

# **CONSTRUCTION**

# **Build a Stronger Business** with Spectra Precision Products

### The Broadest Line

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

### An Entire Industry. Invented Here.

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

### A Partnership for Success

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



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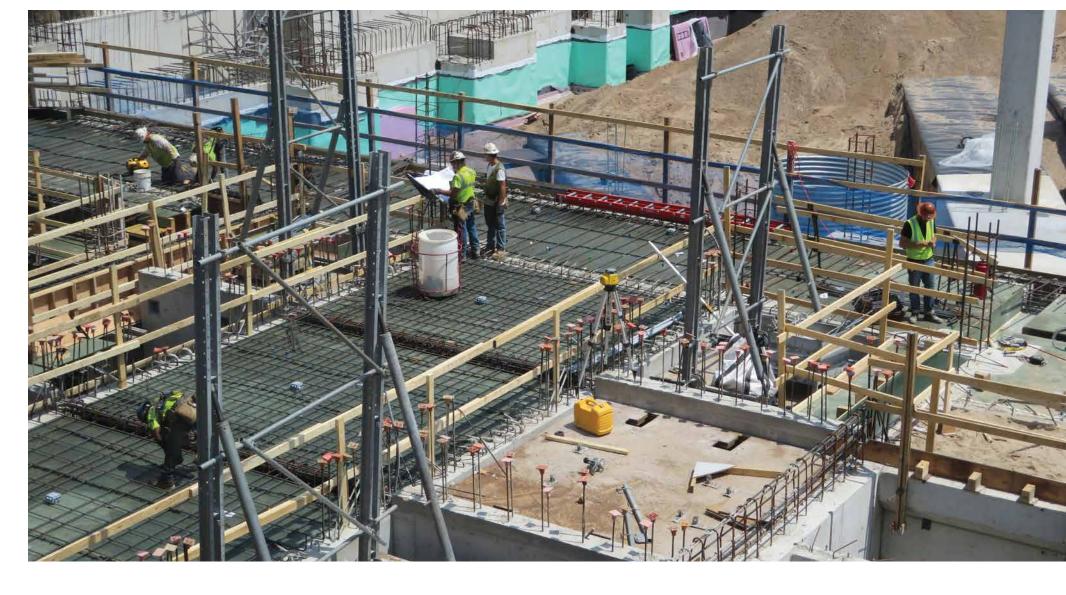
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# DISTRIBUTOR CATALOG



INTERIOR LASERS LASER LEVELS **GRADE LASERS** MACHINE RECEIVERS **RECEIVERS OPTICAL** 

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.





### **Built for Every Job Site**

Spectra Precision products help provide control for elevation, grade, vertical alignment and 90 degree layout for both interior and exterior construction.

They are ruggedly designed to withstand harsh on-the-job conditions including: drops from as much as three feet onto concrete; rain; mud; even brief immersion. Temperature extremes, humidity, and clumsy handling will not harm Spectra Precision products. They are meant for real world reliability.

Our products have been created to facilitate your work. In them you'll 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.

### 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.



**SCAN THIS CODE TO FIND** THE NEAREST SPECTRA **DEALER LOCATION NEAR YOU** AT SPECTRALASERS.COM



### 2019

### CR700

Combination machine mounted or grade rod Laser Receiver with digital readout



### 2018

### **DG613G**

High visibility Green Beam pipe laser with flexible power options



2012 2016

2016

2018

2017

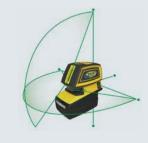












**UL633** 

The MOST versatile construction laser... EVER!

### DG613-DG813

Compact, tough and smart pipe lasers

### QML800G

Green beam QuickMark layout system

### GL612N-GL622N

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

### LT52G

Green Beam family of laser tools using bright Ultra-Green laser beams

1965







#### 1981 1984







#### **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



### **Buying Guide**

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

Simply, laser levels can provide a reference for:

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

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



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

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

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





 Tolerance Setting (Receivers) - Tolerance is an accuracy setting on the receiver. Spectra Precision 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?

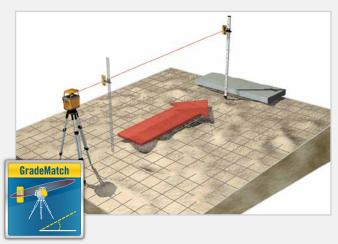
Yes. Several lasers are designed for this application and are selfleveling in the vertical axis. All HV, GL400, GL600 and UL models are designed to be used in the vertical axis. Applications include formwork, foundations, 90° reference, fencing, facades and wall layout. The laser can replace the string line and be used over long distances. Please note the Planelok 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 ongrade 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, PlaneLok 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.



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, RC602N, RC603N and RC803 remote controls.



ST805 available Summer 2019

### **LL100N**

### Affordable, Easy to Use Laser Level









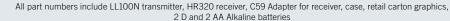


### **Key Features and Benefits**

- When system case configuration purchased includes LL100N laser, HR320 receiver, C59 receiver clamp, tripod and choice of grade rod - a complete leveling crew in case
- Easy to transport, easy to store, easy to use
- Fully automatic self-leveling rotating laser provides fast and accurate setup
- Robust design withstands a 3 ft (1 m) tripod tip over and still remains functional, reducing costs for downtime or repair
- 3 Year No-Downtime warranty keeps productivity high and operating costs low
- One-person elevation control up to a 1,150 ft (350 m) diameter
- Optional RC601 remote control allows easy grade matching using the remote control from rod position

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

Part No.	Receiver	Rod	Tripod	Case
LL100N	HR320	No	No	Small Case
LL100N-1	HR320	GR151 Tenths	Q104025	System Case
LL100N-2	HR320	GR152 Inches	Q104025	System Case
LL100N-3	HR320	GR153 Metric	Q104025	System Case













### **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
- Rechargeable battery pack or alkaline batteries keeps the unit working with no downtime due to
- Optional RC601 remote control allows easy grade matching using the remote control from rod
- 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
- 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
- Comes with a choice of HL450 or HR320 receivers allowing you to choose the best option to suit your



### **Applications**

 Checking/setting elevations, concrete forms, footings, and foundations for small and medium

- 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 numb	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
- Rechargeable battery pack or alkaline batteries keeps the unit working with no downtime due to
- Optional RC402N remote control allows easy grade matching using the remote control from
- 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.

- 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 numb	ers include L	L300S transmi	tter and case. *Rechargea	ble pack comes with	NiMH batteries	and 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
- 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



### **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	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

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





### HV101

Economical Solution for Leveling, Aligning, and Plumb Applications







### **Key Features and Benefits**

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

### **Applications**

- Leveling of ceiling grids
- Installation of interior fittings (cabinets, lighting etc.)

- Transferring points from the floor to the ceiling
- Short range leveling for decks and patios

Part No.	Receiver	Grade Rod	Tripod	Wall Mount	Remote	Case
HV101	No	No	No	M101	RC601	Small Case
HV101-4	HR150U	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.













12 VISIT OUR WEB SITE AT WWW.SPECTRALASERS.COM



### HV302

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







- 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
- Flexible power options, including rechargeable battery pack, AC power and alkaline batteries, combined with low battery warnings, reduces downtime by having multiple power options





- 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

2



Part No.	Receiver	Wall Mount	Power	Ceiling Target	Remote	Rod	Tripod	Case
HV302	HL760	No	4 D Alkaline	No	RC402N	No	No	Small Case
HV302-1	No	M302	Rechargeable Pack*	1176	RC402N	No	No	Small Case
HV302-2	HR150U	M302	Rechargeable Pack*	1176	RC402N	No	No	Small Case
HV302-4	HL760	No	Rechargeable Pack*	No	RC402N	No	No	Small Case
HV302GC-2	HL760	No	4 D Alkaline	No	RC402N	GR152 Inches	Q104025	System Case
HV302-7	HL760	M302	Rechargeable Pack*	1176	RC402N	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
- Installation of ceilings and raised floors
- Interior finishing work
- 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 jobsite 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

Part No.	Receiver	Clamp	Remote	Remote				
GL412N	HL760	C70 Rod Calmp	RC402N	Small Case				
GL412N-2	CR700	C70 Rod Clamp / C71 Magnetic Mount	RC402N	System Case				
GL412N-14	CR700	C70 Rod Clamp / C71 Magnetic Mount	RC402N	Small Case				
GL422N	HL760	C70 Rod Clamp	RC402N	Small Case				
All part numbers include GL412N/GL422N transmitter, case and NiMH rechargeable battery pack and charger								



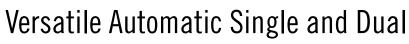












Grade Laser for Level, Grade, and **Vertical Alignment** 

GL612N / GL622N / GL622IR





- 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.





### **General Construction Applications**

RC602N Remote Control

- 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
- 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
- The GL622IR is a Class 1 laser. This type of beam is required in special applications where a visible beam is a safety hazard, distracting or otherwise not permissible.
- 5 Year "No Cost" Warranty
- **HL760 Applications**

Trenching

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

Part No.	Receiver	Clamp	Remote
GL612N	HL760	C70 Rod Calmp	RC602N
GL612N-NR	HL760	C70 Rod Calmp	No
GL622N	HL760	C70 Rod Calmp	RC602N
GL622N-NR	HL760	C70 Rod Calmp	No
GL622IR	HL760	C70 Rod Calmp	RC602N

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





















# GL710, GL720, GL722

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

RC703 Remote Control











### **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 to 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**

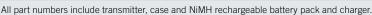
With a Long-range Radio Remote and the same range and base capabilities as the GL720. the GL722 includes all the benefits of the full Radio Remote functions... plus Automatic Axis Alignment, Grade Match and PlaneLok capability. Ideal for general construction, site preparation and

### **Applications**

- General construction
- Site preparation
- Trenching

- Road construction
- Machine control

Part No.	Grade	Receiver	Clamp
CTO-GL710	Single	HL700	C70 Adapter for Receiver
CTO-GL710-10	Single	CR600	C50 Adapter for receiver and C51 Mag. Mount
CTO-GL720	Dual	HL700	C70 Adapter for Receiver
CTO-GL720-10	Dual	CR600	C50 Adapter for receiver and C51 Mag. Mount
CTO-GL722	Dual	CR600	C50 Adapter for Receiver and C51 Mag. Mount
CTO-GL722-IR	Dual Infrared	CR600	C50 Adapter for receiver and C51 Mag. Mount











# **Universal Laser UL633N**

# The Most Versatile Construction Laser, Ever







RC603N Remote Control

### **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 axis 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 façade 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
- Versatility to fit any construction application providing more value and higher return on your investment – do more with one product

- 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























DG613/DG613G DialGrade

Compact and Powerful







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 it levels,
- 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 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
- 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

- Tunnel boring
- Can be used in a pipe or in over the top set-ups

Part No.	Components	Power
DG613	DG613 Laser, 1248 trivet plate 8 inch (200mm), RC803 IR/Radio Remote Control, 956 target	NiMH Recharge
DG613-5	DG613 Laser, 1230 large invert plate, 1239 vertical pole, RC803 IR/Radio Remote Control, 956 target	NiMH Recharge
DG613-6	DG613 Laser, 1237 large invert plate (metric), 1239 vertical pole, RC803 IR/Radio Remote Control, 956 target	NiMH Recharge
DG613-13	DG613 Laser – Over-the Top Package, 1263 precise scope, RC803 IR/Radio Remote Control, P25 power outlet charger, 2 x NiMH battery pack and 1 x charger	NiMH Recharge
DG613G	DG613G Laser, 1248 trivet plate 8 inch (200mm), RC803 IR/Radio Remote Control, 956G target	NiMH Recharge







- 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 guicker 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 DG813 has flexible power options that provide 40 hours operating time (NiMH rechargeable batteries with Worldwide charger) and 50 hours (alkaline batteries). 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 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 Align automatically aligns the DG813 to the centre of the SpotFinder in the pipe or to the direction of the manhole when used in a trench or "over-the-top" set up.
- 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 hetween manholes
- SpotLok 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

- Installation of gravity flow sanitary pipelines
- Storm sewer pipelines

- Pipe jacking
- Tunnel boring











HR320

### **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
- 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

### **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

### **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 dustproof to IP67

# **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



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# **HL700 Digital Readout Receiver**

Highly Versatile Receiver for Basic and Advanced Leveling and Aligning



### **Applications**

- Checking elevations
- Basement excavation
- Digging septic tanks Checking foundations
- Digging footings

- Setting forms
- Checking sub-base materials
- Screeding concrete



### **Key Features and Benefits**

- Digital Readout of Elevation provides a numeric display of  $\pm 2$  inches ( $\pm 5$  cm) and shows exactly how far the elevation is from on-grade
- A large 5 inch (12.7 cm) reception height, more than double the industry standard, allows quick acquisition of the laser beam
- Unique anti-strobe sensor stops construction strobe lights from setting off the receiver, and eliminates phantom strikes for easier identification of true laser beam signals
- Multiple on-grade sensitivities to customize accuracy needs to application

- Designed to survive the tough construction site conditions; it is totally waterproof and can withstand a drop of 10 feet (3 meters) onto concrete
- 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

# **HL760 / HL760U Radio Digital Readout Receiver**

- Foundations, forms, and footings
- Excavations











### **Specific Receiver Features**



#### **RADIO Function**

Choose a model with radio built-in and you will be able to control your rotating laser to enable advanced features such as GradeMatch, Axis Alignment, PlaneLok and Automatic Vertical Alignment.

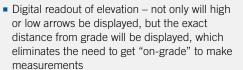


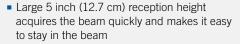
#### **FINGERPRINT Function**

Be even more secure with the unique FINGERPRINT function (only available on HL760 when paired with a Spectra Precision laser that has this function). Once paired, the receiver will reject laser strikes from other lasers on the jobsite that it is not paired with. Thus it eliminates the errors caused by picking the wrong laser beam.

Comparison Table							
	HR320	HL450	HL700	HL760			
Digital		0	0	0			
Precision Levels  V Y Y	2	3	6	6			
Radius	500 ft / 150 m	650 ft / 200 m	1500 ft / 460 m	1500 ft / 460 m			
SHOCK PROOF	5 ft / 1.5 m	5 ft / 1.5 m	10 ft / 3 m	10 ft / 3 m			
WARRANTY NO COST	2	2	3	3			
Radio Communication  )) ((•				0			
Reception Height	2 in / 5 cm	4 in / 10.2 cm	5 in / 12.7 cm	5 in / 12.7 cm			



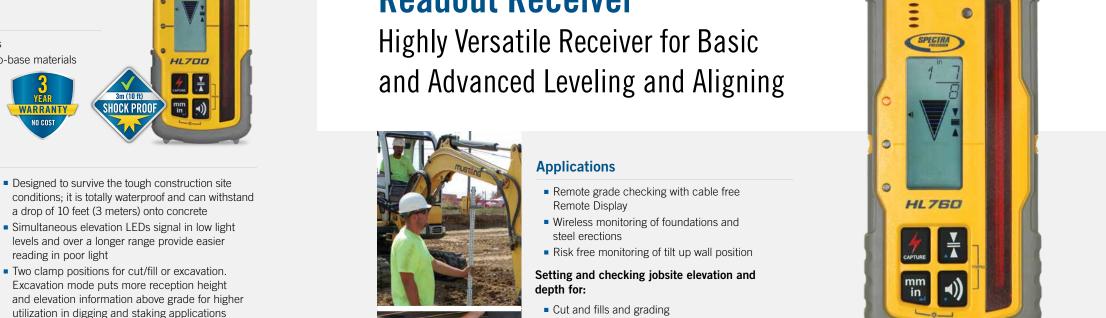




- The HL760 / HL760U has an internal, long range 330 ft (100m) radius, high speed digital radio built inside that allows the receiver to communicate with any other HL760 / HL760U: LL300S, LL400HV, HV302, GL412N / GL422N laser transmitters
- Machine operators can monitor elevation shots taken by another person or foremen can monitor elevations and cut/fill readings from anywhere on

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



CR700 include C70 adapter with bubble vial











C50 Adapter included

Optional Vertical Adapter for CR700 and HL receivers

### **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
- Magnetic Clamp new C71 magnetic clamp will not slip on the machine no matter how rough
- 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 Axis Alignment
- IP67 dustproof, waterproof, weatherproof
- 10-foot (3 m) Drop Guarantee almost destruction proof, extremely robust; eliminates
- 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
- 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

- Digging footings
- Basement and trench excavations
- Checking sub-base materials
- Setting and checking elevations
- Leveling and aligning forms
- Screeding concrete
- Vertical alignment





















### **Automatic Level**

Easy-to-use Optical **Auto-levels** 





- Choice of magnetic or air dampened automatic
- 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

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

### AL24A, AL24M

Part No.	Power/Damp	Tripod	Rod
AL24A	24X / Air	No	No
AL24M	24X / Magnetic	No	No
AL24A-1	24X / Air	5301-27-BLK-SP	GR151
AL24M-1	24X / Magnetic	5301-27-BLK-SP	GR151
AL24A-2	24X / Air	5301-27-BLK-SP	GR152
AL24M-2	24X / Magnetic	5301-27-BLK-SP	GR152
AL24A-3	24X / Air	5301-27-BLK-SP	GR153
AL24M-3	24X / Magnetic	5301-27-BLK-SP	GR153

#### Water resistant construction

Includes hardshell case

Air dampened model shown

- Two-person leveling across the job site
- Leveling forms and footers
- Checking elevation
- Measuring cut and fill

### AL28M

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

### AL32A

Part No.	Power/Damp	Tripod	Rod
AL32A	32X / Air	No	No

# **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
- 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
- Measurement units in degrees, gon, or mils

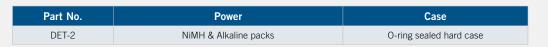
- 90 Degree angle audible notification for quick turning and set out of right angles
- Instant conversion of vertical angles to percent of grade - convenient for slope work and when used in conjunction with Dialgrade® pipe work
- NiMH rechargeable battery pack and charger lower operating cost with reusable 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



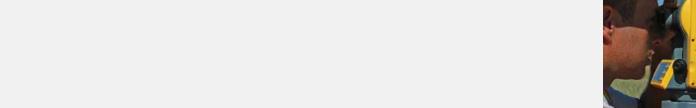
- Establishing 90 degree reference lines
- Checking angles, alignment, and plumb
- Anchor bolt alignment
- Gravity flow pipe laser setup
- Steel column placement

- Alignment of forms, tilt-up walls, and curtain walls
- Basic grade work
- Short range leveling







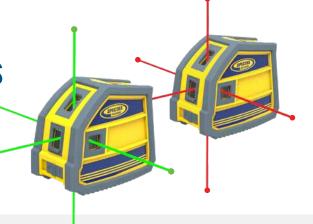






**LP51 / LP51G Laser Pointers** 

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
- 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

Part No.	Points	Bracket	Target	Case	Batteries
LP51	5	Magnetic 1213-0100	Red Ceiling/Floor 23416	Soft Pouch	2 x AA Alkaline
LP51G	5	Magnetic 1213-0100	Green Ceiling/Floor	Soft Pouch	2 x AA Alkaline



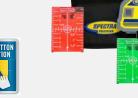




























Simple to Use — Perfect for **Interior Construction** 







### **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

- 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
LT20	1215-1110	Red Ceiling/Floor 23416	Soft Pouch	3 x AA Alkaline
LT20G	1215-1110	Green Ceiling/Floor 1215-1560	Soft Pouch	4 x AA Alkaline





















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
- 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,
- 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
- Exterior building decks, patios, columns, and posts

Part No.	Magnetic Bracket	Target	Case	Receiver	Batteries
LT52R	M152	Red Ceiling/Floor 23416	Hard Case 1215-1740	No	Lithium-lon, Charger 1215-1610
LT52R-2	M152	Red Ceiling/Floor 23416	Hard Case 1215-1740	HR220	Lithium-lon, Charger 1215-1610
LT52G	M152	Green Ceiling/Floor 1215-1560	Hard Case 1215-1740	No	Lithium-lon, Charger 1215-1610



























Simple to use — Perfect for **Interior Construction** 











- 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

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

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

























### 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
- Compact and lightweight design allows easy and secure mounting at ceiling height
- 2 vertical beams spaced 90° apart for alignment
- 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

Part No.	Ceiling Bracket	Target	Case	Mount Spacer	Batteries
LT58G	1215-1650	Green Ceiling/Floor 1215-1560	Hard Case 1215-1640	1215-1550	Lithium-lon, Charger 1215-1310





























QM10/20 Available Summer 2019



**QM10** 

**QM20** 

**Key Features and Benefits** 

- 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 toolbelt
- Illuminated display easy to read in low light conditions
- Long battery life over 5000 measurements

### **Applications**

- Measuring distance
- Measuring for material estimation

#### QM10

#### Small and compact

• Fits in your pocket; easy to carry and transport

#### Simple to operate

Press a single button and measure

### **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)

 Safely 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

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### MACHINE DISPLAY RECEIVERS



### **LR20** Receiver

### **Compact Receiver for Compact Machines**





### **Applications**

- Landscaping, building pads, sports fields, concrete flatwork, tennis courts
- Ideal for mini-excavators
- Footers, storm 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	МММ

### LR30 & LR30W Receiver

Used on Dozers, Box Blades, Levelers





### **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
- Magnetic Part No. **Batteries** Mount LR30 NiMH No LR30-MM NiMH  $\mathsf{MM}\text{-}1$ LR30-DM NiMH DM-20 LR30-1 Alkaline No



- 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
LR30W	NiMH	No	RD20
LR30W-MM	NiMH	MM-1	RD20
LR30W-DM	NiMH	DM-20	RD20
LR30W-2	NIMH	No	No

# SPECTRA PRECISION

### 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

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



- 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 –2 year warranty

Part No.	Batteries	Magnetic Mount	Remote Display
LR50W	NiMH	No	RD20
LR50W-MM	NiMH	MM-1	RD20
LR50W-DM	NiMH	DM-20	RD20
LR50W-2	NiMH	No	No

### **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

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



- 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 –2 year warranty

Part No.	Batteries	Magnetic Mount	Remote Display
LR60W	NiMH	No	RD20
LR60W-MM	NiMH	MM-1	RD20
LR60W-2	NiMH	No	No

### **Receiver Accessories**

Wireless Remote Display and Mounts



### **RD20 Wireless Remote Display**

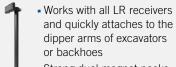
 Wireless remote mounts in the cab and displays grade information to the operator. Helps keep focus on the work and not on the receiver for higher productivity. Works with LR30W, LR50W & LR60W

### **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

backnoes and excavators		
Part No.	Description	
RD20	RD20 Remote Display	
RDM-1	Mount, RD10 Swivel	
010983	Cable, RD10 + RD20 Power, Lighter/power ada	
MM-1	Magnetic Mount for LR Receivers	
DM-20	Bulldozer Bolt-On Mount	

#### **MM-1 Magnetic Mount**



- 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**

Machine Type	Model	Application
Backhoe	Use CR700 or LR20 or LR50	Excavating
Skid-steer Loader	Use CR700 or LR20 or LR30 or LR30W (w/remote display)	Grading
Mini Excavator	Use CR700 or LR20 or LR50 or LR50W (w/remote display)	Excavating
Skid-steer w/blade	Use LR30 or LR50 or LR30W/LR50W (w/remote display)	Grading
Smaller Dozer	Use LR30 or LR30W (w/remote display)	Grading
Larger Excavator	Use LR60 or LR60W (w/remote display)	Excavating
Larger Dozer	Use LR50 or LR50W (w/remote display)	Grading

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#### **Accessories and Components for Rotating Lasers** Wall Mounts All rotating lasers are housed in a jobsite-tough carrying case with customized pockets to hold all accessories M101 wall mount M300 wall mount 1282-1970 LL100/HV101 Small Carrying Case for HV301/HV301G LL100/HV101 Large System Case 1282-1981 5289-0025 GL4X2N, LL300N, LL300S, LL400HV Small Carrying Case Signal Transporter 5289-0026 HV302, HV302G Small Carrying Case 5289-0027 LL300N, LL300S, LL400HV HV302, HV302G System Carrying Case UL633/GL6X2 Carrying Case ST805 increases the radio distance up to two times of grade lasers, pipe lasers HV302 and LL300S lasers 1046-4750S LL500 Carrying Case CTO-1445-0860 GL7XX Carrying Case

#### **Remote Control**



RC601 Remote Control for HV101, HV301, HV301G, LL100, LL100N, LL300, LL300N

RC402N Remote Control for LL300S, HV302, HV302G, GL4X2N

RC602N Remote Control for GL6X2N

### Laser Glasses



**Target** 



1176-6 Red Magnetic Visiline Target Q100206 Green Magnetic Visiline Target

M302

Wall mount

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

TR10 Mini Tripod for Laser Tools









under bright light conditions





#### Accessories and Components for Universal Laser

various setups



RC603N Combined Radio/IR Remote Control for all applications including pipe laying



SF601 Spot Finder for manual of the plumb beam

1248 Trivet Plate

Spot Finder



929 Blower

1244 T-Bar



HL760 Laserometer to beam location



#### **Included Pipe Laser Accessories**



RC803 Remote 956 / 956G Optically



0104667





### **Optional Pipe Laser Accesories**





1230/1237

Plate





P25 Cable w/

Lighter Plug







1263 Sighting

Scope with

1161 Heavy-Duty 936 Adjustable Large Pipe Target Wood Tripod





Adapter for Snot Finder

### **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



Part No.	Material	Extension
1161	Wood	Extends from 3 ft 2 in to 5 ft 3 in (96 cm to 160 cm)
2161	Aluminum	Extends from 3 ft 6 in to 6 ft 1 in (106 cm to 185 cm)
2162	Aluminum	Elevating Base - Extends from 4 ft 3 in to 7 ft 6 in (130 cm to 228 cm)

# **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



Part No.	Material	Packaged With
Q104025	Aluminum	LL100N, LL300S/N, HV101
5301-27-BLK-SP	Aluminum	AL Auto Level Kits

# **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.



Part No.	Material	Extension
90550	Fiberglass	Extends to 5.9 ft (1.8 m)

### **SPECIFICATIONS**



### **Aluminum Grade Rods**

### **Applications**

- Grading
- Leveling
- Sitework

- Landscaping
- Foundations

### **Key Features and Benefits**

- Aluminum leveling rods are made of a 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

Part No.	Length	Sections	Scale
GR151	15 ft	5	Tenths
GR152	15 ft	5	Inches
GR153	5 m	5	Metric
Part No.	Length	Sections	Scale

4

Inches

Tenths

13 ft

13 ft

7321-40

7301-40

# Fiberglass Grade Rods

### **Applications**

- Grading
- Leveling
- Sitework

- Landscaping
- Foundations

### **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 (58-1/2 inches) for convenient storage
- Fiberglass is non-conductive

£ /				
6 5	Part No.	Length	Model	Scale
2	92021	13 ft	CR	Tenths
8 7	92022	13 ft	CR	Inches
6	92041	16 ft	CR	Tenths
2	92042	16 ft	CR	Inches
8	92031	20 ft	CR	Tenths
6	92032	20 ft	CR	Inches
3				

Part No.	Length	Model	Scale
98010	25 ft	SVR	Tenths
98011	25 ft	SVR	Inches
98012	7.6 m	SVR	Metric

# **Specialty Grade Rods**

### **Applications**

- Laser Grade Checking
- Leveling
- Sitework

- Landscaping
- Foundations

### **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
- benchmark elevation

   Wear resistant Delrin® end-rollers

Latch in back locks the band

in any position to match a

Part No.	Length	Sections	Scale
CTO-0319-4300	10 ft	2	Tenths
CTO-0319-4320	3 m	2	Metric
CTO-0319-4310	15 ft	2	Tenths
CTO-0319-4330	5 m	2	Metric



SVR

5079-069 DE Rod Bracket for HR detectors 5079-070 DE Rod Bracket for HL Laserometers

		Laser Le		Horizon	tal and Verti	cal Lasers		
	LL100N	LL300N	LL300S	LL500	HV101	HV302	HV302G	
Accuracy	1/8 in @ 100 ft 3 mm @ 30 m (20 arc seconds)	3/32 in @ 100 ft 2.2 mm @ 30 m (15 arc seconds)	1/16 in at 100 ft 1.5 mm at 30 m (10 arc seconds)		1/8 in @ 100 ft 3 mm @ 30 m (20 arc seconds)	1/16 in at 100 ft 1.5 mm at 30 m (10 arc seconds)	1/16 in at 100 ft 1.5 mm at 30 m (10 arc seconds)	
Laser type / classification	639 nm, Class 2	639 nm, Class 2	639 nm, Class 2	670 nm, Class 2	635 nm, Class 3A/3R	639 nm, Class 3A/3R or 2 (only in EMEA)	520 nm, Class 3A/3R or 2 (only in EMEA)	
Operating diameter	1,150 ft (350 m)	1,650 ft (500 m)	2,600 ft (800 m)	1,650 ft (500 m)	Receiver: 1150 ft (350 m) Visible: 200 ft (60 m)	Receiver: 2600 ft (800 m) Visible: 330 ft (100 m)	Receiver: 2600 ft (800 m) Visible: 250 ft (75 m)	
Self-leveling range	±5 deg	grees electronic serv	o self-leveling	±11 minutes	±5 degrees electronic servo self-leveling			
Power source	2 × D-cell Alkaline batteries		4 D-cell Alkaline Standa NiMH optional	rd,	2 × D-cell Alkaline batteries	4 x D-cell NiMH standard, Alkaline		
Battery life	80 hrs Alkaline	90 hrs Alkaline, 45 hrs NiMH	60 hrs Alkaline, 47 hrs NiMH	175 hrs Alkaline, 100 hrs NiMH,	50 hrs Alkaline	60 hrs Alkaline, 45 hrs NiMH	25 hrs Alkaline 30 hrs NiMH	
Water res.	Yes, IP54	Y	es, IP66	Yes, IP	54	Yes, IP66	Yes, IP66	
Size L × W × H	8.5 × 6.7 × 6.0 in (22 x 17 x 15 cm)		7.7W × 7.9H in 9.7W × 20.1H cm)	$10.8 \times 7.5 \times 7.5$ in $(27 \times 19 \times 19 \text{ cm})$	$8.5 \times 6.7 \times 6.0 \text{ in}$ (22 x 17 x 15 cm)	10.7L × 7.7W × 7.9H in (27.2L × 19.7W × 20.1H cm)	$10.7 \times 7.7 \times 7.9$ in (27.2 × 19.7 × 20.1 cm)	
Weight	3.3 lb (1.5 kg)	6.8	lbs (3.1 kg)	8 lb (3.6 kg)	3.3 lb (1.5 kg)	6.8 lbs (3.1 kg)	6.8 lbs (3.1 kg)	
Warranty	2 Years, with instant exchange		5 Years		2 Years, with instant exchange	5 Years	3 Years	

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



Grade & Universal Lasers								
	GL412N/42	2N	GL612N / GL622N			UL633N		
Accuracy	1/1		100 ft, 1.5 D arc sec	5 mm at 3 onds)	0 m			
Laser type / classification	639 nm, Class		39 nm, 2, 3 mW		650 nm, Class 3A/3R, <5mW			
Operating diameter		26	600 ft (80	00 m)				
Self-leveling range	±5 degrees electronic ser self-leveling	VO		±14 d electron self-le	nic s	ervo		
	-10 to +15%	•	-25	to +25%		-25 to +25%		
Grade range	Single	Dual	Single	Dual		X, Y, Z axis		
Power source	4	1 x D-ce	II NiMH b	attery pac	k			
Battery life	35 hrs NiMF 50 hrs Alkalir			35 hrs 40 hrs				
Rotation speed	300, 600 rpi	n	GL61 300, 750 GL62 0 to 90	600, rpm 22N:	(	) - 750 rpm		
Water resistant			Yes, IP6	6				
Size L × W × H	10.7L × 7.7W × 7 (27.2 × 19.7 × 20			9.4 x 5. (24 x 15				
Weight		6	.8 lbs (3.1	kg)				
Warranty	5 Years		5	Years		5 Years		
	Wireless Rem	ote Spec	cification	s				
Remote control type 2-way communication	RC402N		RO	C602N		RC603N		
Battery life		130	hrs cont	inuous				
Range	330 ft (100 r	n)		490 ft	(150	) m)		

Р	Pipe Lasers							
	DG813	DG613/DG613G						
Grade range	-12% t	0 +40%						
Self-leveling range	(no rough leveling re-	grade range quired) also automatic in the cross axis						
Line range	20°	' ±1°						
Line center	Y	es						
Menu with variable settings	Y	'es						
Line set/check / Line alert		'es						
Accuracy	± 1/16 in @ 100 ft, (1.5 mm/30 m); 10"							
Temperature compensation	Yes							
Operating range	500 ft (150 m)							
Spot Align, Spot Match, Spot Lok, Spot Search with SF803	Yes	No						
ST802/ST805 Transporter	Yes	No						
Color of Laser Beam	Red	DG613 - Red DG613G - Green						
Waterproof	IP68 - Continuous sul	bmersion at 10 ft (3 m)						
Laser classification / output	3A/3R / 4.5-5 mW	, optional 2 / <1 mW						
Weight	8.8 lb (	3.98 kg)						
Length x Diameter	9.8 in (25 cm) x	5.3 in (13,5 cm)						
Battery type and life		13G: 30 hrs) with daily at 20° C						
Battery pack	Sealed (NiMH), Seale	ed removable (alkaline)						
Warranty	5 Y	ears ears						
Wireless r	emote specifications							
Functionality		R-Remote Control serfunctions						
Through the pipe range	500 ft	(150 m)						
Front / Over the top range	425 ft	(130 m)						

Laser Tools										
	LP51 / LP51G	LT20 / LT20G	LT52R / LT52G	LT56	LT58G					
Self-level range	±4° fro	m level	±3° from level	±4° from	m level					
Working range - Visible	100 ft (30m)	100 ft (30m)	100 ft (30m) Lines 200 ft (60m) Points	80 ft (25 m)	100 ft (30 m)					
With HR220 detector	N/A	N/A	300 ft (90 m) LT52R	200 ft (65 m)	N/A					
Accuracy	± 3/16 in @ 50 ft (3 mm @ 10 m)	± 3/16 in @ 50 ft (3 mm @ 10 m)	± 1/8 in @ 50 ft (3 mm @ 15 m)	± 1/8 in (3 mm @						
Battery type	2 x AA	3 x AA	Lithium-lon	Lithiur	n-lon					
Battery life	20 hrs / 10 hrs	20 hrs / 8 hrs	40 / 25 hours points 17 / 8 hours lines	25 hrs all beams	25 hrs horizontal bear 11 hrs all beams					
Dimensions	3.5x4.1x2.4 in 8.9x10.4x6.1 cm	4.3x2.3x4.1 in 11.0x5.8x10.4 cm	5.7 x 3.0 x 5.9 in 14.5x7.8x13.8 cm	4.6x6.0x3.3 in 15.2x11.6x8.4 cm						
Weight	0.69 lb (0.31 kg)	0.8 lb (0.35 kg)	1.5 lb. (0.68 kg)	1.48 lb (0.67 kg)						
Warranty		3 Years with instant exchange								

	HR / HL Laser Receivers										
	HR150U	HR220	HR320	HL450	HL700	HL750	HL760	HL760U			
Working Radius	3 - 100 ft (1 - 30 m)	3 - 100 ft (1 - 30 m)	3 - 650 ft (1 - 200 m)	3 - 650 ft (1 - 200 m)	3 - 1500 ft (1 - 460 m)	3 - 1500 ft (1 - 460 m)	3 - 1500 ft (1 - 460 m)	3 - 1500 ft (1 - 460 m)			
Laser Detection Height	2 in (50 mm)	2 in (50 mm)	2 in (50 mm)	4 in (102 mm)	5 in (127 mm)	5 in (127 mm)	5 in (127 mm)	5 in (127 mm)			
Radio Working radius	N/A	N/A	N/A	N/A	N/A	260 ft (80 m)	720 ft (220 m)	720 ft (220 m)			
Accuracy Range (Deadband)	1/8 in (3 mm)	1/16 in (2 mm)	1/16 - 1/4 in (2 - 6 mm)	1/64 - 3/8 in 0.5mm - 10mm	1/64 - 3/8 in 0.5mm - 10mm	1/64 - 3/8 in 0.5mm - 10mm	1/64 - 3/8 in 0.5mm - 10mm	1/64 - 3/8 in 0.5mm - 10mm			
LED Grade Indicators	Green - On Grade Red - High Blue - Low	N/A	N/A	N/A	Green - On Grade Red - High Blue - Low						
"Fingerprinting"	No	No	No	No	No	No	Yes	Yes			
Power Supply	2 x AA Alkaline	2 x AA Alkaline	2 x AA Alkaline	2 x AA Alkaline	2 x AA Alkaline	2 x AA Alkaline	2 x AA Alkaline	2 x AA Alkaline			
Battery Life	50+ hrs	50+ hrs	70+ hrs	60+ hrs	60+ hrs	60+ hrs	60+ hrs	60+ hrs			
Auto Shut Off	30 min	30 min	30 min	30 min - 24 hr	30 min - 24 hr	30 min - 24 hr	30 min - 24 hr	30 min - 24 hr			
IP Rating	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67			
Warranty	1 Year	1 Year	3 Years	3 Years	3 Years	3 Years	3 Years	3 Years			

	GL700 Series Lasers										
Model	GL710	GL720	GL722								
Servo Deadband Accuracy	4.6 arc seconds	4.6 arc seconds	4.6 arc seconds								
Range (Diameter)	3,000 ft (900 m)	3,000 ft (900 m)	3,000 ft (900 m)								
Axis Grade Range X	NA	-10 to +10%	-10 to +10%								
Axis Grade Y	-0.5 to +25%	-0.5 to +25%	-0.5% to +25%								
Grade Resolution	0.001%	0.001%	0.001%								
Power Source	NiMH 6 x D cell	NiMH 6 x D cell	NiMH 6 x D cell								
Battery Life	30 hrs	30 hrs	30 hrs								
Rotation Speeds	300, 600, 900 rpm	300, 600, 900 rpm	300, 600, 900 rpm								
Radio Remote	No	No	Yes								
Auto Axis Alignment	No	No	Yes								
Grade Match Mode	No	No	Yes								
PlaneLok	No	No	Yes								
Water Resistant		Completely sealed and waterproof									
Size L x W x H		7.75 x 10.0 x 11.75 in (20 x 25 x 30 cm)									
Weight		18.5 lb (8.4 kg)									
	Wireless Re	mote Specifications									
General	Ra	dio Type, 2.4 gHz digital, encrypted to each la	ser								
Operating Range	750 ft (225 m) g	750 ft (225 m) general operation									
Battery Life		100 hrs									
Warranty		2 Years									

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	Automatic Levels										
	AL20M	AL24A	AL28M	AL32A							
Magnification	20×	24	ł×	28x	32x						
Accuracy	±2.5 mm*	±2.0	±1.0 mm*								
Aperture		30	mm		36 mm						
Shortest focus			0.6 m								
Compensator dampening	Magnetic	Air	Air Magnetic Air								
Warranty	2 Year instant exchange										
	*Note: Standard deviation according to DIN 18723 on one kilometer of double leveling										

	DET-2												
Telesc	оре	Optical	Plummet	Angle Measu	uring System Vials		s	Button Functions		Other Specs			
Image	Erect	Image	Erect	Minimum reading	1" or 5"	Tubular	30"/2 mm	ON / OFF	Power	Dust/Water	IP-54		
Mag.	30X	Mag.	ЗХ	Precision	2"	Circular	8'/2 mm	R	Backlight / Illumination on / off	Operating temperature	-20°C to +50°C		
Aperture	45 mm	Angle of view	5°	Units	Deg / mil / gon / V%			HOLD	Angle hold	Size - instrument	164 x 154 x 340 mm		
Focus distance	1.45 m to ∞	Focusing range	0.5 m ~ ∞	Display	Dual, Large Character LCD tilt sensor			R/L	Clockwise / Counterclock- wise measurement	Weight - instrument	4.5 kg		
Field of view	1° 30′	Reticle type	Crosshair	Auto compensation	User Set On / Off ±3' Range			OSET	Zero reset of horizontal angle	Warranty	2 Year		
Stadia Ratio / constant	100 / 0							V%	Convert vertical degrees to %				

QM Series Quick Measure Lasers								
Specification	QM10	QM20	QM55					
Range	30 m (100 ft)	50 m (165 ft)						
Accuracy	± 2.0 mm	± 1.5 mm (± 1/16 in)						
Units of measure	m, ft, in, ft-in							
Automatic shut off	10 m	3 minutes						
Battery life	5000+ measures							
Power supply	2 x AAA 1.5V							
Drop performance	N	1.5 m (5 ft)						
Dust & Water resistance	IP	IP54						
Laser type / power	620-690nm visi	635nm visible red / < 1 mW						
Dimensions	43 x 24 x 110 mm (1.7 x 0.9 x 4.3 in)	48 x 24 x 116 mm (1.9 x 0.9 x 4.6 in)	52 x 28 x 125 mm (2.0 x 1.1 x 4.9 in)					
Weight with batteries	74 g (2.6 oz)	79 g (2.8 oz)	180 g (6.3 oz)					
Weight with batteries	1 Y	3 Years						

Spectra Precision Laser Applications	Laser Pointers - LP51 - LP51G - LT52R - LT52G	Line Generator - LT20 - LT20G - LT52 - LT52G - LT56 - LT58G	Handheld Distance Measuring Device - QM10 - QM20 - QM55	Laser Levels - LL100N - LL300N - LL300S - LL500 Optical Levels - AL20 - AL24 - AL28 - AL32	Horizontal Vertical Lasers - HV101 - HV302 - HV302G	Grade & Universal Lasers  - GL412N - GL422N - GL612N - GL622IR - GL710 - GL720 - GL722 - UL633N			
General Construction									
Forms, footings and foundations				0	0	0			
Septic tank or swimming pools, decks and terraces		0		0	0	0			
Estimating cut and fill				0	0	0			
Checking building square and area		0	0		0	0			
Matching existing slopes and grades				0	0	0			
Checking elevations				0	0	0			
Checking elevations of sub-base and sub-grade				0	0	0			
Checking and setting elevations for sports fields, steep slopes, ramps, and drainage						0			
Vertical alignment and plumb such as anchor bolt and form alignment		0			0	0			
Interior									
Locating finished floor levels		0		0	0				
Laying out interior walls	0	0			0				
Installing ceiling grids	0	0			0				
Short-run vertical alignment		0			0				
Squaring and layout of partitions, walls and tile floors	0	0			0				
Plumb reference and point transfers from below to above, such as walls, door frames, and lighting locations measured from the floor layout to ceiling	0	0			0				
Level reference used for leveling cabinets, counter tops, windows, decks ceilings and chair rails	0	0			0				
Measuring distances, depths and heights			0						