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.

Specifications subject to change without notice
©2019, Trimble Inc. All rights reserved. Trimble, the Globe & Triangle logo and Spectra Precision are trademarks of Trimble Inc., registered in the United States and other countries. All other trademarks are the property of their respective owners. 022507-296J (05/2019)
TABLE OF CONTENTS

**Introduction**
Warranty ........................................ 4  
Service .......................................... 4  
Timeline ......................................... 5  

**Lasers**
Buying guide ..................................... 6  

**Laser Levels**
LL100N .............................................. 9  
LL300N ............................................. 10  
LL300S ............................................. 11  
LL500 .............................................. 12  

**Horizontal and Vertical Lasers**
HV101 .............................................. 13  
HV302 .............................................. 14  
HV302G ............................................ 15  

**Grade Lasers**
GL412N/GL422N .................................... 16  
GL612N/GL622N/GL622IR ......................... 17  
GL710, GL720, GL722 ............................ 18  

**Universal Laser**
UL633N ............................................ 19  

**Pipe Lasers**
DG613, DG613G ................................. 20  
DG813 .............................................. 21  

**Laser Receivers**
HR150U ............................................ 22  
HR220 .............................................. 22  
HR320 .............................................. 23  
HL450 .............................................. 23  
HL700 .............................................. 24  
HL760/HL760U .................................... 25  
CR600 .............................................. 26  
CR700 .............................................. 27  

**Optical Instruments**
Automatic Levels .................................. 28  
DET-2 Construction Theodolite .................... 29  

**Laser Tools**
LP51, LP51G ....................................... 30  
LT20, LT20G ....................................... 31  
LT52, LT52G ....................................... 32  
LT56 ................................................ 33  
LT58G ............................................. 34  
QM10 .............................................. 35  
QM20 .............................................. 35  
QM55 .............................................. 35  

**Interior Layout Systems**
QML800/QML800G ................................. 36  
QML Software .................................. 36  

**Machine Display Receivers**
LR20 ................................................. 37  
LR30 ................................................. 37  
LR50 ................................................. 38  
LR60 ................................................. 38  
RD20 and Accessories ............................ 39  

**Accessories**
Accessories - Lasers ............................. 40  
Accessories - Tripods ............................ 41  
Accessories - Grade Rods ........................ 42  

**Specifications**
Laser Levels, Display Receivers .................. 43  
Grade & Universal Lasers ........................ 44  
Pipe Lasers ....................................... 44  
Laser Tools ....................................... 44  
HR/HL Laser Receivers ............................ 45  
QL700 Series Lasers ................................ 45  
Automatic Levels .................................. 46  
Theodolite ....................................... 46  
QM Laser Distance Meters ........................ 46  
Laser Applications ............................... 47
INTRODUCTION

For more than 50 years, Spectra Precision has been an innovation leader in the construction industry worldwide. We understand what our customers need on the job every day, because we have always made communication and listening to our customers a top priority. We also employ the best engineers and technical specialists we can find to ensure that our reputation for innovation and quality never fades.

This company focus: communication and innovation, is why we bring new technologies to market in easy-to-use, highly efficient products designed with the commercial construction market foremost in mind.

We believe in technological quality, precision, and competitiveness. We believe in work well done. Spectra Precision products are reliable and long-lasting, with an excellent Return on Investment value.

Worldwide Service Network

Spectra Precision has a comprehensive worldwide service provider network with more than 170 approved service centers. In addition, there are three factory service centers – where specialist reprogramming and component level repairs can be undertaken – in Dayton, OH, USA; Kaiserslautern, Germany; and Shanghai, China. All authorized service providers are factory trained and take part in regular continuing education 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 for technical advice, service or repairs.

In this catalog, you will find:

- Ease of use
- Ruggedness
- Superior Warranties

Your goals are our objectives: save time and increase efficiency.

Global Distribution and Service Partners

Our dealers and service providers receive regular, comprehensive training in the latest innovative technologies directly from Spectra Precision, so they can provide industry-best consultation, support and guidance to help construction firms select the best solution for their jobsite and workers’ needs.
**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.
   - **PlaneLock** – 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 receivers 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. **Can I use lasers for vertical applications?**

   Yes. Several lasers are designed for this application and are self-leveling in the vertical axis. All HV, GL400, GL600 and UL models are designed to be used in the vertical axis. Applications include formwork, foundations, 90° reference, fencing, facades and wall layout. The laser can replace the string line and be used over long distances. Please note the PlaneLock function (#2) can be used in either the horizontal or vertical position. There are several laser clamps and receiver brackets available to assist with the quick and efficient setup of vertical alignments.

6. **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.

7. **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 provide 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).
**Buying Guide**

8. What is a Digital Read-Out Receiver?
The Spectra Precision Digital Read-Out receivers have a patented design that delivers consistent accuracy over the entire operating range combined with jobsite durability. The receiver is the one part of the system that receives the most punishment and needs to withstand jobsite abuse such as being dropped or getting wet. With the digital readout models (which have the prefix HL) you do not even need to get the receiver to the on-grade position because it simply displays how far from on-grade you are - allowing you to work faster and more accurately. Readouts can be changed between metric and English units. Be careful to really understand the difference between a Spectra Precision Digital Read-Out receiver and other brands as this could lead to unnecessary errors and additional cost. Not only are these receivers tough and accurate but when used with certain models of laser within the Spectra Precision range they also provide advanced functionality such as automatic grade matching, PlaneLock and axis alignment.

9. 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.

10. 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.

11. Green Beams vs. Red Beams
Spectra Precision manufactures both red beam and green beam rotating lasers, pipe lasers, laser pointers and line lasers. Green beams are up to four times brighter to the human eye and are ideal for brighter conditions. Red beam lasers offer a lower initial price and typically have longer battery life.

12. Increase Radio Range Coverage
The ST802/ST805 Signal Transporters extend the radio range of compatible lasers by up to two times the normal range. This reduces the need for multiple set-ups when working over longer distances and provides the contractor with more control, especially when carrying out alignments. It is placed between the laser and the remote control or receiver. Once paired with the laser, the Transporter will re-broadcast the radio signal, almost doubling the range of the current RC402N, RG602N, RG603N and RC803 remote controls.

ST805 available Summer 2019

**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
- Optional RC601 remote control allows easy grade matching using the remote control from rod position

**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 Numbers**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Receiver</th>
<th>Rod</th>
<th>Tripod</th>
<th>Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL100N</td>
<td>HR320</td>
<td>No</td>
<td>No</td>
<td>Small Case</td>
</tr>
<tr>
<td>LL100N-1</td>
<td>HR320</td>
<td>GR515 Tenths</td>
<td>Q104025</td>
<td>System Case</td>
</tr>
<tr>
<td>LL100N-2</td>
<td>HR320</td>
<td>GR352 Inches</td>
<td>Q104025</td>
<td>System Case</td>
</tr>
<tr>
<td>LL100N-3</td>
<td>HR320</td>
<td>GR653 Metric</td>
<td>Q104025</td>
<td>System Case</td>
</tr>
</tbody>
</table>

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.
- 1650 ft (500 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.

Part No. | Receiver | Power | Rod | Tripod | Case
--- | --- | --- | --- | --- | ---
LL300N | HL450 | 4-D Alkaline | No | No | Small Case
LL300N-1 | HL450 | 4-D Alkaline | Q104025 Tenths | Q104025 | System Case
LL300N-2 | HL450 | 4-D Alkaline | GR152 Inches | Q104025 | System Case
LL300N-3 | HL450 | 4-D Alkaline | GR153 Metric | Q104025 | System Case
LL300N-4 | HL450 | Rechargeable pack* | No | No | Small Case
LL300N-8 | HR320 | 4-D Alkaline | No | No | Small 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.

Part No. | Receiver | Remote | Power | Rod | Tripod | Case
--- | --- | --- | --- | --- | --- | ---
LL300S-5 | HL450 | No | 4-D Alkaline | No | No | Small Case
LL300S-47 | HL450 | Rechargeable Pack* | No | No | Small Case
LL300S-7 | HL760 | No | 4-D Alkaline | No | No | Small Case
LL300S-17 | HL760 | No | GR151 Tenths | Q104025 | System Case
LL300S-27 | HL760 | No | 4-D Alkaline | GR152 Inches | Q104025 | System Case
LL300S-47 | HL760 | RC402N | Rechargeable Pack* | No | No | Small Case

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

General Construction Applications

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

Part No. Receiver Power Rod Tripod Retail Package

LL500 HL700 4 D Alkaline No No No
LL500-1 HL700 4 D Alkaline GR151 Tenths 0.008 Yes
LL500-2 HL700 4 D Alkaline GR152 Inches 0.008 Yes
LL500-3 HL700 4 D Alkaline GR153 Metric 0.008 Yes
LL500-4 HL700 NiMH No No No

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

LL500
Longest Range, Highly Accurate Leveling Solution

Key Features and Benefits

- 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
- Includes HL700 Digital Readout Receiver and C70 rod clamp

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

HV101-1 HL700 No No No M101 RC601 Small Case
HV101-2 HL700 4 D Alkaline No No No M101 RC601 Small Case
HV101GC-1 HR320 GR151 Tenths Q104025 M101 RC601 System Case
HV101GC-2 HR320 GR152 Inches Q104025 M101 RC601 System Case
HV101GC-3 HR320 GR153 Metric Q104025 M101 RC601 System Case

All part numbers include HV101 transmitter, wall mount, ceiling target, laser glasses, remote control, case and 2 D Alkaline batteries.
HV302
General Purpose Construction Laser for Medium-range Interior and Exterior Applications

Key Features and Benefits
- The housing is rugged, lightweight and IP66 weatherproof making it easy for contractor carry and use in demanding job site 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 and HL760
- 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
- Exterior walls and facades

Applications
- Interior and exterior, light to medium commercial, and residential construction
- Leveling and aligning of interior walls
- Installation of ceilings and raised floors
- Exterior walls and facades

Part No. Receiver Wall Mount Power Ceiling Target Remote Rod Tripod Case
HV302 HL760 No D Alkaline No RC402N No No Small Case
HV302-1 No M302 Rechargeable Pack* 1176 RC402N No No No Small Case
HV302-2 HR150U M302 Rechargeable Pack* 1176 RC402N No No No Small Case
HV302-4 HL760 No Rechargeable Pack* No RC402N No No No Small Case
HV302GC-2 HL760 No D Alkaline No RC402N qR32 Q554020 Small Case
HV302-7 HL760 M302 Rechargeable Pack* 1176 RC402N No No No Small Case

All part numbers include HV302 transmitter and case. *Rechargeable pack includes charger.

HV302G
Multipurpose Green Beam Construction Laser for Interior

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
- Fully automatic self-leveling in both horizontal and vertical for fast, accurate setup in horizontal and vertical applications
- Increases productivity with fast setups, fewer mechanical parts, and automatic self-leveling
- Line scan and beam plunge feature for easy drywalls
- Rotor vial for easy and accurate vertical plumb set-up
- Preset adjustable rotation speed and scan line sizes to fulfill all interior application needs
- Minimizes power costs, increases reliability with choice of rechargeable or alkaline batteries
- Automatic Grade Match and PlaneLok using RC402N and HL760U

Applications
- Interior, light to medium commercial and residential construction
- Squaring/layout
- Leveling and aligning of interior walls
- Vertical alignment
- Plumb

Applications
- Interior, light to medium commercial and residential construction
- Squaring/layout
- Leveling and aligning of interior walls
- Vertical alignment
- Plumb

Part No. Receiver Wall Mount Ceiling Target Remote
HV302G-1 No M302 Yes RC402N
HV302G-2 HR150U M302 Yes RC402N
HV302G-7 HL760U M302 Yes RC402N

All part numbers include HV302G transmitter, laser glasses, NiMH battery pack with charger and case.
GL412N / GL422N
Single and Dual Grade Lasers
with Vertical Alignment

Key Features and Benefits

- GL412N / GL422N are grade plus horizontal and vertical lasers. Simple, accurate dial in grade from -10% to +15% (Single GL412N, Dual GL422N)
- 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 job site conditions
- Customizable with choice of HL760 or CR700 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
- Grading and excavating
- Driveways and ramps
- Trenching
- Sport fields, tennis courts (GL422N only)
- Steep slope road embankments and ditch banks

GL612N / GL622N / GL622IR
Versatile Automatic Single and Dual Grade Laser for Level, Grade, and Vertical Alignment

Key Features and Benefits

- GL612N / GL622N are grade lasers 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 job sites
- 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
- Automatic Axis Alignment (GL622N only) is easy to setup for increased accuracy
- Long operating radio range - 490 ft (150 m)
- Automatic Grade Match displays the existing grade changes to be made from anywhere on the jobsite
- 5 Year “No Cost” Warranty
- Mask mode eliminates interference with other crews on the jobsite
- Automatic Axis Alignment (GL622N only) is easy to setup for increased accuracy

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

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

Radio communication between the laser and HL760 Laserometer allow advanced features and remote display capabilities

Part No. Receiver Clamp Remote Remote
GL412N CR700 C70 Rod Clamp RC402N Small Case
GL422N CR700 C70 Rod Clamp RC402N Small Case
GL422N GL612N CR700 C70 Rod Clamp RC402N Small Case
GL622IR CR700 C70 Rod Mount HL760 RC402N Small Case

All part numbers include GL412N/GL422N transmitter, case and NiMH rechargeable battery pack and charger.

Part No. Receiver Clamp Remote Remote
GL612N CR700 C70 Rod Clamp RC602N
GL622N CR700 C70 Rod Clamp RC602N
GL622IR CR700 C70 Rod Clamp RC602N

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

Temperature Compensation

Grade Match displays the existing grade changes to be made from anywhere on the jobsite
- Automatic Axis Alignment (GL622N only) is easy to setup for increased accuracy

Risk free monitoring of tilt up wall position

90° Applications

- 90° layout

Radio Remote

Included
GL710, GL720, GL722
High Precision, 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 when set up on a tall tripod
- 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

GL720 Dual Grade Laser

Applications
- Dual slope grading and steep slope excavation
- Vertical alignment for anchor bolts, building axes, facades and form alignment
- Levelling concrete pads and for any job requiring 90° layout outdoors

Part No. | Grade | Receiver | Clamp
--- | --- | --- | ---
CTO-GL710 | Single | HL700 | C70 Adapter for Receiver
CTO-GL710-D | Single | CR600 | C50 Adapter for receiver and CSI Mag. Mount
CTO-GL720 | Dual | HL700 | C70 Adapter for Receiver
CTO-GL720-D | Dual | CR600 | C50 Adapter for receiver and CSI Mag. Mount
CTO-GL722 | Dual | CR600 | C50 Adapter for receiver and CSI Mag. Mount
CTO-GL722-IR | Dual Infrared | CR600 | C50 Adapter for receiver and CSI Mag. Mount

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

Universal Laser UL633N
The Most Versatile Construction Laser, Ever

Key Features and Benefits
- Full control for horizontal level, single or dual grade, vertical alignments or setting out 90° angles - providing the ability to do so much more from one single laser
- Long operating radio range - 490 ft (150 m)
- High precision alignment for grades - align automatically to your grade hub for accurate grade set-ups on X, Y or XY axes simultaneously. Only grade laser on the market that provides the ability to have a second grade axis that can be set from 10° to 170°. For car park set ups or other applications where two grade axes are not at 90°. No need to spend time calculating the set-up just align to the receivers and start working
- Grade matching - measures and displays the grade between 2 elevations over unknown ground also simultaneously on two axes
- Precise control for high accuracy applications such as concrete floors – the laser will lock onto the receiver and stay fixed in the on-grade position all day eliminating costly drift caused by temperature fluctuations. – PlaneLok
- Fast vertical alignment – laser will align either to the receiver or SpotFinder for vertical alignments such as facade installation, building axis alignment or kerbs.
- Rapid 90° degree layout - set a 90° angle in seconds with no complex calculations
- Various power options – keeping you working when you need to work
- Intuitive menu driven operation – no secret button pressing, select your mode and start working
- Versatility to fit any construction application providing more value and higher return on your investment – do more with one product

Applications
- Levelling concrete forms and footers
- Vertical alignment for anchor bolts, building axis, facades and form alignment
- Slope work for sports fields, driveways, parking garages and ramps
- Layout of concrete pads and for any job requiring 90° layout outdoors

Part No. | Receiver | Spot Finder SF601 | Clamps | Remote
--- | --- | --- | --- | ---
UL633N | 2x HL760 with adapter with rubber strap | Red Clamps with Bubble Vial | RC603N

All part numbers include transmitter, case and NiMH rechargeable battery pack and charger.
**DG613/DG613G DialGrade**

**Compact and Powerful**

- New reduced length to make it easier to fit in pipes around tighter inverts
- Self levelling range of -12% to +40% over the entire grade range
- Cross axis compensation provides a quicker more accurate set-up as the laser does not have to be level in the pipe – place it in the pipe if levels, you work.
- Bright visible beam that works up to 500ft (150m)
- RCB03 remote works via radio 430ft (130m) or infra-red 500ft (150m) for both “over-the-top” set-up and in pipe/trench set-up.
- Large, bright, graphical user interface makes the screen easier to see and use when in or out of the pipe. Same graphical user interface can be seen on the remote – what you see on the laser you see on the remote.

**Applications**

- Installation of gravity flow sanitary pipelines
- Storm sewer pipelines
- Pipe jacking
- Tunnel boring
- Can be used in a pipe or in over the top set-ups

**Key Features and Benefits**

- The DG613G has flexible power options that provide 40 (30) hours operating time (NiMH rechargeable batteries with worldwide charger). Alkaline batteries can be used directly in the laser without a separate battery pack. Additional car charger can be purchased to keep you working even when out in remote areas.
- The Spectra Precision DG613G has advanced functionality that makes setting up and using it easier and more accurate:
  - Line-Set/Check – allows the user to align the laser to the manhole quickly and easily to set direction. The beam will go up to 100% allowing easy alignment even in short trenches
  - Line Scan – provides a quick alignment to the centre of the target
  - Line Alert – notifies the user if the set-up is disturbed eliminating costly re-work from errors

**DG613-5**

**DG613 Laser, 1230 Large invert plate, 1239 Vertical pole, RCB03 IR/Radio Remote Control, 956L target**

**DG613-6**

**DG613 Laser, 1237 Large invert plate (metric), 1239 Vertical pole, RCB03 IR/Radio Remote Control, 956L target**

**DG613-13**

**DG613 Laser – Over-the-Top Package, 1263 precision scope, RCB03 IR/Radio Remote Control, P25 power outlet charger, 2 x NiMH battery pack and 1 x car charger**

**DG613G**

**DG613G Laser, 1248 Trivet plate 8 inch (200mm), RCB03 IR/Radio Remote Control, 956G target**

---

**DG813 DialGrade**

**Small, Tough and Smart – Perfection in a Pipe**

- New reduced length to make it easier to fit in pipes around tighter inverts
- Self levelling range of -12% to +40% over the entire grade range
- Cross axis compensation provides a quicker more accurate set-up as the laser does not have to be level in the pipe – place it in the pipe if it levels, you work.
- Bright visible beam that works up to 500ft (150m)
- RCB803 remote works via radio 430ft (130m) or infra-red 500ft (150m) for both “over-the-top” set-up and in pipe/trench set-up.
- Large, bright, graphical user interface makes the screen easier to see and use when in or out of the pipe. Same graphical user interface can be seen on the remote – what you see on the laser you see on the remote.

**Applications**

- Installation of gravity flow sanitary pipelines
- Storm sewer pipelines
- Pipe jacking
- Tunnel boring
- Can also be used to calculate the grade between manholes
- SpotSearch – can be used to locate the beam in a desired position for applications such as solar farms where the beam could be subject to drift.
- Spot Search – can be used to locate the beam over long distances out of the trench

**Key Features and Benefits**

- The Spectra Precision DG813 has advanced functionality that makes setting up and using it easier and more accurate:
  - Line-Set/Check – allows the user to align the laser to the manhole quickly and easily to set direction. The beam will go up to 100% allowing easy alignment even in short trenches
  - Line Scan – provides a quick alignment to the centre of the target
  - Line Alert – notifies the user if the set-up is disturbed eliminating costly re-work from errors
  - The SF803 SpotFinder, when used with DG813, provides other automatic functions making it the smartest pipe laser in the industry:
    - Spot Search – can be used to locate the beam in a desired position for applications such as solar farms where the beam could be subject to drift.
    - Spot Search – can be used to locate the beam over long distances out of the trench

**DG813 Laser, 1248 Trivet plate 8 inch (200mm), RCB803 IR/Radio Remote Control, SF803 SpotFinder w/pole adapter & target plate, 956 target, Transporter ST802/ST805**

**DG813-3**

**DG813 Laser, 1230 Large invert plate, RCB03 IR/Radio Remote Control, SF803 SpotFinder w/pole adapter & target plate, 956 target, Transporter ST802/ST805**

**DG813-5**

**DG813 Laser, 1239 Large invert plate, 1239 Vertical pole, RCB03 IR/Radio Remote Control, 956L target, Transporter ST802/ST805**

**DG813-6**

**DG813 Laser, 1237 Large invert plate (metric), 1239 Vertical pole, RCB03 IR/Radio Remote Control, 956L target, Transporter ST802/ST805**

---

**Part No.** | **Components** | **Power**
---|---|---
DG613 | DG613 Laser, 1248 Trivet plate 8 inch (200mm), RCB03 IR/Radio Remote Control, 956L target | NiMH Recharge
DG613-5 | DG613 Laser, 1230 Large invert plate, 1239 Vertical pole, RCB03 IR/Radio Remote Control, 956L target | NiMH Recharge
DG613-6 | DG613 Laser, 1237 Large invert plate (metric), 1239 Vertical pole, RCB03 IR/Radio Remote Control, 956L target | NiMH Recharge
DG613-13 | DG613 Laser – Over-the-Top Package, 1263 precision scope, RCB03 IR/Radio Remote Control, P25 power outlet charger, 2 x NiMH battery pack and 1 x car charger | NiMH Recharge
DG613G | DG613G Laser, 1248 Trivet plate 8 inch (200mm), RCB03 IR/Radio Remote Control, 956G target | NiMH Recharge

---

**Part No.** | **Components** | **Power**
---|---|---
DG813 | DG813 Laser, 1248 Trivet plate 8 inch (200mm), RCB03 IR/Radio Remote Control, SF803 SpotFinder w/pole adapter & target plate, 956 target, Transporter ST802/ST805 | NiMH Recharge
DG813-3 | DG813 Laser, 1230 Large invert plate, RCB03 IR/Radio Remote Control, SF803 SpotFinder w/pole adapter & target plate, 956 target, Transporter ST802/ST805 | NiMH Recharge
DG813-5 | DG813 Laser, 1239 Large invert plate, 1239 Vertical pole, RCB03 IR/Radio Remote Control, SF803 SpotFinder w/pole adapter & target plate, 956 target, Transporter ST802/ST805 | NiMH Recharge
DG813-6 | DG813 Laser, 1237 Large invert plate (metric), 1239 Vertical pole, RCB03 IR/Radio Remote Control, SF803 SpotFinder w/pole adapter & target plate, 956 target, Transporter ST802/ST805 | NiMH Recharge
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

HR220 Line Laser Receiver
Special Receiver for use with Line 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 line lasers
- Snap-in G61 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
- C45 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

Specific Receiver Features
- Setting forms
- Checking sub-base materials
- Screeding concrete

Key Features and Benefits
- Digital Readout of elevation provides a numeric display of ± 5 cm (± 2 inches) 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 Rod Clamp with Bubble Vial included.

Comparison Table

<table>
<thead>
<tr>
<th>Feature</th>
<th>HL320</th>
<th>HL450</th>
<th>HL700</th>
<th>HL760</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reception Height</td>
<td>2 in</td>
<td>4 in</td>
<td>5 in</td>
<td>5 in</td>
</tr>
<tr>
<td>Radius</td>
<td>650 ft</td>
<td>200 m</td>
<td>1500 ft</td>
<td>1500 ft</td>
</tr>
<tr>
<td>Depth</td>
<td>2 ft</td>
<td>6 ft</td>
<td>6 ft</td>
<td>6 ft</td>
</tr>
<tr>
<td>Range</td>
<td>330 ft</td>
<td>100 m</td>
<td>330 ft</td>
<td>330 ft</td>
</tr>
</tbody>
</table>

HL760 / HL760U 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 / HL760U has an internal, long range 330 ft (100m) radius, high speed digital radio built inside that allows the receiver to communicate with any other HL760 / HL760U, LL300S, LL400HV, HV302, GL412N / GL422N 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 Rod Clamp with Bubble Vial included.
- HL760U can also accept infrared and green beam lasers.
- When working in deep excavations the capture mode allows the user to pick up the laser elevation without having to adjust the receiver to the on-grade position – it tells you how far off on-grade you are.
- Clamp comes with patented reversible jaw to allow a more solid fix to round or square rods.
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 CS1 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
- On grade off mode for monitoring
- Line alert mode for long range vertical alignment

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

Accessories and Components for Laser Receivers: All receivers include rod clamps (CR700/CR600 include rod clamp and magnetic mount)
- C71 Magnetic Mount included with CR700 receiver
- CS1 Magnetic Mount included with CR600 receiver
- C50 Adapter included with CR600 receiver
- Optional Vertical Adapter for CR700 and HL Receivers PN 105516

CR700 Combination Receiver
Machine or Rod Mounted Combination Receiver

Key Features and Benefits
- Bright LED Arrow Displays – new red/green/blue LED arrows are super bright and visible in all conditions
- Magnetic Clamp – new C71 magnetic clamp will not slip on the machine no matter how rough the work is
- Light Bar Technology – patented laser reception technology delivers the most accurate, consistent and reliable performance
- Laser Radio – the CR700 is radio-compatible with the GL400N / GL600N series grade lasers and the HV302 enabling the use of time saving functions such as Grade Match, Fingerprinting, PlanLok and Axes Alignment
- IP67 – dustproof, waterproof, weatherproof
- 10-foot (3 m) Drop Guarantee – almost destruction proof, extremely robust; eliminates downtime
- Digital Read-Out – the CR700 provides the exact distance from on-grade numerically
- Remote Display – pair the CR700 receiver with an HL760 receiver to be used as a remote display — useful for machine operators and site supervisors
- Fingerprint On/Off – a menu function allows the CR700 to enable or disable Fingerprinting, which pairs the receiver with a particular laser, eliminating erroneous readings from multiple lasers
- Backlight – Receiver can be viewed in the dark or low light conditions
- Vertical Drift Alarm – Warns if the laser is disturbed when using in the vertical mode
- 3-Year Warranty – the best warranty on laser receivers

Applications
- Digging footings
- Basement and trench excavations
- Checking sub-base materials
- Setting and checking elevations
- Leveling and aligning forms
- Screeding concrete
- Vertical alignment
DET-2 Construction Theodolite
Full Featured Digital Theodolite for Construction

Key Features and Benefits
- 2 arc seconds 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 changer - 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

Part No. Power/Damp Tripod Rod
AL20M 20X / Magnetic No No
AL20M-1 20X / Magnetic 5301-27-BLK-SP GR151
AL20M-2 20X / Magnetic 5301-27-BLK-SP GR152
AL20M-3 20X / Magnetic 5301-27-BLK-SP GR153

Part No. Power/Damp Tripod Rod
AL24A 24X / Air No No
AL24A-1 24X / Air 5301-27-BLK-SP GR151
AL24A-2 24X / Air 5301-27-BLK-SP GR152
AL24A-3 24X / Air 5301-27-BLK-SP GR153

Part No. Power/Damp Tripod Rod
AL28M 28X / Magnetic No No
AL28M-1 28X / Magnetic 5301-27-BLK-SP GR151
AL28M-2 28X / Magnetic 5301-27-BLK-SP GR152
AL28M-3 28X / Magnetic 5301-27-BLK-SP GR153

Part No. Power/Damp Tripod Rod
AL32A 32X / Air No No
AL32A-1 32X / Air 5301-27-BLK-SP GR151
AL32A-2 32X / Air 5301-27-BLK-SP GR152
AL32A-3 32X / Air 5301-27-BLK-SP GR153

Part No. Power Case
DET-2 NiMH & Alkaline packs O-ring sealed hard case

Automatic Level
Easy-to-use Optical Auto-levels

Key Features and Benefits
- Choice of magnetic or air dampened automatic compensation
- 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 fitters
- Checking elevation
- Measuring cut and fill

Applications
- Establishing 90 degree reference lines
- Checking angles, alignment, and plumb
- Anchor bolt alignment
- Gravity flow pipe laser setup
- Steel column placement

Part No. Power/Damp Tripod Rod
AL20M 20X / Magnetic No No
AL20M-1 20X / Magnetic 5301-27-BLK-SP GR151
AL20M-2 20X / Magnetic 5301-27-BLK-SP GR152
AL20M-3 20X / Magnetic 5301-27-BLK-SP GR153

Part No. Power/Damp Tripod Rod
AL24A 24X / Air No No
AL24A-1 24X / Air 5301-27-BLK-SP GR151
AL24A-2 24X / Air 5301-27-BLK-SP GR152
AL24A-3 24X / Air 5301-27-BLK-SP GR153

Part No. Power/Damp Tripod Rod
AL28M 28X / Magnetic No No
AL28M-1 28X / Magnetic 5301-27-BLK-SP GR151
AL28M-2 28X / Magnetic 5301-27-BLK-SP GR152
AL28M-3 28X / Magnetic 5301-27-BLK-SP GR153

Part No. Power/Damp Tripod Rod
AL32A 32X / Air No No
AL32A-1 32X / Air 5301-27-BLK-SP GR151
AL32A-2 32X / Air 5301-27-BLK-SP GR152
AL32A-3 32X / Air 5301-27-BLK-SP GR153

Part No. Power Case
DET-2 NiMH & Alkaline packs O-ring sealed hard case

Visit Our Web Site at www.spectralasers.com
**LP51 / LP51G Laser Pointers**

5-Point Red & Green Beam
Self-leveling Pocket Lasers

**Key Features and Benefits**
- The LP51 and LP51G project 5 beams - one beam up, one down and three beams at 90 degrees to each other
- Choice of green beam LP51G or red beam LP51
- 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
- Pointers ship in retail box with soft pouch, target and mounting accessory

**Applications**
- Level, horizontal and vertical layout, checking plumb
- Point transfer
- Checking square
- Layout of interior walls
- Drywall track installation
- Cabinet & trim installation, finish carpentry
- Reference points for sprinkler systems, HVAC, lighting

**LT20 / LT20G Crossline Laser**

Simple to Use — Perfect for Interior Construction

**Key Features and Benefits**
- Capable of handling interior horizontal, vertical or plumb positioning application
- Choice of high visibility green beam LT20G or economical red beam LT20
- Automatic self-leveling assures accuracy and fast setup
- 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
- Included clamp for ceiling installation

**Applications**
- Level, horizontal & vertical layout, square, & plumb
- Building, layout, & squaring of interior walls
- Acoustical ceiling installation (small rooms)
- Drywall track installation
- Cabinet & trim installation, finish carpentry

**Part No. | Magnetic Mount / Ceiling Bracket | Target | Case | Batteries**
--- | --- | --- | --- | ---
LP51 | 1213-0100 | Red Ceiling/Floor | Soft Pouch | 2 x AA Alkaline
LP51G | 1213-0100 | Green Ceiling/Floor | Soft Pouch | 2 x AA Alkaline
LT20 | 1215-1110 | Red Ceiling/Floor | Soft Pouch | 3 x AA Alkaline
LT20G | 1215-1110 | Green Ceiling/Floor | Soft Pouch | 4 x AA Alkaline
LT56 Rugged Universal Laser Layout Tool
Simple to use – Perfect for Interior Construction

Key Features and Benefits
- Capable of handling interior horizontal, vertical or plumb positioning application
- Horizontal and 2 vertical planes 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
- 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
- General construction elevation control with HR220 receiver
- Exterior building decks, patios, columns, & posts

Applications
- Level, horizontal & vertical layout, square, & plumb
- Building, layout, & squaring of interior walls
- Acoustical ceiling installation
- Drywall track installation
- Cabinet & trim installation, finish carpentry
- Exterior building deck footings, patios, columns, & posts

Key Features and Benefits
- Eliminates the need for contractors to purchase two tools by combining a 5-beam pointer and a crossline laser into one product
- Versatile tool does multiple jobs - set it up once and work plumb, level and square in the whole area
- Choice of green beams or red beams
- Automatic self-leveling assures accuracy and fast setup
- The industry’s brightest crosslines and points for easy viewing in all conditions – points are visible up to 200 feet (60 m)
- Wide 210° horizontal line intersects side points; Vertical up beam intersects up point
- Down point clears floor track, no accessory required
- 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
- New magnetic bracket can be attached to a steel column, wall stud or any steel surface
- 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
- General construction elevation control with HR220 receiver
- Exterior building decks, patios, columns, and posts

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

Part No. Receiver Case
LT52R-2 M152 Red Ceiling/Floor 23416 Hard Case 1215-1740 No Lithium-Ion, Charger 1215-1610
LT52G M152 Green Ceiling/Floor 1215-1560 Hard Case 1215-1740 No Lithium-Ion, Charger 1215-1610

Part No. Magnetic Bracket Target Case Receiver Batteries
LT52R M152 Red Ceiling/Floor 23416 Hard Case 1215-1740 No Lithium-Ion, Charger 1215-1610
LT52R-2 M152 Red Ceiling/Floor 23416 Hard Case 1215-1740 HR220 Lithium-Ion, Charger 1215-1610
LT52G M152 Green Ceiling/Floor 1215-1560 Hard Case 1215-1740 No Lithium-Ion, Charger 1215-1610
**QM Series Quick Measure Lasers**

**Digital Distance Measuring**

**QM10**
- One-person operation allows safe measuring to difficult-to-reach or hazardous locations
- More accurate than traditional measuring tapes
- Small, compact - fits in your pocket or tool belt
- Illuminated display - easy to read in low light conditions
- Long battery life - over 5000 measurements

**Applications**
- Measuring distance
- Measuring for material estimation
- Safety measurement on places, where hard to reach

**QM20**
- Area and volume functions
- Easy quick calculations of common tasks
- Pythagoras functions
- Provides indirect height or width for inaccessible areas

**QM55**
- Area, volume and Pythagoras functions
- Quick calculations including indirect height
- Tough and rugged, designed for construction
- Drop spec of 1.5 m (5 ft)

---

**LT58G Laser Tool**

**The Go-To Interior Laser**

**Key Features and Benefits**
- High visibility 360° green beam can be seen up to 100 ft (30m) and provides full room coverage with a single set up
- Compact and lightweight design allows easy and secure mounting at ceiling height
- 2 vertical beams spaced 90° apart for alignment and squaring
- Small compact hard case is easy to store on-site and easy to transport

**Applications**
- Ceilings
- Level, horizontal and vertical layout, square & plumb
- Square and plumb of interior walls

**QM Series**

**QM55**
- Area, volume and Pythagoras functions
  - Quick calculations including indirect height

**QM10**
- One-person operation allows safe measuring to difficult-to-reach or hazardous locations
- More accurate than traditional measuring tapes
- Small, compact - fits in your pocket or tool belt
- Illuminated display - easy to read in low light conditions
- Long battery life - over 5000 measurements

**Applications**
- Measuring distance
- Measuring for material estimation
- Safety measurement on places, where hard to reach

**QM20**
- Area and volume functions
  - Easy quick calculations of common tasks
- Pythagoras functions
  - Provides indirect height or width for inaccessible areas

**QM55**
- Area, volume and Pythagoras functions
  - Quick calculations including indirect height
- Tough and rugged, designed for construction
  - Drop spec of 1.5 m (5 ft)
INTERIOR LAYOUT SYSTEMS

QML800 / QML800G

X Marks the Spot

Key Features and Benefits

- An Android tablet wirelessly controls 2 lasers – self-contained network
- Intuitive, easy-to-use Android application – operators require no surveying background or training
- The user simply selects any point and the lasers rotate to create, within few seconds, a bright visible X where this point is located
- Desired points located extremely fast – within 5 seconds
- Points are accurate – to within 1/8” (3mm)
- Complicated shapes, arcs and curves are now easy to layout - no calculations required

Applications – Interior Layout

- Drywall
- HVAC
- Plumbing
- Electrical
- Warehouse, event, retail and factory layout

Applications – BuildView

- Includes BuildView application software that allows users to load the architectural file and select points directly from the file. No need for advanced point file creation.
- Optional license for BuildView Office enables users to open architectural files on a computer to view, analyze and plan layout and build.
- Most floors can be laid out in one day or less– complete before materials clutter the floor
- Typical 65% reduced layout time and 50% labor reduction over traditional layout methods
- No distance measure errors, no math errors
- In and out before other trades start storing materials on the floor
- Available with green laser beams

Applications

- Landscaping, building pads, sports fields, concrete flatwork, tennis courts
- Ideal for mini-excavators
- Footers, stem drains, utility, sewage
- General construction grade and depth control

Applications – BuildView Office

- Super bright LED display providing easily visible depth and elevation control to the user
- Easy to use with a simple push button set-up
- Ideal for both grading and excavating
- Built-in plumb indication makes grade checking simple and easy and avoids errors

Part No. Bateries Magnetic Mount
LR20 NiMH No
LR20-1 NiMH No

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

LR30W provides wireless link to RD20 remote display that can be placed in cab or in the operators peripheral vision so they concentrate on what is happening at the bucket or blade
- Robust and built for jobsite environment – 2 year warranty

 Applications

- Machine mounted grade checking
- Grading and leveling

Key Features and Benefits

- Three selectable accuracy settings allowing the user to rough grade through to final finish
- Full 360 degree reception – picking up the laser beam wherever you are working reducing downtime and eliminating errors
- Choice of batteries and mounting kit packages

Part No. Batteries Magnetic Remote Display
LR30W NiMH No RD20
LR30W-MM NiMH MM-1 RD20
LR30W-DM NiMH DM-20 RD20
LR30W-2 NiMH No No

MACHINE DISPLAY RECEIVERS

LR20 Receiver

Compact Receiver for Compact Machines

Applications

- Used on Dozers, Box Blades, Levelers

Key Features and Benefits

- Designed to be used on smaller machines – LR20-1 comes with smaller adjustable magnetic mount ideal for mini-excavators
- 360 degree reception and 8 inch (203 mm) vertical reception provide large working area and range making it easier to get to desired elevation without over-digging
- Rugged housing allows the receiver to be used in the toughest jobsite conditions

Part No. Batteries Magnetic
LR20 NiMH MM-1

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

Applications

- Designed to be used on smaller machines
- 360 degree reception
- 8 inch (203 mm) vertical reception
- Rugged housing

Applications

- Designed to be used on smaller machines
- 360 degree reception
- 8 inch (203 mm) vertical reception
- Rugged housing
**LR50 & LR50W Receiver**

**Blade Tilt and Plumb Indicator**

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

**Key Features and Benefits**
- **Plumb Indicator** – for fast, accurate grade checking when excavating.
- **Blade Tilt Indicator** – helps the operator keep the blade level for increased accuracy and productivity. Tilt can be set to an existing angle too providing more flexibility for the operator.
- **Center on-grade** provides an equal amount of grade information above and below grade when used on grading machines.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Batteries</th>
<th>Magnetic Mount</th>
<th>Remote Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>LR50</td>
<td>NiMH</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>LR50-MM</td>
<td>NiMH</td>
<td>MM-1</td>
<td></td>
</tr>
<tr>
<td>LR50-O</td>
<td>NiMH</td>
<td>DA-20</td>
<td></td>
</tr>
<tr>
<td>LR50-1</td>
<td>Alkaline</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

**LR60 & LR60W Receiver**

**Angle Compensation for Excavation**

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

**Key Features and Benefits**
- **Patented Angle Compensation Indicator** – automatically calculates and corrects the grade display for the angle of the dipper arm when excavating allowing the operator to check grade in multiple locations without moving the machine.
- **Center on-grade** provides an equal amount of grade information above and below on-grade when used with dozers, mini-graders, levellers and drag boxes.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Batteries</th>
<th>Magnetic Mount</th>
<th>Remote Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>LR60</td>
<td>NiMH</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>LR60-MM</td>
<td>NiMH</td>
<td>MM-1</td>
<td></td>
</tr>
<tr>
<td>LR60-O</td>
<td>Alkaline</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

**Receiver Accessories**

**Wireless Remote Display and Mounts**

**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.

**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.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RD20</td>
<td>RD20 Remote Display</td>
</tr>
<tr>
<td>RDMA-1</td>
<td>Mount, RD10 Swivel</td>
</tr>
<tr>
<td>010983</td>
<td>Cable, RD10 = RD20 Power, Lighter/power adapter</td>
</tr>
<tr>
<td>MM-1</td>
<td>Magnetic Mount for LR Receivers</td>
</tr>
<tr>
<td>DM-20</td>
<td>Bulldozer Bolt-On Mount</td>
</tr>
</tbody>
</table>

**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 Dozer 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.

**Product Application**

<table>
<thead>
<tr>
<th>Machine Type</th>
<th>Model</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backhoe</td>
<td>Use CR700 or LR20 or LR50</td>
<td>Excavating</td>
</tr>
<tr>
<td>Skid-steer Loader</td>
<td>Use CR700 or LR20 or LR30 or LR30W</td>
<td>Grading</td>
</tr>
<tr>
<td>Mini Excavator</td>
<td>Use CR700 or LR20 or LR50 or LR50W</td>
<td>Excavating</td>
</tr>
<tr>
<td>Skid-steer w/blade</td>
<td>Use LR30 or LR50 or LR30W/LR50W</td>
<td>Excavating</td>
</tr>
<tr>
<td>Smaller Dozer</td>
<td>Use LR30 or LR30W</td>
<td>Grading</td>
</tr>
<tr>
<td>Larger Excavator</td>
<td>Use LR60 or LR60W</td>
<td>Excavating</td>
</tr>
<tr>
<td>Larger Dozer</td>
<td>Use LR50 or LR50W</td>
<td>Excavating</td>
</tr>
</tbody>
</table>
Accessories and Components for Rotating Lasers

- **Cases**
  - All rotating lasers are housed in a jobsite-tough carrying case with cushioned pockets to hold accessories
  - 2161-2070: LL100/HV101 Small Carrying Case
  - 2161-2081: LL100/HV101 Logo System Case
  - 2161-2020: LL100, LL300, LL400 Small Carrying Case
  - 5301-0025: LL100, LL300, LL400 Carrying Case
  - 5301-0026: LL100, LL300, LL400 Carrying Case
  - 5301-0027: LL100, LL300, LL400 Carrying Case
  - 1282-1981: LL100/HV101 Large System Case
  - 1282-1970: LL100/HV101 Small Carrying Case

- **Remote Control**
  - RC402N Remote Control for LL300S, HV101, HV101G, LL100, LL100N
  - RC601 Remote Control for HV101, HV101G
  - RC602N Remote Control for GL6X2N, HV302, HV302G

- **Clamps**
  - M401 Tilt-Up Base
  - M403 Carrying Case
  - M406 Rod carried Laser Tool
  - M407 Tilt-Beacon

- **Wall Mounts**
  - M401 Wall mount for HV101
  - M402 Wall mount for HV101

- **Signal Transporter**
  - S760 increases radio-distance up to 25% of grade laser, pipe laser HV101 and LL300 lasers

- **Laser Glasses**
  - Q104007 Green Laser Glasses
  - Q104006 Red Laser Glasses

- **Laser Shutter**
  - SF803

- **Target**
  - M301 Rod Magnetic Visiline Target

- **Accessories and Components for Universal Laser**

- **Tri-Max** is a surveying grade tripod with certified accuracy

Heavy Duty Tripods

### Applications
- Lasers
- Instruments

### Key Features and Benefits
- Stable and accurate for most applications
- Choices of wood, aluminum and elevating base
- Telescopic legs allow setup at various heights
- 5/8 x 11 threaded post accommodates standard instruments and lasers
- 2161 packaged with LL500 kits

Medium Duty Tripods

### Applications
- Lasers
- Instruments

### Key Features and Benefits
- Sturdy and lightweight for many applications
- Telescopic legs allow setup at various heights
- 5/8 x 11 threaded post accommodates standard instruments and lasers

Specialty Tripod

### Applications
- Lasers
- Instruments

### Key Features and Benefits
- Machine control
- Adjustable legs, portability, heavy-duty construction ensure long field life.
ACCESSORIES - GRADE RODS

Aluminum Grade Rods

Applications
- Grading
- Leveling
- Sitework

Key Features and Benefits
- Aluminum leveling rods are made of light and durable alloy
- Telescopic sections are anodized and silk-screened with moisture-resistant ink
- Each rod section uses sturdy polycarbonate buttons that lock each section when extended; the height gauge is on the back side
- Each rod includes a protective bag

Fiberglass Grade Rods

Applications
- Grading
- Leveling
- Sitework

Key Features and Benefits
- CR Series Leveling Rods are perfect for laser detector mounting — no special brackets are required
- Rectangular shape with rounded back corners for better gripping
- SVR oval fiberglass rods are a surveying standard. Additional models available
- SVR 25 features a short collapsed length (9.6" [24.1 cm]) for convenient storage
- Fiberglass is non-conductive

Specialty Grade Rods

Applications
- Laser Grade Checking
- Leveling
- Sitework

Key Features and Benefits
- Direct Elevation (DE) rods are made of aluminum
- Laser DE rods feature a side rail for attaching optional bracket for laser receiver
- Continuous tapes are stainless steel
- Latch in back locks the band in any position to match a benchmark elevation
- Wear resistant Deklin end-rollers

Specifications

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Length</th>
<th>Sections</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>GR151</td>
<td>15 ft</td>
<td>5</td>
<td>Tenth</td>
</tr>
<tr>
<td>GR152</td>
<td>15 ft</td>
<td>5</td>
<td>Inch</td>
</tr>
<tr>
<td>GR153</td>
<td>5 m</td>
<td>5</td>
<td>Metric</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Length</th>
<th>Sections</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>730240</td>
<td>13 ft</td>
<td>4</td>
<td>Inches</td>
</tr>
<tr>
<td>730403</td>
<td>13 ft</td>
<td>4</td>
<td>Inches</td>
</tr>
</tbody>
</table>

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Laser Levels</th>
<th>Horizontal and Vertical Lasers</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL100N</td>
<td>LL300N</td>
</tr>
<tr>
<td>LL300S</td>
<td>LL500</td>
</tr>
<tr>
<td>HV101</td>
<td>HV302</td>
</tr>
<tr>
<td>HV302G</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Accuracy</th>
<th>Laser type / classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1/8 in @ 100 ft 3 mm @ 30 m (20 arc seconds)</td>
<td>639 mm, Class 2</td>
</tr>
<tr>
<td>3 3/2 in @ 100 ft 2.2 mm @ 30 m (15 arc seconds)</td>
<td>639 mm, Class 2</td>
</tr>
<tr>
<td>1 1/8 in @ 100 ft 3 mm @ 30 m (20 arc seconds)</td>
<td>639 mm, Class 3A/3R</td>
</tr>
<tr>
<td>5/8 in @ 100 ft 1.5 mm @ 30 m (10 arc seconds)</td>
<td>639 mm, Class 3A/3R</td>
</tr>
<tr>
<td>1 1/8 in @ 100 ft 3 mm @ 30 m (20 arc seconds)</td>
<td>639 mm, Class 3A/3R</td>
</tr>
</tbody>
</table>

Laser Display Receivers

<table>
<thead>
<tr>
<th>Number of Display Channels</th>
<th>Laser Display Receivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>LR20</td>
<td>LL100N, LL300S, LL500</td>
</tr>
<tr>
<td>LR30 (W)</td>
<td>LL100N, LL300S, LL500</td>
</tr>
<tr>
<td>LR50 (W)</td>
<td>LL100N, LL300S, LL500</td>
</tr>
<tr>
<td>LR60 (W)</td>
<td>LL100N, LL300S, LL500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Laser Type</th>
<th>Accuracy</th>
<th>NDA</th>
<th>Angle Compensation Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE Rod</td>
<td>± 0.5°</td>
<td>± 0.5°</td>
<td>± 0.5°</td>
</tr>
<tr>
<td>DE Rod</td>
<td>± 0.5°</td>
<td>± 0.5°</td>
<td>± 0.5°</td>
</tr>
<tr>
<td>DE Rod</td>
<td>± 0.5°</td>
<td>± 0.5°</td>
<td>± 0.5°</td>
</tr>
<tr>
<td>DE Rod</td>
<td>± 0.5°</td>
<td>± 0.5°</td>
<td>± 0.5°</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receiver:</td>
<td></td>
</tr>
<tr>
<td>Visible:</td>
<td></td>
</tr>
<tr>
<td>Water res.:</td>
<td></td>
</tr>
<tr>
<td>Battery Recharge Time</td>
<td>3-4 hrs</td>
</tr>
<tr>
<td>Battery Life</td>
<td>60 hrs</td>
</tr>
<tr>
<td>Beam Reception</td>
<td>250 ft</td>
</tr>
<tr>
<td>Vertical Reception</td>
<td>90 ft</td>
</tr>
<tr>
<td>Receiver Warranty</td>
<td>2 Years</td>
</tr>
</tbody>
</table>

VISIT OUR WEB SITE AT WWW.SPECTRALASERS.COM
**Automatic Levels**

<table>
<thead>
<tr>
<th>Specification</th>
<th>AL20M</th>
<th>AL24A</th>
<th>AL24M</th>
<th>AL28M</th>
<th>AL32A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Magnification</strong></td>
<td>20x</td>
<td>24x</td>
<td>28x</td>
<td>32x</td>
<td></td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>±2.5 mm*</td>
<td>±2.0 mm*</td>
<td>±1.5 mm*</td>
<td>±1.0 mm*</td>
<td></td>
</tr>
<tr>
<td><strong>Aperture</strong></td>
<td>30 mm</td>
<td>30 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Shutter focus</strong></td>
<td>0.6 m</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Compass damper</strong></td>
<td>Magnetic</td>
<td>Air</td>
<td>Magnetic</td>
<td>Air</td>
<td></td>
</tr>
<tr>
<td><strong>Warranty</strong></td>
<td>2 Year instant exchange</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Standard deviation according to DIN 18723 on one kilometer of stable leveling

**Det-2 Telescope**

<table>
<thead>
<tr>
<th>Specification</th>
<th>DET-2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Telescope</strong></td>
<td>Erect</td>
</tr>
<tr>
<td><strong>Optical Plumbet</strong></td>
<td>Erect</td>
</tr>
<tr>
<td><strong>Angle Measuring System</strong></td>
<td>Optical Plummet</td>
</tr>
<tr>
<td><strong>Viola</strong></td>
<td>Circular</td>
</tr>
<tr>
<td><strong>Button Functions</strong></td>
<td>ON / OFF</td>
</tr>
<tr>
<td><strong>Other Specs</strong></td>
<td>Power</td>
</tr>
</tbody>
</table>

**QM Series Quick Measure Lasers**

<table>
<thead>
<tr>
<th>Specification</th>
<th>GM10</th>
<th>GM20</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Range</strong></td>
<td>30 m (100 ft)</td>
<td>50 m (165 ft)</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>±2.0 mm (± 1/12 in)</td>
<td>±1.5 mm (± 1/16 in)</td>
</tr>
<tr>
<td><strong>Units of measure</strong></td>
<td>m, ft, in, ft-in</td>
<td>m, ft, in</td>
</tr>
<tr>
<td><strong>Automatic shut off</strong></td>
<td>10 minutes</td>
<td>3 minutes</td>
</tr>
<tr>
<td><strong>Battery life</strong></td>
<td>5000+ measures</td>
<td>1500 measures</td>
</tr>
<tr>
<td><strong>Power supply</strong></td>
<td>2 x AAA 1.5V</td>
<td>2 x AAA 1.5V</td>
</tr>
<tr>
<td><strong>Drop performance</strong></td>
<td>NA</td>
<td>1.5 m (5 ft)</td>
</tr>
<tr>
<td><strong>Dust &amp; Water resistance</strong></td>
<td>IP54</td>
<td>IP54</td>
</tr>
<tr>
<td><strong>Laser type / power</strong></td>
<td>620-690nm visible red / &lt; 1 mW</td>
<td>635nm visible red / &lt; 1 mW</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>43 x 24 x 110 mm (1.7 x 0.9 x 4.3 in)</td>
<td>48 x 24 x 166 mm (1.9 x 0.9 x 6.6 in)</td>
</tr>
<tr>
<td><strong>Weight with batteries</strong></td>
<td>74 g (2.6 oz)</td>
<td>79 g (2.8 oz)</td>
</tr>
<tr>
<td><strong>Warranty</strong></td>
<td>1 Year</td>
<td>3 Years</td>
</tr>
</tbody>
</table>

**QM Series Laser Applications**

- **Laser Pointers**
  - LP51
  - LT20
  - LT52
  - LT52G
- **Line Generator**
  - LT20GS
  - LT52G
  - LT56
  - LT58G
- **Handheld Distance Measuring Device**
  - GM10
  - GM20
  - GM55
- **Laser Levels**
  - LL100N
  - LL200N
  - LL300S
  - LL500
- **Laser Levels**
  - AL20
  - AL30
  - AL40
  - AL28
  - AL32
- **Horizontal Vertical Lasers**
  - HV101
  - HV302
  - HV302G
- **Grade & Universal Lasers**
  - GL412N
  - GL422N
  - GL612N
  - GL622N
  - GL622IR
  - GL710
  - GL720
  - GL722
  - UL633N

**Specifications**

- **Magnification**
- **Accuracy**
- **Aperture**
- **Shutter focus**
- **Compass damper**
- **Warranty**

**DET-2 Telescope**

- **Telescope**
- **Optical Plumbet**
- **Angle Measuring System**
- **Viola**
- **Button Functions**
- **Other Specs**

**QM Series Quick Measure Lasers**

- **Range**
- **Accuracy**
- **Units of measure**
- **Automatic shut off**
- **Battery life**
- **Power supply**
- **Drop performance**
- **Dust & Water resistance**
- **Laser type / power**
- **Dimensions**
- **Weight with batteries**
- **Warranty**

**Spectra Precision Laser Applications**

- **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