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
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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 our latest products, with unique features that will make your projects more efficient and your workers more productive on a daily basis. All of the information in the catalog – and more – can also be found on our free, dedicated mobile App. Search for Spectra Laser on either Google Play Store or Apple App Store. The App contains videos, as well as product manuals and user guides, all easily accessible on any smart device.

Our industry expertise has allowed us to combine the most complex and innovative laser technology with unparalleled ease of use. Configure your Spectra Precision laser in a few seconds and get to work.

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.

For their jobsite and workers’ needs.

and guidance to help construction firms select the best solution

Precision, so they can provide industry-best consultation, support

training in the latest innovative technologies directly from Spectra

Bob Studebaker with the 1st rotating laser in the world
Rotolite 1st rotating laser for interior work
945U 1st electronic automatic self-leveling rotating laser with slope adjustment
EL-1 1st electronic automatic self-leveling rotating laser level with a laser diode still produced.
Pipemaster 1st pipe laser with internal battery and infrared remote control

for 1945U

INTRODUCTION
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 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).
**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, Plane-Lok 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 up 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.

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**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 top 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

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**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 & LL100N-1 | HR320 & HR320 | GR151 Tenths & GR151 Tenths | No & No | Small Case
LL100N-2 & LL100N-3 | HR320 & HR320 | GR152 Inches & GR153 Metric | No & No | Small 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.
- Available 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 | GR151 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.

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**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.
- 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 | HL450 | No | 4 D Alkaline | No | No | Small Case
LL300S-4 | HL450 | No | Rechargeable Pack* | No | No | Small Case
LL300S-7 | HL760 | No | 4 D Alkaline | No | No | Small Case
LL300S-17 | HL760 | No | 4 D Alkaline | 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.
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
- Excavating, digging footings, and septic tanks with CR600 receiver
- Sub-base leveling with skid steer loaders and CR600 receiver
- Longer range machine control applications

Machine Control Applications
- Checking/setting elevations, concrete forms, footings, and foundations for medium to large commercial jobs
- 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 Grade Rod Tripod Wall Mount Remote Case
HV101-4 HR150U 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.

Longest Range, Highly Accurate Leveling Solution

HV101

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
- Comes with a choice of HL700 or CR600 receivers allowing you to choose the best option to suit your application

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

Machine Control Applications
- Checking/setting elevations, concrete forms, footings, and foundations for medium to large commercial jobs
- 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 Rod Tripod Retail Package
LL500 HL700 4 D Alkaline No No No
LL500-1 HL700 4 D Alkaline GR151 Tenths 2161 Yes
LL500-2 HL700 4 D Alkaline GR152 Inches 2161 Yes
LL500-3 HL700 4 D Alkaline GR153 Metric 2161 Yes
LL500-4 HL700 NiMH No No No
LL500-10 CR600 4 D Alkaline No No No
LL500-24 CR600 NiMH No No No

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

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Receiver</th>
<th>Wall Mount</th>
<th>Power</th>
<th>Ceiling Target</th>
<th>Remote</th>
<th>Rod</th>
<th>Tripod</th>
<th>Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>HV302</td>
<td>HL760</td>
<td>No</td>
<td>4 D Alkaline</td>
<td>No</td>
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<td>No</td>
<td>No</td>
<td>Small Case</td>
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<td>HV302-1</td>
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<td>M302</td>
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<td>1176</td>
<td>RC402N</td>
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<td>No</td>
<td>Small Case</td>
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<tr>
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<td>HR150U</td>
<td>M302</td>
<td>Rechargeable Pack*</td>
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<td>HL760</td>
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<td>Rechargeable Pack*</td>
<td>1176</td>
<td>RC402N</td>
<td>No</td>
<td>No</td>
<td>Small Case</td>
</tr>
</tbody>
</table>

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

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**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 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
- Rotor vial for easy and accurate vertical plumb set-up

**Applications**
- Interior, light to medium commercial and residential construction
- Squaring/layout
- Leveling and aligning of interior walls
- Installation of ceilings and raised floors
- Interior finishing work
- Vertical alignment
- Plumb

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Receiver</th>
<th>Wall Mount</th>
<th>Ceiling Target</th>
<th>Remote</th>
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<td>HR150U</td>
<td>M302</td>
<td>Yes</td>
<td>RC402N</td>
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</tbody>
</table>

All part numbers include HV302G laser glasses, transmitter, case and NiMH battery pack with charger.
**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 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
- Grading and excavating
- Driveways and ramps
- Trenching
- Sport fields, tennis courts (GL422N only)
- Steep slope road embankments and ditch banks

**GL612N / GL622N**

**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 (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
- Automatic Axis Alignment (GL622N only) is easy to setup for increased accuracy.
- Radio communication between the laser and HL760 Laserometer allow advanced features and remote display capabilities
- Long operating radio range - 490 ft (150 m)
- 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

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

**General Construction Applications**

**HL760 Applications**

**Part No.** | **Receiver** | **Clamp** | **Remote**
---|---|---|---
GL412N / GL422N | HL760 | C70 Adapter for receiver | RC402N
GL412N-14 / GL422N-14 | CR600 | C30 Rod Clamp and C51 Magnetic Mount | RC402N

All part numbers include GL412N/422N transmitter, case and NiMH rechargeable battery pack and charger.

**Part No.** | **Receiver** | **Clamp** | **Remote**
---|---|---|---
GL612N / GL622N | HL760 | C70 Adapter for receiver | RC602N

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

**Visit our web site at www.spectralasers.com**
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

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Grade</th>
<th>Receiver</th>
<th>Clamp</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTO-GL710</td>
<td>Single</td>
<td>HL700</td>
<td>CTO-700 Adapter for Receiver</td>
</tr>
<tr>
<td>CTO-GL710-1D</td>
<td>Single</td>
<td>CR600</td>
<td>CSL Adapter for Receiver and CSL Mag. Mount</td>
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<tr>
<td>CTO-GL720</td>
<td>Dual</td>
<td>HL700</td>
<td>CTO-700 Adapter for Receiver</td>
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<tr>
<td>CTO-GL720-1D</td>
<td>Dual</td>
<td>CR600</td>
<td>CSL Adapter for Receiver and CSL Mag. Mount</td>
</tr>
<tr>
<td>CTO-GL722</td>
<td>Dual</td>
<td>CR600</td>
<td>CSL Adapter for Receiver and CSL Mag. Mount</td>
</tr>
<tr>
<td>CTO-GL722-IR</td>
<td>Dual Infrared</td>
<td>CR600</td>
<td>CSL Adapter for Receiver and CSL Mag. Mount</td>
</tr>
</tbody>
</table>

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

Applications

- Levelling concrete forms and footers
- Vertical alignment for anchor bolts, building axis, facades and form alignment
- Dual slope grading and steep slope excavation
- 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 | Rod Clamps with Bubble Vial | Remote |
<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UL633N</td>
<td>2x HL700</td>
<td>with adapter with rubber strap</td>
<td>RC603N</td>
<td></td>
</tr>
</tbody>
</table>

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

**Compact and Powerful**

**Key Features and Benefits**

- 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 it levels, you work.
- Bright visible beam that works up to 500ft (150m)
- RO803 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.
- The DG613(G) 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 DG613(G) 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

**Applications**

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

**Part No.**

<table>
<thead>
<tr>
<th>DG613</th>
<th>DG613 Laser, 1248 invert plate 8 inch (200mm), RO803 IR/Radio Remote Control, 956 target</th>
</tr>
</thead>
<tbody>
<tr>
<td>DG613-5</td>
<td>DG613 Laser, 1230 large invert plate, 1239 vertical pole, RO803 IR/Radio Remote Control, 956 target</td>
</tr>
<tr>
<td>DG613-6</td>
<td>DG613 Laser, 1237 large invert plate (metric), 1239 vertical pole, RO803 IR/Radio Remote Control, 956 target</td>
</tr>
<tr>
<td>DG613-13</td>
<td>DG613 Laser – Over-the-Top Package, 1263 precision scope, RO803 IR/Radio Remote Control, P25 power outlet charger, 2 x NiMH battery pack and 1 x charger</td>
</tr>
<tr>
<td>DG613G</td>
<td>DG613G Laser, 1248 invert plate 8 inch (200mm), RO803 IR/Radio Remote Control, 956G target</td>
</tr>
</tbody>
</table>

**DG813 DialGrade**

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

**Key Features and Benefits**

- 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 it levels, you work.
- Bright visible beam that works up to 500ft (150m)
- RC803 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.
- 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 Match – a great tool for checking that pipe has been installed to the correct grade or for finding the grade of existing pipe work. Can also be used to calculate the grade between manholes.
    - SpotClick – can be used to lock 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.

**Applications**

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

**Part No.**

<table>
<thead>
<tr>
<th>DG813</th>
<th>DG813 Laser, 1248 invert plate 8 inch (200mm), RO803 IR/Radio Remote Control, SF803 Spot Finder w/pole adapter &amp; target plate, 956 target, Transporter ST802</th>
</tr>
</thead>
<tbody>
<tr>
<td>DG813-3</td>
<td>DG813 Laser, 1230 large invert plate, 1239 vertical pole, RO803 IR/Radio Remote Control, SF803 Spot Finder w/pole adapter &amp; target plate, 956 target, Transporter ST802</td>
</tr>
<tr>
<td>DG813-5</td>
<td>DG813 Laser, 1230 large invert plate, 1239 vertical pole, RO803 IR/Radio Remote Control, SF803 Spot Finder w/pole adapter &amp; target plate, 956 target, Transporter ST802</td>
</tr>
<tr>
<td>DG813-6</td>
<td>DG813 Laser, 1237 large invert plate (metric), 1239 vertical pole, RO803 IR/Radio Remote Control, SF803 Spot Finder w/pole adapter &amp; target plate, 956 target, Transporter ST802</td>
</tr>
</tbody>
</table>

**Part No.**

| DG813-13 | DG613 Laser – Over-the-Top Package, 1263 precision scope, RO803 IR/Radio Remote Control, P25 power outlet charger, 2 x NiMH battery pack and 1 x charger |
| DG613G | DG613G Laser, 1248 invert plate 8 inch (200mm), RO803 IR/Radio Remote Control, 956G target |
**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 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 C61 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
- The perfect entry level receiver for smaller job sites
- Includes C61 rod clamp

**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 job site
- Automatic power shutoff (after 30 minutes) reduces annual battery cost
- C45 Rod Clamp included
Digital readout and robust performance

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 a 2 inches (± 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

HL750 Radio Digital Readout Receiver
Digital readout and robust performance

Applications
- Checking elevations
- Basement excavation
- Septic tank installation
- Checking footings and foundations
- Setting forms
- Checking sub-base materials
- Screeding concrete
- Vertical alignment (with laser in vertical model)

Key Features and Benefits
- The HL750 with radio communication is a stand alone receiver that works with all red beam laser transmitters providing a digital readout for elevation control in millimetres or fractional inches, eliminating the need to get “on-grade” when taking measurements.
- The internal radio allows the receiver to be paired with a second HL750 for long range wireless remote display or monitoring – even when the second receiver is out of sight. This can be particularly important when using a laser for vertical alignment as the paired receiver can be given to a crane operator to see what is being seen at ground level when putting steel or building facades into position. It also works with the GL612, GL622 and UL633 to provide advanced functions such as grade matching, axis alignment and PlaneLoK.
- 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.
- Anti-strobe sensor stops construction strobe lights from setting off the receiver, reducing costly errors.
- Will take a drop of up to 10' (3m) onto concrete for reduced downtime.
- C70 Rod Clamp comes with patented reversible jaw to allow a more solid fix to round or square rods.

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 rections
- 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 30 ft (9.1 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 CSI 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 (CR600 includes rod clamp and magnetic mount)**
- Optional Bubble Vial Kit for HR150U, HR220, HR320 and HL450 receivers includes C70 Adapter for receiver w/ Bubble Vial PN C70
- C51 Magnetic Mount included with CR600 receiver
- C50 Adapter included with CR600 receiver

**Electronic Fieldbook App**
Simplifies Level Recording

**Key Features**
- Choose your workflow – Height of Collimation, Rise & Fall or Cut & Fill
- Guides you through the workflow, making it simple and easy to use
- Input your levels and the calculations are done for you – eliminating errors with calculations
- Closure checks performed automatically – no math required
- Multiple methods for export (Google Drive, Email, Dropbox, Bluetooth)
- Send messages to the rod man direct from the app to improve communication and eliminate hand signals
- Available in iOS or Android
- No need to purchase level books – permanent record for all your projects

**User Benefits**
- Input your readings and all the math is taken care of – eliminating errors
- Improve communication with rod-man
- Permanent record of every job, including GPS position of the jobsite that can be sent or shared via multiple methods
- Simple and easy to use

**Applications**
- All level work – Height of Collimation, Rise & Fall and Cut & Fill
- Use with laser (Cut & fill) or auto-level for all applications
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

AL20M

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Power/Damp</th>
<th>Tripod</th>
<th>Rod</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL20M-1</td>
<td>20X / Magnetic</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>AL20M-2</td>
<td>20X / Magnetic</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>AL20M-3</td>
<td>20X / Magnetic</td>
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AL24A, AL24M

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<tr>
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<td>24X / Air</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>AL24A-3</td>
<td>24X / Air</td>
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<td>No</td>
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<tr>
<td>AL24M-1</td>
<td>24X / Magnetic</td>
<td>No</td>
<td>No</td>
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<tr>
<td>AL24M-2</td>
<td>24X / Magnetic</td>
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AL28M

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AL32A

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</thead>
<tbody>
<tr>
<td>AL32A-1</td>
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<td>AL32A-2</td>
<td>32X / Air</td>
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<tr>
<td>AL32A-3</td>
<td>32X / Air</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

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 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
**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.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Points</th>
<th>Bracket</th>
<th>Target</th>
<th>Case</th>
<th>Batteries</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP51</td>
<td>5</td>
<td>Magnetic</td>
<td>Red Ceiling/Floor</td>
<td>Soft Pouch</td>
<td>2 x AA Alkaline</td>
</tr>
<tr>
<td>LP51G</td>
<td>5</td>
<td>Magnetic</td>
<td>Green Ceiling/Floor</td>
<td>Soft Pouch</td>
<td>2 x AA Alkaline</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Magnetic Mount / Ceiling Bracket</th>
<th>Target</th>
<th>Case</th>
<th>Batteries</th>
</tr>
</thead>
<tbody>
<tr>
<td>LT20</td>
<td>1215-1110</td>
<td>Red Ceiling/Floor</td>
<td>Soft Pouch</td>
<td>3 x AA Alkaline</td>
</tr>
<tr>
<td>LT20G</td>
<td>1215-1110</td>
<td>Green Ceiling/Floor</td>
<td>Soft Pouch</td>
<td>4 x AA Alkaline</td>
</tr>
</tbody>
</table>
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 plane 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
- General construction elevation control with HR220 receiver
- Exterior building decks, patios, columns, & posts

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

LT52R / LT52G Point & Line Laser Tool
The Tool for All Trades

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 steel columns, wall studs or any steel surface
- HR220 receiver can be added for exterior applications for maximum jobsite versatility

Applications
- Level, horizontal and vertical layout, square, & plumb
- Building, 90° 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, & posts

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

VISIT OUR WEB SITE AT WWW.SPECTRALASERS.COM
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
- Universal mounting accessory fits all main ceiling track styles including shadow track
- Mounting accessory includes height adjustment, rotational fine adjustment and magnetic mounting for steel columns
- Laser has both camera tripod threads (1/4") and standard instrument threads (5/8 x 11)
- Simple Operation and set up – automatic self levelling, constant beam, no rotation

Applications
- Ceilings
- Level, horizontal and vertical layout, square & plumb
- Square and plumb of interior walls
- Drywall track layout and installation
- Cabinet and trim installation, finish carpentry
- The intersection of planes can be used for point transfer floor to ceiling, front to back and side to side

Applications
- Ceilings
- Level, horizontal and vertical layout, square & plumb
- Square and plumb of interior walls
- Drywall track layout and installation
- Cabinet and trim installation, finish carpentry
- The intersection of planes can be used for point transfer floor to ceiling, front to back and side to side

Part No. Ceiling Bracket Target Case Mount Spacer Batteries
LT58G 1215-1650 Green Ceiling/Floor 1215-1650 Hard Case 1215-1640 1215-1650 Lithium-Ion, Charger 1215-1310

QM Series
Quick Measure Lasers
Digital Distance Measuring

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

Applications
- Measuring distance
- Measuring for material estimation

QM55
Area and volume functions
- Easy quick calculations of common tasks

Pythagoras functions
- Provides indirect height or width for inaccessible areas

QM75
Small and compact
- Fits in your pocket, easy to carry and transport

Simple to operate
- Press a single button and measure

QM95
High accuracy
- ±1.0 mm (+1/4 inch) accuracy for precise work

Long range measurements
- 200 m (650 feet) range

Part No. Ceiling Bracket Target Case Mount Spacer Batteries
QM55 1215-1650 Green Ceiling/Floor 1215-1650 Hard Case 1215-1640 1215-1650 Lithium-Ion, Charger 1215-1310

QM75 1215-1560 Hard Case 1215-1550 Lithium-Ion, Charger 1215-1310

QM95 1215-1570 Hard Case 1215-1580 Lithium-Ion, Charger 1215-1310
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 new easy to layout - no calculations required

Applications – Interior Layout
- Drywall
- HVAC
- Plumbing
- Electrical
- Warehouse, retail and factory layout

Applications – Interior Layout Systems
- Ideal for mini-excavators
- Footers, stem drains, utility, sewage
- General construction grade and depth control

LR20 Receiver
Compact Receiver for Compact Machines

Applications
- Landscaping, building pads, sports fields, concrete flatwork, tennis courts
- Machine mounted grade checking
- Footers, stem drains, utility, sewage
- General construction grade and depth control

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

LR30 & LR30W Receiver
Used on Dozers, Box Blades, Levelers

Applications
- Landscaping, building pads, sports fields, concrete flatwork, tennis courts
- Ideal for mini-excavators
- Three selectable accuracy settings allowing the user to rough grade through to finish level
- 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
- LR30W provides wireless link to RD20 remote display that can be placed in cab 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

Part No. Batteries Magnetic Mount Remote Display
LR30 NiMH No
LR30-MM NiMH MM-1 RD20
LR30-DM NiMH DM-20 RD20
LR30-1 Alkaline No

LR30W NiMH No
LR30W-MM NiMH MM-1 RD20
LR30W-DM NiMH DM-20 RD20
LR30W-2 NiMH No No
**LR50 & LR50W Receiver**

**Blade Tilt and Plumb Indicator**

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

**Key Features and Benefits**
- **Plumb Indication** – for fast, accurate grade checking when excavating
- **Blade Tilt Indication** – 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

- **Offset on-grade** provides more range above the on-grade position using the entire receiver to avoid over-digging
- **LR50W provides wireless link to RD20 remote display in cab for easier reference by the operator**
- **Robust and built for jobsite environment –** for fast, accurate grade checking when excavating

**Part No. Batteries Magnetic Mount Remote Display**

<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>RD20</td>
</tr>
<tr>
<td>LR50-MM</td>
<td>NiMH</td>
<td>MM-1</td>
<td>RD20</td>
</tr>
<tr>
<td>LR50-DM</td>
<td>NiMH</td>
<td>DM-20</td>
<td>RD20</td>
</tr>
<tr>
<td>LR50-2</td>
<td>NiMH</td>
<td></td>
<td>RD20</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 Indication** – 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
- **Check grade with the dipper arm extended to or retracted up to 30 degrees**
- **Four selectable accuracies – allowing for rough or precise work**
- **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
- **Offset on-grade** provides more range above the on-grade position using the entire receiver to avoid over-digging
- **Robust and built for jobsite environment –** for fast, accurate grade checking when excavating

**Part No. Batteries Magnetic Mount Remote Display**

<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>RD20</td>
</tr>
<tr>
<td>LR60-MM</td>
<td>NiMH</td>
<td>MM-1</td>
<td>RD20</td>
</tr>
<tr>
<td>LR60-1</td>
<td>Alkaline</td>
<td></td>
<td>RD20</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 backsides and excavators**

**Part No. Description**

<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>RDA-1</td>
<td>Mount, RD10 Senst</td>
</tr>
<tr>
<td>010983</td>
<td>Cable, RD20 + 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.**
**ACCESSORIES - RECEIVERS**

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

- **RC603 Remote Control (for GL6X2N)**
- **RC402N Remote Control (for LL300S)**
- **RC601 Remote Control (for HV101)**
- **M401 Token Base**
- **M316 Rotation Tray for Laser Tool**
- **TR10 Mini Tripod for Laser Tools**

**Remote Control**

- **RC603 Remote Control for HV101, HV301G, GL4X2N, GL6X2N, LL500**
- **RC402N Remote Control for LL300S, HV302, HV302G**
- **RC401N Remote Control for GL300, HV302, HV302G**

**Laser Glasses**

- **Q100206 Red Laser Glasses**
- **Q100207 Green Magnetic Visiline Target**
- **Q104865 Adapter for SF601**

**Target**

- **HL700 Laser Visor to measure and display beam location**
- **936 Adjustable Pole Adapter**
- **Q1002 Adaptive Spot Finder**
- **ST802 Transporter (DG813)**

**Accessories and Components for Universal Laser**

- **1238 Extra Long Laser Beam Plate**
- **1244 Tilt Base**
- **1246/1247 Medium Pipe Target**
- **1228 Extended Height Vertical Pole**
- **P24 Pole Adapter for Spot Finder (SF803)**

**Included Pipe Laser Accessories**

- **RC603 Remote**
- **90550 Fiberglass (20 ft, 6 m)**
- **SF803 Spot Finder for manual and automatic detection**
- **SF802K Adapter for SF801 allows various setups**

**Optional Pipe Laser Accessories**

- **Q104025 Aluminum LL100N, LL300S/N, HV101**
- **Q104025 Aluminum Extends from 3 ft 6 in to 6 ft 1 in (106 cm to 185 cm)**
- **Q104025 Aluminum Extends from 4 ft 3 in to 7 ft 6 in (130 cm to 228 cm)**
- **Q104025 Fiberglass Extends to 5.9 ft (1.8 m)**

**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
  - Machine control
- **Key Features and Benefits**
  - Tri-Max is a surveying grade tripod with certified accuracy
  - Adjustable legs, portability, heavy-duty construction ensure long field life.
**Aluminum Grade Rods**

**Applications**
- Grading
- Leveling
- Sitework
- Landscaping
- Foundations
- Sitework
- Leveling
- Grading

**Key Features and Benefits**
- Aluminum leveling rods are made of a light and durable alloy
- Rectangular shape with rounded back corners for better gripping
- Each rod includes a protective bag

**Specifications**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Length</th>
<th>Sections</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>GL151</td>
<td>15 ft</td>
<td>5</td>
<td>Tents</td>
</tr>
<tr>
<td>GL152</td>
<td>15 ft</td>
<td>5</td>
<td>Inches</td>
</tr>
<tr>
<td>GL153</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>732340</td>
<td>13 ft</td>
<td>4</td>
<td>Inches</td>
</tr>
<tr>
<td>730440</td>
<td>13 ft</td>
<td>4</td>
<td>Inches</td>
</tr>
</tbody>
</table>

**Fiberglass Grade Rods**

**Applications**
- Grading
- Leveling
- Sitework
- Landscaping
- Foundations
- Sitework
- Leveling
- Grading

**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 (9.9 x 1.2 inches) for convenient storage
- Fiberglass is non-conductive

**Specifications**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Length</th>
<th>Model</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>92021</td>
<td>13 ft</td>
<td>CR</td>
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<tr>
<td>92022</td>
<td>13 ft</td>
<td>CR</td>
<td>Inches</td>
</tr>
<tr>
<td>92041</td>
<td>16 ft</td>
<td>CR</td>
<td>Tents</td>
</tr>
<tr>
<td>92042</td>
<td>16 ft</td>
<td>CR</td>
<td>Inches</td>
</tr>
<tr>
<td>92031</td>
<td>20 ft</td>
<td>CR</td>
<td>Tents</td>
</tr>
<tr>
<td>92032</td>
<td>20 ft</td>
<td>CR</td>
<td>Inches</td>
</tr>
<tr>
<td>98010</td>
<td>25 ft</td>
<td>SVR</td>
<td>Tents</td>
</tr>
<tr>
<td>98011</td>
<td>25 ft</td>
<td>SVR</td>
<td>Inches</td>
</tr>
<tr>
<td>98012</td>
<td>7.6 m</td>
<td>SVR</td>
<td>Metric</td>
</tr>
</tbody>
</table>

**Specialty Grade Rods**

**Applications**
- Laser Grade Checking
- Grading
- Leveling
- Sitework
- Landscaping
- Foundations
- Sitework
- Leveling
- Grading

**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 tapers are stainless steel
- Groove allows in back locks the band in any position to match a benchmark elevation
- Wear resistant Delrin® end-rollers

**Specifications**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Length</th>
<th>Sections</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTO-0319-4860</td>
<td>20 ft</td>
<td>2</td>
<td>Tents</td>
</tr>
<tr>
<td>CTO-0319-4320</td>
<td>3 m</td>
<td>2</td>
<td>Metric</td>
</tr>
<tr>
<td>CTO-0319-4310</td>
<td>15 ft</td>
<td>2</td>
<td>Tents</td>
</tr>
<tr>
<td>CTO-0319-4330</td>
<td>3 m</td>
<td>2</td>
<td>Metric</td>
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</table>
### SPECIFICATIONS

#### Grade & Universal Lasers

<table>
<thead>
<tr>
<th>Laser Type / classification</th>
<th>GL412N/422N</th>
<th>GL612N / GL622N</th>
<th>UL633N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>1/36 in at 100 ft, 1.5 mm at 30 m (10 arc seconds)</td>
<td>1/36 in at 100 ft, 1.5 mm at 30 m (10 arc seconds)</td>
<td>1/36 in at 100 ft, 1.5 mm at 30 m (10 arc seconds)</td>
</tr>
<tr>
<td>Linearity</td>
<td>0.001%</td>
<td>0.001%</td>
<td>0.001%</td>
</tr>
<tr>
<td>Laser mode</td>
<td>1/36 in at 50 ft, 1.5 mm at 10 m (15 arc seconds)</td>
<td>1/36 in at 50 ft, 1.5 mm at 10 m (15 arc seconds)</td>
<td>1/36 in at 50 ft, 1.5 mm at 10 m (15 arc seconds)</td>
</tr>
<tr>
<td>Battery type</td>
<td>Lithium-Ion</td>
<td>Lithium-Ion</td>
<td>Lithium-Ion</td>
</tr>
<tr>
<td>Battery life</td>
<td>20 hrs</td>
<td>20 hrs</td>
<td>20 hrs</td>
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</table>

#### Pipe Lasers

<table>
<thead>
<tr>
<th>Grade range</th>
<th>DG813</th>
<th>DG613/64613G</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-1/8°</td>
<td>-1/8°</td>
</tr>
</tbody>
</table>

#### Laser Tools

<table>
<thead>
<tr>
<th>Laser Tools</th>
<th>LPS1 / LPS1G</th>
<th>LT20 / LT20G</th>
<th>LT52R / LT52G</th>
<th>LT56</th>
<th>LT58G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-level range</td>
<td>1° from level</td>
<td>1° from level</td>
<td>1° from level</td>
<td>1° from level</td>
<td>1° from level</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Working range - Visible</th>
<th>100 ft (30m)</th>
<th>100 ft (30m)</th>
<th>200 ft (61m)</th>
<th>80 ft (25 m)</th>
<th>100 ft (30 m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>With HR220 detector</td>
<td>N/A</td>
<td>N/A</td>
<td>100 ft (30m)</td>
<td>100 ft (30m)</td>
<td>120 ft (36m)</td>
</tr>
<tr>
<td>Accuracy</td>
<td>± 1/16 in @ 100 ft, 1.5 mm at 10 m</td>
<td>± 1/16 in @ 50 ft, 1.5 mm at 10 m</td>
<td>± 1/16 in @ 50 ft, 1.5 mm at 10 m</td>
<td>± 1/16 in @ 50 ft, 1.5 mm at 10 m</td>
<td>± 1/16 in @ 50 ft, 1.5 mm at 10 m</td>
</tr>
<tr>
<td>Battery type</td>
<td>2 x AA</td>
<td>2 x AA</td>
<td>2 x AA</td>
<td>2 x AA</td>
<td>2 x AA</td>
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<tr>
<td>Battery life</td>
<td>20 hrs / 10 hrs</td>
<td>20 hrs / 10 hrs</td>
<td>20 hrs / 10 hrs</td>
<td>20 hrs / 10 hrs</td>
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<tr>
<td>Dimensions</td>
<td>3.54x4.2x4.6</td>
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<td>3.54x4.2x4.6</td>
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<td>3.54x4.2x4.6</td>
</tr>
<tr>
<td>Weight</td>
<td>0.78 lbs (355 g)</td>
<td>0.78 lbs (355 g)</td>
<td>0.78 lbs (355 g)</td>
<td>0.78 lbs (355 g)</td>
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<tr>
<td>Warranty</td>
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<td>3 years</td>
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### HR / HL Laser Receivers

<table>
<thead>
<tr>
<th>HR150U</th>
<th>HR220</th>
<th>HR320</th>
<th>HL450</th>
<th>HL700</th>
<th>HL750</th>
<th>HL760</th>
<th>HL760U</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working range</td>
<td>3 - 100 ft</td>
<td>3 - 100 ft</td>
<td>3 - 450 ft</td>
<td>3 - 450 ft</td>
<td>3 - 1500 ft</td>
<td>3 - 1500 ft</td>
<td>3 - 1500 ft</td>
</tr>
<tr>
<td>Laser Detection</td>
<td>2 x (50 mm)</td>
<td>2 x (50 mm)</td>
<td>4 x (100 mm)</td>
<td>4 x (100 mm)</td>
<td>5 x (127 mm)</td>
<td>5 x (127 mm)</td>
<td>5 x (127 mm)</td>
</tr>
<tr>
<td>Radio Working range</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Accuracy Range (Deadhead)</td>
<td>±1.2 in @ 100 ft, 1.5 mm at 30 m</td>
<td>±1.2 in @ 100 ft, 1.5 mm at 30 m</td>
<td>±1.2 in @ 100 ft, 1.5 mm at 30 m</td>
<td>±1.2 in @ 100 ft, 1.5 mm at 30 m</td>
<td>±1.2 in @ 100 ft, 1.5 mm at 30 m</td>
<td>±1.2 in @ 100 ft, 1.5 mm at 30 m</td>
<td>±1.2 in @ 100 ft, 1.5 mm at 30 m</td>
</tr>
<tr>
<td>Linear Scale / Linear Alert</td>
<td>±2 x AA</td>
<td>±2 x AA</td>
<td>±2 x AA</td>
<td>±2 x AA</td>
<td>±2 x AA</td>
<td>±2 x AA</td>
<td>±2 x AA</td>
</tr>
</tbody>
</table>

### GL700 Series Lasers

<table>
<thead>
<tr>
<th>Model</th>
<th>GL710</th>
<th>GL720</th>
<th>GL722</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Range (Rotary)</td>
<td>3,000 ft (900 m)</td>
<td>3,000 ft (900 m)</td>
<td>3,000 ft (900 m)</td>
</tr>
<tr>
<td>Axis Grade Range X</td>
<td>NA</td>
<td>-10 to +10°</td>
<td>-10 to +10°</td>
</tr>
<tr>
<td>Axis Grade Y</td>
<td>-0.5 to +25°</td>
<td>-0.5 to +25°</td>
<td>-0.5 to +25°</td>
</tr>
<tr>
<td>Grade Resolution</td>
<td>0.001°</td>
<td>0.001°</td>
<td>0.001°</td>
</tr>
<tr>
<td>Power Source</td>
<td>12VDC 10 AH</td>
<td>12VDC 10 AH</td>
<td>12VDC 10 AH</td>
</tr>
<tr>
<td>Battery Life</td>
<td>100 hrs</td>
<td>100 hrs</td>
<td>100 hrs</td>
</tr>
<tr>
<td>Warranty</td>
<td>2 Years</td>
<td>2 Years</td>
<td>2 Years</td>
</tr>
</tbody>
</table>

### Laser Tools

<table>
<thead>
<tr>
<th>General</th>
<th>Radio Type, 2.4 gHz digital, encrypted to each laser</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Range</td>
<td>750 ft (225 m) general operation</td>
</tr>
<tr>
<td>Battery Life</td>
<td>100 hrs</td>
</tr>
<tr>
<td>Warranty</td>
<td>2 Years</td>
</tr>
</tbody>
</table>

### Water Resistant

- Completely sealed and waterproof

#### Size L x W x H

- 7.75 x 10.3 x 11.75 in (20 x 25 x 30 cm)
- 7.75 x 10.3 x 11.75 in (20 x 25 x 30 cm)
- 7.75 x 10.3 x 11.75 in (20 x 25 x 30 cm)
- 7.75 x 10.3 x 11.75 in (20 x 25 x 30 cm)
- 7.75 x 10.3 x 11.75 in (20 x 25 x 30 cm)
- 7.75 x 10.3 x 11.75 in (20 x 25 x 30 cm)
- 7.75 x 10.3 x 11.75 in (20 x 25 x 30 cm)
### 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 plum 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

### Automatic Levels

<table>
<thead>
<tr>
<th>Model</th>
<th>Magnification</th>
<th>Accuracy</th>
<th>Focus Distance</th>
<th>Power</th>
<th>Dust/Water Protection</th>
<th>Warranty</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL20M</td>
<td>30x</td>
<td>±2.5 mm</td>
<td>0.6 m</td>
<td>ON/OFF</td>
<td>E</td>
<td>2 Year</td>
</tr>
<tr>
<td>AL24A</td>
<td>24x</td>
<td>±2.0 mm</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>AL24M</td>
<td>28x</td>
<td>±1.5 mm</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>AL28M</td>
<td>32x</td>
<td>±1.0 mm</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>AL32A</td>
<td>36x</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

### DET-2

<table>
<thead>
<tr>
<th>Telescope</th>
<th>Optical Plummets</th>
<th>Angle Measuring System</th>
<th>Vials</th>
<th>Button Functions</th>
<th>Other Specs</th>
</tr>
</thead>
<tbody>
<tr>
<td>30X</td>
<td>3X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3K</td>
<td>3K</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5X</td>
<td>5X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7X</td>
<td>7X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10X</td>
<td>10X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20X</td>
<td>20X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25X</td>
<td>25X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30X</td>
<td>30X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### QM Series Quick Measure Lasers

<table>
<thead>
<tr>
<th>Specification</th>
<th>QM55</th>
<th>QM75</th>
<th>QM95</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>50 m (165 ft)</td>
<td>70 m (230 feet)</td>
<td>250 m (650 ft)</td>
</tr>
<tr>
<td>Units of measure</td>
<td>m, ft, m, ft, m</td>
<td>m, mm, ft, in, yds</td>
<td>m, mm, ft, in, yds</td>
</tr>
<tr>
<td>Automatic shut off</td>
<td>3 minutes</td>
<td>10 minutes</td>
<td>2 minutes</td>
</tr>
<tr>
<td>Battery life</td>
<td>5000+ measures</td>
<td>8000 measures</td>
<td>8000 measures</td>
</tr>
<tr>
<td>Power supply</td>
<td>2 x AAA 1.5V</td>
<td>2 x AA 1.5V</td>
<td>2 x AA 1.5V</td>
</tr>
<tr>
<td>Drop performance</td>
<td>1.5 m (5 ft)</td>
<td>1.5 m (5 ft)</td>
<td>1.5 m (5 ft)</td>
</tr>
<tr>
<td>Dust &amp; Water resistance</td>
<td>IP54</td>
<td>IP55</td>
<td>IP54</td>
</tr>
<tr>
<td>Laser type / power</td>
<td>635nm visible red / &lt; 1 mW</td>
<td>635nm visible red / &lt; 1 mW</td>
<td>635nm visible red / &lt; 1 mW</td>
</tr>
<tr>
<td>Dimensions</td>
<td>52 x 28 x 125 mm (20 x 1.1 x 4.9 in)</td>
<td>52 x 28 x 125 mm (20 x 1.1 x 4.9 in)</td>
<td>52 x 28 x 125 mm (20 x 1.1 x 4.9 in)</td>
</tr>
<tr>
<td>Weight with batteries</td>
<td>187 g (6.6 oz)</td>
<td>144 g (5.1 oz)</td>
<td>217 g (7.7 oz)</td>
</tr>
<tr>
<td>Warranty</td>
<td>3 Years</td>
<td>3 Years</td>
<td>3 Years</td>
</tr>
</tbody>
</table>