; it is totally waterproof and can withstand a drop of 10 feet (3 meters) onto concrete
- Simultaneous elevation LEDs signal in low light levels and over a longer range provide easier reading in poor light
- Two clamp positions for cut/fill or excavation. Excavation mode puts more reception height and elevation information above grade for higher utilization in digging and staking applications
- Three-year "No Excuses" warranty
- C70 Adapter with Bubble Vial included



## HL760 Radio Digital Readout Receiver

Highly Versatile Receiver for Basic and Advanced Leveling and Aligning



### Applications

- Remote grade checking with cable free Remote Display
- Wireless monitoring of foundations and steel erections
- Risk free monitoring of tilt up wall position
- Setting and checking jobsite elevation and depth for:
  - Cut and fills and grading
  - Foundations, forms, and footings
  - Excavations

### Key Features and Benefits

- Digital readout of elevation – not only will high or low arrows be displayed, but the exact distance from grade will be displayed, which eliminates the need to get "on-grade" to make measurements
- Large 5 inch (12.7 cm) reception height acquires the beam quickly and makes it easy to stay in the beam
- The HL760 has an internal, long range (80 m / 260 ft radius), high speed digital radio built inside that allows the receiver to communicate with any other HL750, HL760, LL300S, HL750U, or the HL750:GL5X2, GL6X2, UL633; HL760:LL400HV, HV302, GL4X2N laser transmitters
- Machine operators can monitor elevation shots taken by another person or foremen can monitor elevations and cut/fill readings from anywhere on the jobsite
- Anti-strobe sensor stops construction strobe lights from setting off the receiver, and makes it easier to identify true laser beam signals
- Multiple deadband setting allows adaptation to meet all your jobsite requirements
- Dust and weatherproof housing withstands a drop of up to 10 ft (3 m) onto concrete for reduced downtime
- Two clamp positions for cut/fill or excavation
- Three-year "No Excuses" warranty
- C70 Adapter with Bubble Vial included





# HL750U Universal Radio Digital Readout Receiver

Universal Receiver for Red and Green Laser Applications



## Applications

- Checking elevations
- Basement excavation
- Digging septic tanks
- Checking foundations
- Digging footings
- Setting forms
- Checking sub-base materials
- Screeding concrete

## Key Features and Benefits

- The HL750U with Radio Communication is a stand-alone receiver that works with ANY general construction, site work, agriculture, machine control or highway and heavy rotating laser transmitter, including Green Beam lasers
- The HL750U has an internal, long range (260 ft / 80 m radius), high speed digital radio built inside that allows the receiver to communicate with any other HL750, HL750U, or the GL512 and GL522 laser transmitters. Two HL750U's can be used together for long range wireless remote display and monitoring - even when the 2nd receiver is out of sight
- C70 Adapter with Bubble Vial included



## CR600 Combination Receiver

### Machine or Rod Mounted Combination Receiver



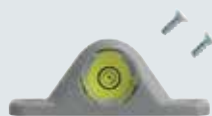
#### Key Features and Benefits

- Provides high, low, or on-grade information for all your grading and excavation applications up to 1,500 ft (460 m) radius
- In addition to handheld and rod-mounted capabilities, the CR600 system includes a C51 machine magnetic mount so it can be used as a machine-control mounted receiver in a wide range of jobsite applications
- Magnesium housing is rugged but lightweight
- Super-bright LED display can be easily seen by a machine operator in brightly lit conditions
- 270° reception for easy visibility of on-grade beam
- Five on-grade sensitivities to customize need to application
- Two-year warranty
- Can be used with any brand rotating red laser

#### Applications

- Digging footings
- Basement excavation
- Checking sub-base materials
- Setting and checking elevations
- Leveling and aligning forms
- Screeding concrete

**Accessories and Components: All receivers include tod clamps (CR600 includes rod clamp and magnetic mount)**



Optional Bubble Vial Kit for HR150U, HR220, HR320 and HL450 receivers adapters  
PN 1277-6251S



HL700, HL750/U and HL760/U includes C70 Adapter for receiver with Bubble Vial  
PN C70



C51 Magnetic Mount included with CR600 receiver



C50 Adapter included with CR600 receiver

## Automatic Level

### Easy-to-use Optical Auto-levels



Air dampened model shown

#### Key Features and Benefits

- Choice of magnetic or air dampened automatic compensators
- Double-sided, continuous horizontal tangent drives
- Stadia lines for simple distance measurement
- Convenient horizontal angle measurement
- Built in bubble mirror and sighting guide
- Metal housing for increased durability
- Water resistant construction
- Includes hardshell case
- Two-person leveling across the job site
- Leveling forms and footers
- Checking elevation
- Measuring cut and fill



#### AL20M

Part No.	Power/Damp	Tripod	Rod
AL20M	20X / Magnetic Damped	No	No

#### AL28M

Part No.	Power/Damp	Tripod	Rod
AL28M	20X / Magnetic Damped	No	No
AL28M-G	28X / Magnetic Damped	No	No

#### AL24A, AL24M

Part No.	Power/Damp	Tripod	Rod
AL24A	24X / Air Damped	No	No
AL24M	24X / Magnetic Damped	No	No
AL24M-3EU	24X / Magnetic Damped	Yes	5 m, metric

#### AL32A

Part No.	Power/Damp	Tripod	Rod
AL32A	20X / Magnetic Damped	No	No

#### Automatic Level Specifications

	AL20M	AL24A	AL24M	AL28M	AL32A
Magnification	20x	24x	24x	28x	32x
Accuracy	±2.5 mm*	±2.0 mm*	±2.0 mm*	±1.5 mm*	±1.0 mm*
Aperture	30 mm	30 mm	30 mm	30 mm	36 mm
Shortest Focus	0.6 m	0.6 m	0.6 m	0.6 m	0.6 m
Compensator Dampening	Magnetic	Air	Magnetic	Magnetic	Air
Warranty	3 Year, with instant exchange	3 Year, with instant exchange	3 Year, with instant exchange	3 Year, with instant exchange	3 Year, with instant exchange



## DET-2 Construction Theodolite

### Full Featured Digital Theodolite for Construction



#### Key Features and Benefits

- 2-inch angular accuracy - accurate enough for any construction job, yet the display resolution can be tailored to any operator's preferences for fast readings
- Vertical axis compensation - tilt sensor provides the highest level of accuracy and can be turned on or off depending on job requirements
- Dual LCD with large characters - easy to see angle readings eliminate errors and reduces eye fatigue
- Simple six button keypad - quick setups and simple operation with low operator learning curve
- Large suite of programmable settings - provide multiple options for various users and job requirements including zero position of vertical angle
- Measurement units in degrees, gon, or mils
- 90 Degree angle audible notification - for quick turning and set out of right angles
- Instant conversion of vertical angles to percent of grade - convenient for slope work and when used in conjunction with Dialgrade® pipe work
- NiMH rechargeable battery pack and charger - lower operating cost with reusable batteries
- Alkaline battery pack standard - provides backup and eliminates downtime if the charge is lost in the middle of a job
- Each DET-2 comes equipped with a plumb bob, NiMH rechargeable battery pack and charger, alkaline battery pack, adjustment tools, rain hood, multi-language user guide, and hardshell, compact, o-ring sealed, carrying case

#### Applications

- Establishing 90 degree reference lines
- Checking angles, alignment, and plumb
- Anchor bolt alignment
- Gravity flow pipe laser setup
- Steel column placement
- Alignment of forms, tilt-up walls, and curtain walls
- Basic grade work
- Short range leveling



## DET-2 Specifications

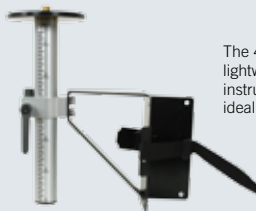
Telescope		Optical Plummet		Angle Measuring System		Vials		Button Functions		Other Specs	
Image	Erect	Image	Erect	Minimum Reading	1" or 5"	Tubular	30"/2 mm	ON / OFF	Power	Dust/Water	IP-54
Mag.	30X	Mag.	3X	Precision	2"	Circular	8/2 mm	R	Backlight / Illumination On / Off	Operating Temperature	-20°C to +50°C
Aperture	45 mm	Angle of View	5°	Units	Deg / mil / gon / V%			HOLD	Angle Hold	Size - Instrument	164 x 154 x 340 mm
Focus Distance	1.45 m to ∞	Focusing range	0.5 m ~ ∞	Display	Dual, Large Character LCD Tilt Sensor			R/L	Clockwise / Counterclockwise Measurement	Weight - Instrument	4.5 kg
Field of View	1° 30'	Reticle type	Crosshair	Auto Compensation	User Set On / Off ±3' Range			OSET	Zero Reset of Horizontal Angle	Warranty	1 Year
Stadia Ratio / Constant	100 / 0							V%	Convert Vertical Degrees to %		

### Additional Accessories: Use with line and point lasers, rotating lasers and theodolites for simple and accurate interior leveling

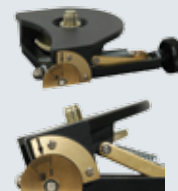


Model Number: 4852-14  
Batter Board Clamp

- Allows attachment of lasers or theodolites to batter boards for accurate vertical alignment
- 3 point contact for secure, sturdy grip
- Quick release clamp for quick instrument attachment



The 4852-15 Column Clamp is lightweight but stable. works with all instruments with a 5/8 x 11 base, ideal for lasers and theodolites.



4852-11  
Tilting Base, Laser

## LP30, LP50 Laser Pointers

### 3-Beam and 5-Beam Self-leveling Pocket Lasers



#### Key Features and Benefits

- The LP30 projects 3 beams - one beam up, one down and one horizontal beam
- The LP50 projects 5 beams - one beam up, one down and three beams at 90 degrees to each other
- Self-leveling, and universal accessories allow for setup in multiple applications
- Patented technology... highly visual in all conditions for better productivity
- Beam flashes if it becomes out of level for any reason
- Easily fits in your tool belt so it's always at hand
- 3 year instant exchange warranty minimizes downtime
- Able to withstand a 3-foot (1 meter) drop... IP54 rated
- LP30 ships in retail box with soft pouch, target and mounting accessory
- LP50 ships in retail carton with hard case, target, ceiling plate and mounting accessory

#### Applications

- Level, horizontal and vertical layout, checking plumb
- Point transfer
- Checking square with LP50
- Layout of interior walls, drywall track installation
- Acoustical ceiling installation
- Drywall track installation
- Cabinet & trim installation, finish carpentry
- Short range leveling
- Reference points for sprinkler systems, HVAC, lighting



# LT20 2 Plane Crossline Laser

Simple to Use — Perfect for Interior Construction



## Key Features and Benefits

- Capable of handling interior horizontal, vertical or plumb positioning application
- Horizontal plane and 2 vertical planes (LT56) provide a precise 90 degree layout grid with four cross line intersections
- Automatic self-leveling assures accuracy and fast setup
- One tool to use on every job every day. HR220 receiver can be added for exterior applications for maximum jobsite versatility (LT56)
- 3 year instant exchange warranty minimizes downtime
- Water, mud, and shock resistant, able to withstand a 3-foot (1 meter) drop onto concrete... IP54 rated

## Applications

- Level, horizontal & vertical layout, square, & plumb
- Building, layout, & squaring of interior walls
- Acoustical ceiling installation
- Drywall track installation
- Cabinet & trim installation, finish carpentry
- General construction elevation control with HR220 receiver
- Reference points for sprinkler systems, HVAC, lighting
- Exterior building deck footings, patios, columns, & posts

Part No.	Receiver	Case
LT20	No	Soft Pouch



# 5.2XL Point and Crossline Laser

## Two Tools in One



### Key Features and Benefits

- Eliminates the need for a contractor to purchase two tools - a 5-beam pointer and a crossline laser - by combining both into one simple small product
- Automatic self-leveling assures accuracy and fast setup
- The industry's brightest crossline laser for easy viewing in all conditions
- Easy-to-see lines with a biased upwards beam that intersects the plumb up point
- Soft pouch includes bely loop so it's always at hand
- Set it up once and work plumb, level and square in the whole area
- 3 year instant exchange warranty minimizes downtime
- Water, mud, and shock resistant, able to withstand a 3-foot (1-meter) drop onto concrete... IP54 rated
- HR220 receiver can be added for exterior applications for maximum jobsite versatility

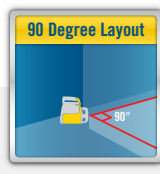
### Applications

- Level, horizontal and vertical layout, square, and plumb
- Building, layout, and squaring of interior walls
- Point transfer
- Acoustical ceiling installation
- Drywall track installation
- Cabinet and trim installation, finish carpentry
- General construction elevation control with HR220 receiver
- Exterior building decks, patios, columns, and posts

Part No.	Receiver	Case
5.2XL	No	Soft Pouch
5.2XL-2	HR220	Hard Case

# LT56 3 Plane Crossline Laser

Simple to use — Perfect for Interior Construction



## Key Features and Benefits

- Capable of handling interior horizontal, vertical or plumb positioning application
- Horizontal plane and 2 vertical planes (LT56) provide a precise 90 degree layout grid with four cross line intersections
- Automatic self-leveling assures accuracy and fast setup
- One tool to use on every job every day. HR220 receiver can be added for exterior applications for maximum jobsite versatility (LT56)
- 3 year instant exchange warranty minimizes downtime
- Water, mud, and shock resistant, able to withstand a 3-foot (1 meter) drop onto concrete... IP54 rated

## Applications

- Level, horizontal & vertical layout, square, & plumb
- Building, layout, & squaring of interior walls
- Acoustical ceiling installation
- Drywall track installation
- Cabinet & trim installation, finish carpentry
- General construction elevation control with HR220 receiver
- Reference points for sprinkler systems, HVAC, lighting
- Exterior building deck footings, patios, columns, & posts

Part No.	Receiver	Case
LT56	No	Hard Case
LT56-2	HR220	Hard Case





## QM55 Quick Measure Laser

Digital Distance Measuring



### Applications

- Measuring distance
- Measuring for material estimation
- Safely measurement on places, where hard to reach

### Key Features and Benefits

- One-person operation allows safe measuring to difficult-to-reach or hazardous locations
- Tough and rugged, designed for construction - Drop spec of 5 feet (1.5 m)
- Sealed against dust and water - simply wash it off if it gets dirty
- More accurate than traditional measuring tapes
- Small, compact - fits in your pocket or toolbelt
- Illuminated display - easy to read in low light conditions
- Long battery life - up to 8000 measurements
- Range - 165 ft (50 m)



## QM75 Quick Measure Laser

Digital Distance Measuring



### Applications

- Measuring distance
- Measuring for material estimation
- Safely measurement on places, where hard to reach

### Key Features and Benefits

- One-person operation allows safe measuring to difficult-to-reach or hazardous locations
- Tough and rugged, designed for construction - Drop spec of 5 feet (1.5 m)
- Sealed against dust and water - simply wash it off if it gets dirty
- More accurate than traditional measuring tapes
- Small, compact - fits in your pocket or toolbelt
- Illuminated display - easy to read in low light conditions
- Long battery life - up to 8000 measurements
- Range - 230 ft (70 m)



# QM95 Quick Measure Laser

## Digital Distance Measuring



### Applications

- Measuring distance
- Measuring for material estimation
- Safely measurement on places, where hard to reach

### Key Features and Benefits

- One-person operation allows safe measuring to difficult-to-reach or hazardous locations
- Tough and rugged, designed for construction - Drop spec of 5 feet (1.5 m)
- Sealed against dust and water - simply wash it off if it gets dirty
- More accurate than traditional measuring tapes
- Small, compact - fits in your pocket or toolbelt
- Illuminated display - easy to read in low light conditions
- Long battery life - up to 8000 measurements
- Range - 650 ft (200 m)



## All Quick Measure Models Feature:

### Tough and rugged

- Stands up to tough jobsite conditions

### Designed for construction

- Drop specification of 1.5 meter (5 feet)

### Quick

- Fast measure response time

### Accurate

- Accuracy is maintained over the entire measure distance

### Sealed against dust and water

- If it gets dirty, simply wash off

### Illuminated display

- Easy reading in low light conditions

### Long battery life

- Standard alkaline batteries provide thousands of shots

### Selectable units of measure

- Quickly select the units required

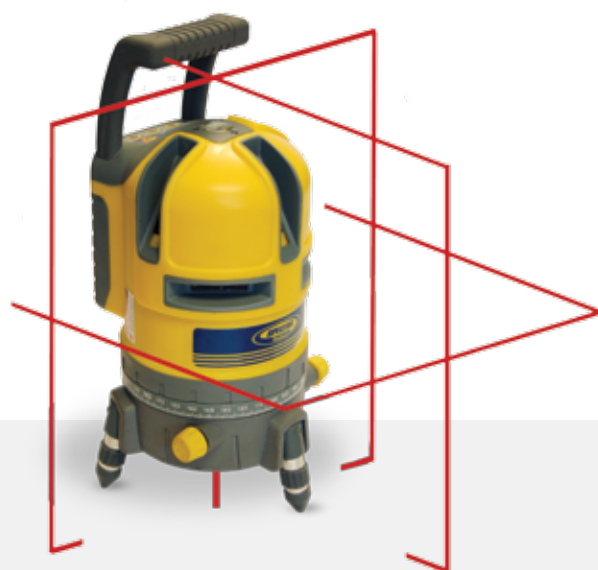
### 3 Year Warranty

- With the first 2 years at no cost

Specification	QM55	QM75	QM95
Range	50 m (165 ft)	70 m (230 feet)	200 m (650 feet)
Accuracy	± 1.5 mm (± 1/16 in)	± 1.5 mm (± 1/16 in)	± 1.0 mm (± 1/24 in)
Units of Measure	m, ft, in, ft-in	m, mm, ft, in, yds	m, mm, ft, in, yds
Automatic Shut Off	3 minutes	10 minutes	10 minutes
Battery Life	5000+ measures	8000 measures	8000 measures
Power Supply	2 x AAA 1.5V	2 x AAA 1.5V	2 x AA 1.5V
Power Indication	LCD 3 segments	LCD 4 segments	LCD 4 segments
Drop Performance	1.5 m (5 ft)	1.5 m (5 ft)	1.5 m (5 ft)
Dust & Water Resistance	IP54	IP55	IP54
Laser Type / Power	635nm visible red / < 1 mW	635nm visible red / < 1 mW	635nm visible red / < 1 mW
Dimensions	52 x 28 x 125 mm (2.0 x 1.1 x 4.9 in)	34 x 42 x 125 mm (1.3 x 1.6 x 4.9 in)	62 x 28 x 120 mm (2.4 x 1.2 x 4.7 in)
Weight with Batteries	187 g (6.6 oz)	144 g (5.1 oz)	217 g (7.7 oz)
Warranty	3 Years	3 Years	3 Years
Functions	QM55	QM75	QM95
Usage	Indoor	Indoor / Outdoor	Indoor / Outdoor
Single Measure	✓	✓	✓
Continuous Measure	✓	✓	✓
Add / Subtract	✓		✓
Side Measure Button			✓
Extension Tab Auto Detected			✓

## 1.5PL Precision Line Laser

Perfect for High Accuracy  
Interior Construction Use



### Key Features and Benefits

- Automatic self-leveling and plumb assures accuracy and fast setup
- One person installation of walls, doors, ceiling track and other overhead fixtures without the need for a plumb-bob, squares or tapes
- Fast, one person 90° layout of rooms, walls, tile, carpet squares and fixtures
- Includes both cost-saving rechargeable battery pack and back-up alkaline battery pack
- Rotational base with fine adjust knobs make position adjustment fast, easy and accurate
- Built in collapsible tripod legs allow clearance of floor track and plummet
- 1.5PL system includes a hard case with protective foam, 2 battery packs, charger, laser glasses and laser target
- 1.5PL-2 includes HR220 and clamp

### Applications

- Interior plumb, level, layout and square
- Drywall track and walls installation
- Cabinet and trim installation, finish carpentry
- Ceiling and door installation
- Institution utility layout and installation
- Exterior level, layout and square applications with the HR220 receiver
- Decks, patios, septic system and swimming pool installation

### Accessories for Line and Point Lasers: Use with line and point lasers for simple and accurate interior leveling



Ceiling Pole 7220-01  
Adjusts 81 - 320 cm

The laser platform adjusts vertically and locks tight at any location - perfect for interior construction applications.



Lightweight aluminum tripods are portable, easy to set up and use.

7210-02 — Adjusts from 64 to 168 cm and includes built-in circular vial



Rotating Adapter 7230-02 allows instruments that have a 1/4 x 20 female thread pattern to attach to accessories (tripods) that have 5/8 x 11 studs.





## LR20 Receiver

Compact Laser Receiver Used on Mini-Excavators and Compact Machines



### Key Features and Benefits

- 8-inch (203 mm), 360-degree laser reception provides large working area and range
- Polycarbonate housing and elastomer over molding provides rugged durability for years of reliable use
- Super bright grade display with Green on-grade LEDs provides superior depth/elevation indication
- Push button setup for ease of use and application flexibility
- Powered by NiMH batteries; optional machine power cord available
- Center and offset on-grades are ideal for both grading and excavating applications
- Built-in plumb indicator for fast, accurate grade checking in excavation applications
- LR20-1 kit includes adjustable magnetic mount that fits in case with receiver for easy transport

### Applications

- Landscaping, building pads, sports fields, concrete flatwork, tennis courts
- Footers, storm drains, utility, sewage
- General construction grade and depth control

Part No.	Batteries	Magnetic Mount
LR20	NiMH	No
LR20-1	NiMH	MMM

### Display Receiver Accessories: Magnetic Mount and Remote Display for increased productivity

#### RD20 Wireless Remote Display



- Wireless remote mounts in the cab and displays grade information to the operator. Helps keep focus on the work and not on the receiver for higher productivity. Works with LR30W, LR50W & LR60W

#### MM-1 Magnetic Mount



- Works with all LR receivers and quickly attaches to the dipper arms of excavators or backhoes
- Strong dual magnet packs will not slip on the machine
- Magnets are adjustable, can be positioned around hoses or piping, for quick installation and set-up
- Release lever aids in detaching from machine

#### DM-20 Bulldozer Bolt-On Mast



- Trimble Ready™ adjustable mount installs with no welding. The mast mount bolts instantly to machines that come from the factory Trimble Ready.

Part No.	Description
RD20	RD20 Remote Display
RDM-1	Mount, RD10 Swivel
O10983	Cable, RD10 + RD20 Power, Lighter/power adapter
MM-1	Magnetic Mount for LR Receivers
DM-20	Bulldozer Bolt-On Mount

### Applications

- Remote Display is used when the receiver is behind the operator or is otherwise difficult to see, i.e. pulled drag boxes, scrapers, or trenchers
- Magnetic Mount is used to quickly attach receivers to backhoes and excavators

## LR30 and LR30W Receiver

### Used on Dozers, Box Blades, Levelers



#### Key Features and Benefits

- Use on grading and excavating equipment including: dozers, graders, scrapers, skid steers and levelers
- Five channels of grade information plus directional out-of-beam indicators
- Three selectable accuracies meet job tolerances from rough grading to final finishing
- Full 360-degree reception picks up the laser from all directions
- LR30W links wirelessly to the RD20 in-cab display
- Ultra-bright LED's with Green on-grade provides easy-to-see display to match ambient lighting conditions

#### Applications

- Machine mounted grade checking
- Grading and leveling

Part No.	Batteries	Magnetic Mount
LR30	NiMH	No
LR30-MM	NiMH	MM-1
LR30-DM	NiMH	DM-20

Part No.	Batteries	Magnetic Mount	Remote Display
LR30W	NiMH	No	RD20
LR30W-MM	NiMH	MM-1	RD20
LR30W-DM	NiMH	DM-20	RD20





# LR50 and LR50W Receiver

## Features Built-in Blade Tilt and Excavation Plumb Indicator



### Key Features and Benefits

- Built-in blade tilt indicator helps the operator keep the blade level for increased accuracy and productivity
- Center on-grade provides an equal amount of grade information above and below on-grade. Use on dozers, graders, scrapers and box blades
- Built-in plumb indicator for fast, accurate grade checking in excavation applications
- Offset on-grade gives you more range above grade using the entire receiver for more productive excavation
- Up to six channels of grade information plus directional out-of-beam indicators
- LR50W links wirelessly to the RD20 in-cab display
- Two-Year Warranty - Reliability you can count on

### Applications

- Machine mounted grade checking
- Grading and leveling
- Excavation and trenching

Part No.	Batteries	Magnetic Mount
LR50	NiMH	No
LR50-MM	NiMH	MM-1
LR50-DM	NiMH	DM-20

Part No.	Batteries	Magnetic Mount	Remote Display
LR50W	NiMH	No	RD20
LR50W-MM	NiMH	MM-1	RD20
LR50W-DM	NiMH	DM-20	RD20





## LR60 and LR60W Receiver

### Features Excavation Plumb Indicator and Angle Compensation Indication



#### Key Features and Benefits

- Patented Angle Compensation Indication automatically calculates and corrects the grade display for the angle of the dipper arm
- Check grade with the dipper arm extended or retracted up to 30 degrees
- Built-in plumb indicator for fast, accurate grade checking
- Center on-grade provides an equal amount of grade information above and below on-grade. Use on dozers, graders, scrapers and box blades
- Extended reception height stays in the beam longer providing addition grade information
- Offset on-grade for productive excavation
- Up to eight channels of grade information plus directional out-of-beam indicators
- LR60W links wirelessly to the RD20 in-cab display
- Four selectable accuracies for each on-grade location

#### Applications



- Machine mounted grade checking
- Grading and leveling
- Excavation and trenching

Part No.	Batteries	Magnetic Mount
LR60	NiMH	No
LR60-MM	NiMH	MM-1

Part No.	Batteries	Magnetic Mount	Remote Display
LR60W	NiMH	No	RD20
LR60W-MM	NiMH	MM-1	RD20



## Product Application

Machine Type			
Backhoes		Use <b>CR600</b> or <b>LR20</b> or <b>LR50</b>	Grading
Skid-steer Loader		Use <b>CR600</b> or <b>LR20</b> or <b>LR30</b> or <b>LR30W (w/remote display)</b>	Elevation Display
Mini Excavator		Use <b>CR600</b> or <b>LR20</b> or <b>LR50</b> or <b>LR50W (w/remote display)</b>	Elevation Display
Skid-steer w/blade		Use <b>LR30</b> or <b>LR50</b> or <b>LR30W/LR50W (w/remote display)</b>	Elevation Display/Lift Control
Smaller Dozer		Use <b>LR30</b> or <b>LR30W (w/remote display)</b>	Elevation Display/Lift Control
Larger Excavator		Use <b>LR60</b> or <b>LR60W (w/remote display)</b>	Elevation Display
Larger Dozer		Use <b>LR50</b> or <b>LR50W (w/remote display)</b>	Elevation Display/Lift Control

# SPECIFICATIONS

Laser Levels						Horizontal and Vertical Lasers		
	LL100N	LL300N	LL300S	LL400HV	LL500	HV101	HV302	HV301G
Accuracy	1/8 in @ 100 ft 3 mm @ 30 m (20 arc seconds)	3/32 in @ 100 ft 2.2 mm @ 30 m (15 arc seconds)	1/16 in at 100 ft 1.5 mm at 30 m (10 arc seconds)	1/16 in at 100 ft 1.5 mm at 30 m (10 arc seconds)	1/16 in at 100 ft 1.5 mm at 30 m (10 arc seconds)	1/8 in @ 100 ft 3 mm @ 30 m (20 arc seconds)	1/16 in at 100 ft 1.5 mm at 30 m (10 arc seconds)	3/32 in @ 100 ft 2.2 mm @ 30 m (15 arc seconds)
Operating diameter	1,150 ft (350 m)	1,650 ft (500 m)	2,600 ft (800 m)	2,600 ft (800 m)	1,600 ft (500 m)	Receiver: 1150 ft (350 m) Visible: 200 ft (60 m)	Receiver: 2600 ft (800 m) Visible: 330 ft (100 m)	Receiver: 1,600 ft (500 m) Visible: 500 ft (150 m)
Self-leveling range	±5 degrees electronic servo self-leveling	±5 degrees electronic servo self-leveling		±5 degrees electronic servo self-leveling	±11 minutes	±5 degrees electronic servo self-leveling	±5 degrees electronic servo self-leveling	±5 degrees electronic servo self-leveling
Power source	2 × D-cell Alkaline batteries	4 × D-cell Alkaline/recharge optional		4 D-cell Alkaline Standard, NiMH Optional	4 D-cell Alkaline Standard, recharge optional	2 × D-cell Alkaline batteries	4 D-cell rechargeable batteries, Alkaline backup	4 × D-cell NiMH standard, Alkaline backup
Battery life	80 hr Alkaline	90 hr Alkaline, 45 hr NiMH	60 hr Alkaline, 47 hr NiMH	60 hr Alkaline, 47 hr NiMH	175 hr Alkaline, 100 hr NiMH	50 hr Alkaline	60hr Alkaline, 45 hr Rechargeable	45 hr Alkaline, 18 hr Rechargeable
Water res.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Size L × W × H	8.5 × 6.7 × 6.0 in (22 × 17 × 15 cm)	10.7L × 7.7W × 7.9H in (27.2L × 19.7W × 20.1H cm)		8.3 × 7.1 × 7.9 in (21 × 18 × 20 cm)	10.8 × 7.5 × 7.5 in (27 × 19 × 19 cm)	8.5 × 6.7 × 6.0 in (22 × 17 × 15 cm)	10.7L × 7.7W × 7.9H in (27.2L × 19.7W × 20.1H cm)	9.6 × 6.5 × 7.3 in (24 × 17 × 19 cm)
Weight	3.3 lb (1.5 kg)	6.8 lbs (3.1 kg)		6.8 lb (3.1 kg)	8 lb (3.6 kg)	3.3 lb (1.5 kg)	6.8 lbs (3.1 kg)	6 lb (2.7 kg)
Warranty	3 Year, with instant exchange	5 Years		5 Years	5 Years	3 Year, with instant exchange	5 Years	5 Years

Laser Display Receivers				
	LR20	LR30 (W)	LR50 (W)	LR60 (W)
Number of Display Channels	5-Channel Display	5-Channel Display	5-Channel Display 6-Channel Display in excavating mode	7-Channel Display 8-Channel Display in excavating mode
Accuracy: Center On-Grade mode (Grading)	Fine: 0.20 in (5 mm) Standard: 0.40 in (10 mm) Wide: 0.80 in (20 mm)	Fine: 0.20 in (5 mm) Standard: 0.45 in (12 mm) Wide: 1.25 in (32 mm)	Fine: 0.20 in (5 mm) Standard: 0.40 in (10 mm) Wide: 0.80 in (20 mm)	Setup: 0.20 in (5 mm) Fine: 0.40 in (10 mm) Standard: 0.80 in (20 mm) Wide: 1.6 in (40 mm)
Accuracy: Offset On-Grade mode (Excavating)	Fine: 0.50 in (12 mm) Standard: 1.0 in (25 mm) Wide: 2.0 in (50 mm)	NA	Fine: 0.50 in (12 mm) Standard: 1.0 in (25 mm) Wide: 2.0 in (50 mm)	Setup: 0.25 in (6 mm) Fine: 0.50 in (12 mm) Standard: 1.0 in (25 mm) Wide: 2.0 in (50 mm)
ACE—Angle Compensation Mode	NA	NA	NA	Fine: 0.50 in (12 mm) Standard: 1.0 in (25 mm)
Blade-Tilt Accuracy	NA	NA	± 0.5°, ± 1.5°, ± 2.5°	N/A
Plumb-Swing Accuracy	± 0.5°, ± 1.5°, ± 2.5°	NA	± 0.5°, ± 1.5°, ± 2.5°	Standard: 0.5 in (12 mm) Angle Compensation Mode: 1.0 in (25 mm)
Beam Reception	360 Degrees	360 Degrees	360 Degrees	360 Degrees
Vertical Reception	8 in (203.2 mm)	6.75 in (171 mm)	6.75 in (171 mm)	8.75 in (222 mm)
LED Battery Life Alkaline Bright / Dim NiMH Bright / Dim	35 hrs	50 hrs / 75 hrs 40 hrs / 50 hrs	45 hrs / 60 hrs 30 hrs / 45 hrs	45 hrs / 75 hrs 40 hrs / 50 hrs
Battery Recharge Time	3-4 hrs	3-4 hrs	3-4 hrs	3-4 hrs
Size	9.5 × 4.38 × 1.85 in (24.1 × 11.1 × 4.7 cm)	13.5 × 5.6 × 5.9 in (34.3 × 14.2 × 14.9 cm)	13.5 × 5.6 × 5.9 in (34.3 × 14.2 × 14.9 cm)	15.5 × 5.6 × 5.9 in (39.4 × 14.2 × 14.9 cm)
Weight	2.5 lb (1.13 kg)	5.5 lb (2.5 kg)	5.5 lb (2.5 kg)	6.0 lb (2.7 kg)
Receiver Warranty	2 Years	2 Years	2 Years	2 Years





Grade & Universal Lasers					
	GL412N/422N		GL612 / 622		UL633
Accuracy	1/16 in at 100 ft, 1.5 mm at 30 m (10 arc seconds)				
Operating diameter	2600 ft (800 m)	2600 ft (800 m)	2600 ft (800 m)	2600 ft (800 m)	
Self-leveling range	±5 degrees electronic servo self-leveling		±14 degrees electronic servo self-leveling		
Grade range	-10 to +15%		-25 to +25%		-25 to +25% X, Y, Z axis
	Single	Dual	Single	Dual	
Power source	4 x D-cell NiMH battery pack		4 x D-cell NiMH battery pack		
Battery life	35 hr NiMH 50 hr Alkaline		35 hr NiMH 40 hr Alkaline		
Water resistant	Yes				
Size L x W x H	10.7L x 7.7W x 7.9H in (27.2L x 19.7W x 20.1H cm)		9.4 x 5.9 x 11 in (24 x 15 x 28 cm)		
Weight	6.8 lbs (3.1 kg)				
Warranty duration	5 Years		5 Years		5 Years
Wireless Remote Specifications					
Remote Control Type 2-way communication	RC402N		RC602		RC603
Battery life	130 hrs continuous 1 year normal use				
Range	330 ft (100 m)				

Pipe Lasers		
	DG711	DG511
Grade Range	-15% to +40%	
Self-Leveling Range	Complete grade range (no rough leveling required)	
Line Range	20°	
Line Center	Yes	
Grade Zero & Quick Grade	Yes	
Line Set/Check / Line Alert	Yes	No
Temperature Compensation	Yes	No
Grade Compensation	Yes	
Waterproof	Continuous Submersion at 10 ft (3 m)	
Laser classification / output	3A/3R / 4.5–5 mW (maximum allowable)	
Weight	8.0 lbs (3.6 kg)	
Length	14.75 in (37.5 cm)	
Diameter	5.5 in (14 cm)	
Housing material	Armored Die Casting	Hard Anodized Aluminum
Battery type and life	NiMH / 60 Hours with Daily Setup at 20° C	
Battery pack	Sealed (NiMH), Sealed Removable (Alkaline)	
Warranty Period	5 Years	5 Years
Wireless Remote Specifications		
Functionality	7 Button Power, Line and Grade Adjustment, Line Set	3 Button Power, Line Adjustment
Through the Pipe Range	750 ft (225 m)	
Front / Over the Top Range	500 ft (150 m)	
Rear Range	30 ft (10 m)	
Battery life	3 Years	2 Years

Laser Tools								
	LP30 + LP50	5.2XL	LT20	LT56	1.5PL	QM55	QM75	QM95
Self-level range	±4° from level	±4° from level	±4° from level	±4° from level	±3° from level	N/A	N/A	N/A
Working range - Visible	100 ft (30 m)	100 ft (30 m)	100 ft (30 m)	80 ft (25 m)	100 ft (30 m)	165 ft (50 m)	230 ft (70 m)	650 ft (200 m)
With Detector	N/A	250 ft (75 m)	N/A	200 ft (65 m)	180 ft (55 m)	N/A	N/A	N/A
Accuracy	1/16 in @ 17 ft 1.5 mm @ 5 m	1/16 in @ 17 ft 1.5 mm @ 5 m	1/16 in @ 17 ft 1.5 mm @ 5 m	1/32 in @ 17 ft 1.0 mm @ 5 m	1/32 in @ 17 ft 1.0 mm @ 5 m	±1/16 in ±1.5 mm	±1/16 in ±1.5 mm	±1/24 in ±1.0 mm
Battery type	2 x AA alkaline	3 x AA alkaline	3 x AA alkaline	Lithium-ion, 7200 mAh, 3.7 V	4 x AA alkaline & NiMH recharge	2 x AAA alkaline	2 x AAA alkaline	2 x AA Alkaline
Battery life	20 hours, alkaline	35/15 hours (point/line beams) 10 hours (all beams on)	20 hours, alkaline	> 25 hours all beams on	> 7 hours all beams on	5000+ readings	8,000 readings	8,000 readings
Dimensions	3.5x4.1x2.4 in 8.9x10.4x6.1 cm	4.5x5.2x3.1 in 11.5x13x8 cm	4.3x2.3x4.1 in 11.0x5.8x10.4 cm	4.6x6.0x3.3 in 15.2x11.6x8.4 cm	9.5x5.0x4.5 in 24.1x12.7x11.5 cm	2.0x1.1x4.9 in 5.2x2.8x12.5 cm	1.3x1.6x4.9 in 3.4x4.2x12.5 cm	2.4x1.2x4.7 in 6.2x2.8x12.0 cm
Weight	0.69 lb (0.31 kg)	1.1 lb (0.5 kg)	0.8 lb (0.35 kg)	1.48 lb (0.67 kg)	3.5 lb (1.58 kg)	6.6 oz (0.19 kg)	5.0 oz (0.14 kg)	7.7 oz (0.22 kg)
Warranty	3 Years, with instant exchange	3 Years, with instant exchange	3 Years, with instant exchange	3 Years, with instant exchange	1 Year	3 Years, with instant exchange	3 Years, with instant exchange	3 Years, with instant exchange

# SPECIFICATIONS

Spectra Precision Laser Applications	Laser Pointers	Line Generator	Handheld Distance Measuring Device	Laser Levels	Horizontal Vertical Lasers	Grade & Universal Lasers
	- LP30 - LP50	- 5.2XL - LT20 - LT56 - 1.5PL	- QM55 - QM75 - QM95	- LL100N - LL300N - LL300S - LL400HV - LL500  Optical Levels - AL20 - AL24 - AL28 - AL32	- HV101 - HV302 - HV301G	- GL412N - GL422N - GL612 - GL622 - GL710 - GL720 - GL722 - UL633
General Construction						
Forms, footings and foundations				○	○	○
Septic tank or swimming pools, decks and terraces		○		○	○	○
Estimating cut and fill				○	○	○
Checking building square and area		○	○		○	○
Matching existing slopes and grades				○	○	○
Checking elevations				○	○	○
Checking elevations of sub-base and sub-grade				○	○	○
Checking and setting elevations for sports fields, steep slopes, ramps, and drainage						○
Vertical alignment and plumb such as anchor bolt and form alignment		○			○	○
Interior						
Locating finished floor levels		○		○	○	
Laying out interior walls	○	○			○	
Installing ceiling grids	○	○			○	
Short-run vertical alignment		○			○	
Squaring and layout of partitions, walls and tile floors	○	○			○	
Plumb reference and point transfers from below to above, such as walls, door frames, and lighting locations measured from the floor layout to ceiling	○	○			○	
Level reference used for leveling cabinets, counter tops, windows, decks ceilings and chair rails	○	○			○	
Measuring distances, depths and heights			○			







