

# CONSTRUCTION DISTRIBUTOR CATALOG



INTERIOR LASERS LASER LEVELS GRADE LASERS MACHINE RECEIVERS RECEIVERS OPTICAL

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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.



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.





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.



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### 2021



#### LL500

The original Electronic Self-Leveling Laser Level was introduced 40 years ago, in 1981.

The LL500 is still one of the most trusted lasers used today.







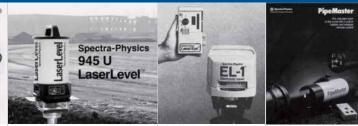


**Bob Studebaker** with the 1st rotating laser in the world



Rotolite 1st rotating laser for interior work

# 1976



1981

**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

1984

1st pipe laser with internal battery and infrared remote control

### LASERS



### **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.

### **Buying Guide**

#### 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?

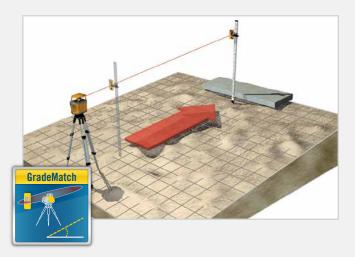
Yes. Several lasers are designed for this application and are selfleveling in the vertical axis. All HV, GL400, GL600 and UL models are designed to be used in the vertical axis. Applications include formwork, foundations, 90° reference, fencing, facades and wall layout. The laser can replace the string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

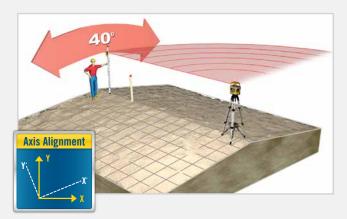
Grade Matching allows a user to match the fall of the ground or between two existing elevations without complex calculations.

- 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)





#### 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.



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

Spectra Precision lasers are designed to be used on the jobsite where they may get knocked over or dropped. If a laser has the "Shockproof" icon it can be dropped 1m onto concrete or

withstand a 1.5m pushover on a tripod. What does this mean in real terms? While we can't guarantee that the laser's calibration will not be changed we do guarantee that the most expensive internal components will still work - reducing the lifetime running cost of the laser.



#### 11. Green Beams vs. Red Beams

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

#### 12. Laser Remote App

The Laser Remote App easily controls all laser functions typically controlled by the laser's remote control. It is avaialable for iOS and Android smart devices. When used with the ST805 Signal Transporter, the Laser Remote App connects to the following lasers:



LL300S, HV302, HV302G, GL412N, GL422N, GL612N, GL622N, GL622IR, UL633N, DG613, DG613G and DG813.



#### 13. Increase Radio Range Coverage

The 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 rebroadcast the radio signal, almost doubling the range of the current RC402N, RC602N, RC603N and RC803 remote controls.



#### 14. Accessories

Using the proper accessories ensures the best performance from your lasers and instruments. Heavy-duty tripods and grade rods enhanece the productivity of the laser products.

Spectra Precision offers a wide selection and SECO accesories division has accessories to meet all your construction and geospatial needs.

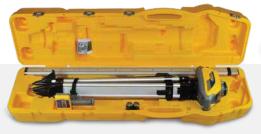


# **LL100N** Affordable, Easy to Use Laser Level









#### **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



- 2 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 / Clamp	Rod	Tripod	Case					
LL100N	HR320 / C59	No	No	Small Case 1282-1970					
LL100N-1	HR320 / C59	GR151 Tenths	Q104025	System Case 1282-1981					
LL100N-2	HR320 / C59	GR152 Inches	Q104025	System Case 1282-1981					
LL100N-3	HR320 / C59	GR153 Metric	Q104025	System Case 1282-1981					
	All part numbers include LL100N transmitter, 2 D and 2 AA Alkaline batteries								





# **LL300N** Medium-Range, Highly Accurate Leveling Solution











#### **Key Features and Benefits**

- Available with a choice of system case (with receiver, tripod and choice of grade rod) or small carry case with receiver and clamp.
- Fully automatic self-leveling provides fast and accurate setup
- Rechargeable battery pack or alkaline batteries keeps the unit working with no downtime due to power loss
- Optional RC601 remote control allows easy grade matching using the remote control from rod position
- 1650 ft (500 m) operating diameter

#### **Applications**

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

- Single-axis manual slope mode with 'cross-axis' self-leveling allowing grade matching for basic slope work, while maintaining accuracy in the cross-axis
- Built to withstand severe drops of up to 3 ft (1 m) directly onto concrete, or up to 5 ft (1.5 m) when pushed over on a tripod means less downtime and cost due to damage caused by an accidental drop or tip-over
- Comes with a choice of HL450 or HR320 receivers allowing you to choose the best option to suit your application
- Basic slope work such as driveways and ramps
- Excavating, digging footings, and septic tanks

Part No.	Receiver / Clamp	Power	Rod	Tripod	Case
	Receiver / Clamp	TOwer	Nou	mpou	Case
LL300N	HL450 / C45	4 D Alkaline	No	No	Small Case
LL300N-1	HL450 / C45	4 D Alkaline	GR151 Tenths	Q104025	System Case
LL300N-2	HL450 / C45	4 D Alkaline	GR152 Inches	Q104025	System Case
LL300N-3	HL450 / C45	4 D Alkaline	GR153 Metric	Q104025	System Case
LL300N-4	HL450 / C45	Rechargeable*	No	No	Small Case
LL300N-8	HR320 / C59	4 D Alkaline	No	No	Small Case
LL300N-BCA	No	4 D Alkaline	No	No	Small Case
LL300N-BCC	No	Rechargeable*	No	No	Small Case

All part numbers include LL300N transmitter. \*Rechargeable comes with Q103311 NiMH battery pack and 95720-00 charger.



# **LL300S** Medium-Range, Highly Accurate Leveling Solution











#### Key Features and Benefits

- Available in system case with receiver, tripod and choice of grade rod
- Fully automatic self-leveling provides fast and accurate setup
- Rechargeable battery pack or alkaline batteries keeps the unit working with no downtime due to power loss
- Optional RC402N remote control allows easy grade matching using the remote control from rod position
- 2,600 ft (800 m) operating diameter

- Single-axis manual slope mode with 'cross-axis' self-leveling allowing grade matching for basic slope work, while maintaining accuracy in the cross-axis
- Built to withstand severe drops of up to 3 ft (1 m) directly onto concrete, or up to 5 ft (1.5 m) when pushed over on a tripod means less downtime and cost due to damage caused by an accidental drop or tip-over
- Comes with a choice of HL450 or HL760. Fingerprinting function can be used when used in conjunction with HL760 receiver.

#### Applications

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

Part No.	Receiver / Clamp	Remote	Power	Rod	Tripod	Case
LL300S	HL450 / C45	No	4 D Alkaline	No	No	Small Case
LL300S-4	HL450 / C45	No	Rechargeable*	No	No	Small Case
LL300S-7	HL760 / C45	No	4 D Alkaline	No	No	Small Case
LL300S-17	HL760 / C45	No	4 D Alkaline	GR151 Tenths	Q104025	System Case
LL300S-27	HL760 / C45	No	4 D Alkaline	GR152 Inches	Q104025	System Case
LL300S-47	HL760 / C45	RC402N	Rechargeable*	No	No	Small Case
LL300S-BCA	No	No	4 D Alkaline	No	No	Small Case
LL300S-BCC	No	No	Rechargeable*	No	No	Small Case
All part numb	ers include LL300S tra	nsmitter. *Re	chargeable comes wit	h Q104234 NiMH	battery pack a	nd 95720-00

All part numbers include LL300S transmitter. \*Rechargeable comes with Q104234 NiMH battery pack and 95720-00 charger.



# **LL500** Longest Range, Highly Accurate Leveling Solution



 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

Includes HL700 Digital Readout Receiver and

on-grade position

C70 rod clamp

mounting placement making it faster to find the





#### **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

#### **General Construction Applications**

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

Part No.	Receiver / Clamp	Power	Rod	Tripod	Case				
LL500	HL700 / C70	4 D Alkaline	No	No	Small Case				
LL500-1	HL700 / C70	4 D Alkaline	GR151 Tenths	2161	Small Case				
LL500-2	HL700 / C70	4 D Alkaline	GR152 Inches	2161	Small Case				
LL500-4	HL700 / C70	NiMH*	No	No	Small Case				
All part numbe	All part numbers include LL500 transmitter and 1046-4750S case. *Q103077 NiMH batteries and 95720-00 charger.								





### HORIZONTAL AND VERTICAL LASERS

# **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
- 2 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 / Clamp	Grade Rod	Tripod	Wall Mount	Remote	Case
HV101	No	No	No	M101	RC601	Small Case
HV101-4	HR150U / C61	No	No	M101	RC601	Small Case
HV101GC-1	HR320 / C59	GR151 Tenths	Q104025	M101	RC601	System Case
HV101GC-2	HR320 / C59	GR152 Inches	Q104025	M101	RC601	System Case
HV101GC-3	HR320 / C59	GR153 Metric	Q104025	M101	RC601	System Case

All part numbers include HV101 transmitter, 1176 ceiling target, Q100206 laser glasses, and 2 D Alkaline batteries.





### HORIZONTAL AND VERTICAL LASERS

# 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

#### **Applications**

- Interior and exterior, light to medium commercial, and residential construction
- Leveling and aligning of forms and footers

- 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
- Leveling and aligning of interior walls
- Installation of ceilings and raised floors
- Exterior walls and facades

Part No.	Receiver / Clamp	Wall Mount	Ceiling Target	Remote	HL Vertical Adapter	Power	Rod	Tripod	Case
HV302	HL760 / C70	No	No	RC402N	105516	4 D Alkaline	No	No	Small Case
HV302-1	No	M302	1176	RC402N	No	Rechargeable*	No	No	Small Case
HV302-4	HL760 / C70	No	No	RC402N	105516	Rechargeable*	No	No	Small Case
HV302GC-2	HL760 / C70	No	No	RC402N	105516	4 D Alkaline	GR152 Inch	Q104025	System Case
HV302-7	HL760 / C70	M302	1176	RC402N	105516	Rechargeable*	No	No	Small Case
HV302-BCA	No	No	No	No	No	4 D Alkaline	No	No	Small Case
HV302-BCC	No	No	No	No	No	Rechargeable*	No	No	Small Case

All part numbers include HV302 transmitter and case. \*Rechargeable pack includes Q104234 NiMH pack and 95720-00 charger.



### HORIZONTAL AND VERTICAL LASERS

# **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 / Clamp	Wall Mount	Ceiling Target	Remote	Power
HV302G-1	No	M302	Q104124	RC402N	Rechargeable*
HV302G-2	HR150U	M302	Q104124	RC402N	Rechargeable*
HV302G-7	HL760U	M302	Q104124	RC402N	Rechargeable*
HV302G-1NR	No	M302	Q104124	No	Rechargeable*

All part numbers include HV302G transmitter and Q104252 laser glasses and small case. \*Rechargeable pack includes Q104234 NiMH battery pack with 95720-00 charger



### **GL412N / GL422N** Single and Dual Grade Lasers with Vertical Alignment













RC402N Remote Control

#### **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 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

#### **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

- 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
- Driveways and ramps
- Trenching
- Sport fields, tennis courts
- Steep slope road embankments and ditch banks

Part No.	Receiver	Clamp	HL Vertical Adapter	Remote	Rod	Tripod	Case
GL412N	HL760	C70 Rod Calmp	105516	RC402N	No	No	Small Case
GL412N-2	CR700	C70 Rod Clamp / C71 Magnetic Mount	No	RC402N	GR152 Inch	Q104025	System Case
GL412N-14	CR700	C70 Rod Clamp / C71 Magnetic Mount	No	RC402N	No	No	Small Case
GL412N-BCC	No	No	No	No	No	No	Small Case
GL422N	HL760	C70 Rod Clamp	105516	RC402N	No	No	Small Case
GL422N-14	CR700	C70 Rod Clamp / C71 Magnetic Mount	No	RC402N	No	No	Small Case
GL422-BCC	No	No	No	No	No	No	Small Case

All part numbers include GL412N or GL422N transmitter, Q104234 NiMH rechargeable battery pack and 95720-00 charger.



### **GRADE LASERS**

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









RC602N Remote Control

#### **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.

#### **General Construction Applications**

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



- Radio communication between the laser and HL760 Laserometer allow advanced features and remote display capabilities
- 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	HL Vertical Adapter	Remote
GL612N	HL760	C70 Rod Calmp	105516	RC602N
GL622N	HL760	C70 Rod Calmp	105516	RC602N
GL622-BCC	No	No	No	No
GL622IR	HL760	C70 Rod Calmp	No	RC602N

All part numbers include GL612N, GL622N or GL622IR transmitter, Q104667 NiMH rechargeable battery pack, Q104781 charger and small carrying case.



# GL710, GL720, GL722 High Precision, Extra Long Range Grade Lasers

RC703 Remote Control



SPECTRA





#### **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 road construction.

#### Applications

- General construction
- Site preparation
- Trenching

- Road construction
- Machine control

Part No.	Grade	Receiver	Clamp	Remote
GL710	Single	HL700	C70 Adapter for Receiver	No
GL710-BCC	Single	No No		No
GL720	Dual	HL700	C70 Adapter for Receiver	No
GL720-BCC	Dual	No	No	No
GL722	Dual	CR600	C50 Adapter for Receiver and C51 Mag. Mount	RC703
GL722-BCR	Dual	No	No	RC703
GL722-IR	Dual Infrared	CR600	C50 Adapter for receiver and C51 Mag. Mount	RC703

All part numbers include transmitter, case, 1445-2900 NiMH rechargeable batteries and 1445-2092 charger.



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





#### **Applications**

- Levelling concrete forms and footers
- Vertical alignment for anchor bolts, building axis, facades and form alignment
- 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	Clamp	HL Vertical Adapter	Spot Finder	Remote
UL633N	2x HL760	2x C70	105516	SF601 with Adapter	RC603N
UL633N-BCC	No	No	No	No	No

All part numbers include transmitter, small case, Q104667 NiMH rechargeable battery pack and Q104781 charger.



### PIPE LASERS



### **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)
- Remote Control RC803 works 430ft (130m) with radio for the laser installation above the trench and 500ft (150m) with infrared through the pipeline
- 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



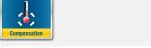


- Installation of gravity flow sanitary pipelines
- Storm sewer pipelines
- Pipe jacking

- 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





### PIPE LASERS

# 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)
- Remote Control RC803 works 430ft (130m) with radio for the laser installation above the trench and 500ft (150m) with infrared through the pipeline
- 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.

- Installation of gravity flow sanitary pipelines
- Storm sewer pipelines

- 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 between 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
- Pipe jacking
- Tunnel boring

Part No.	Components	Power
DG813	DG813 Laser, 1248 trivet plate 8 inch (200mm), RC803 IR/Radio Remote Control, SF803 Spot Finder w/pole adapter & target plate, 956 target, ST805 Transporter	NiMH Recharge
DG813-3	DG813 Laser, 1230 large invert plate, RC803 IR/Radio Remote Control, SF803 Spot Finder w/pole adapter & target plate, 956 target, ST805 Transporter	NiMH Recharge
DG813-5	DG813 Laser, 1230 large invert plate, 1239 vertical pole, RC803 IR/Radio Remote Control, SF803 Spot Finder w/pole adapter & target plate, 956 target, ST805 Transporter	NiMH Recharge
DG813-6	DG813 Laser, 1237 large invert plate (metric), 1239 vertical pole, RC803 IR/Radio Remote Control, SF803 Spot Finder w/pole adapter & target plate, 956 target, ST805 Transporter	NiMH Recharge
5	SpotFinder Temperature	

### LASER RECEIVERS

### **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

#### 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
- The perfect entry level receiver for smaller job sites
- Includes C61 general purpose rod clamp

# HR1220 Line Laser Receiver

Special Receiver for use with Line Lasers



#### Applications

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

#### **Key Features and Benefits**

- Front and rear LCD provides ease of viewing
- Illuminated LCDs for easy-to-see readings in low light conditions
- Two accuracy selections to fit various jobsite requirements
- Large 3 inch (80 mm) reception height for quick beam acquisition

- **3** WARRANTY NO COST
- Includes C20 rod clamp for attachment to rods

0

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HASE

- Dual level bubbles for accurate horizontal and vertical readings
- Built-In magnets on top of receiver for attachment to ceiling grids or metal studs
- Marking notches on each side at on-grade for easy transferring of 4 ft (1 m) marks

### **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)
- Iwo on-grade sensitivities (fine and coars allow getting to grade fast
   Spap-on rod clamp (included) allows
- Snap-on rod clamp (included) allows quick attachment and removal



- 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



### **DIGITAL LASER RECEIVERS**

## **HL450 Digital Readout Receiver**

### Ideal for use with any Rotating Transmitter





#### Applications

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

### Setting formsChecking sub-base materials

- Screeding concrete
- HL450 PROF

#### **Key Features and Benefits**

- Digital readout of elevation allows faster readings by displaying the exact numerical distance from grade, eliminating the need to move the receiver to get to "on-grade"
- Anti-Strobe Sensor stops construction strobe lights from setting off the receiver, and eliminates phantom strikes for easier identification of true laser beam signals
- Large 4-inch (10.2-cm) reception height allows faster readings by acquiring the beam quickly, and makes it easier to stay in the beam
- Withstands direct drops up to 5 feet (1.5 meters) on to concrete providing less downtime due to damage and service requirements
- Full weather and dust proof design, including the battery compartment assures a longer product life and/or repair costs
- Approximately 60-hour battery life with 2 x AA batteries keeps work going on the jobsite
- Automatic power shutoff (after 30 minutes) reduces annual battery cost
- C45 Rod Clamp included

# **HL700 Digital Readout Receiver**

### Highly Versatile Receiver for Basic and Advanced Leveling and Aligning





### Applications

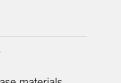
- Checking elevations
- Basement excavation
- Digging septic tanks
- Checking foundations
- Digging footings
- Setting forms
- Checking sub-base materials
- Screeding concrete



### Key Features and Benefits

- Digital Readout of Elevation provides a numeric display of ± 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

- Designed to survive the tough construction site conditions; it is totally waterproof and can withstand a drop of 10 feet (3 meters) onto concrete
- Simultaneous elevation LEDs signal in low light levels and over a longer range provide easier reading in poor light
- Two clamp positions for cut/fill or excavation. Excavation mode puts more reception height and elevation information above grade for higher utilization in digging and staking applications
- Three-year "No Excuses" warranty
- C70 Rod Clamp with Bubble Vial included



# **DIGITAL LASER RECEIVERS**

### HL760 / HL760U Radio Digital Readout Receiver

Highly Versatile Receiver for Basic and Advanced Leveling and Aligning







#### Applications

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

#### Setting and checking jobsite elevation and depth for:

- Cut and fills and grading
- Foundations, forms, and footings
- Excavations



#### Key Features and Benefits

- Digital readout of elevation not only will high or low arrows be displayed, but the exact distance from grade will be displayed, which eliminates the need to get "on-grade" to make measurements
- Large 5 inch (12.7 cm) reception height acquires the beam quickly and makes it easy to stay in the beam
- The HL760 / HL760U has an internal, long range 330 ft (100m) radius, high speed digital radio built inside that allows the receiver to communicate with any other HL760 / HL760U: LL300S, LL400HV, HV302, GL412N / GL422N, GL612N/GL622N, UL633N laser transmitters
- Machine operators can monitor elevation shots taken by another person or foremen can monitor elevations and cut/fill readings from anywhere on the jobsite
- Anti-strobe sensor stops construction strobe lights from setting off the receiver, and makes it easier to identify true laser beam signals

- Multiple deadband setting allows adaptation to meet all your jobsite requirements
- Dust and weatherproof housing withstands a drop of up to 10 ft (3 m) onto concrete for reduced downtime
- Two clamp positions for cut/fill or excavation
- Three-year "No Excuses" warranty
- C70 Rod Clamp with Bubble Vial included
- C70 Clamp has a patented reversible jaw to allow a more solid fix to round or square rods.
- 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.

### **Specific HL760 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 (when HL760 is 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.

Please note these 2 functions are only available on some Spectra Precision rotating lasers.



### **DIGITAL COMBINATION LASER RECEIVERS**

# **CR700 Combination Receiver**

### Machine or Rod Mounted Combination Receiver









- Bright LED Arrow Displays new red/green/blue LED arrows are super bright and visible in all conditions
- Magnetic Clamp new C71 magnetic clamp will not slip on the machine no matter how rough the work is
- Light Bar Technology patented laser reception technology delivers the most accurate, consistent and reliable performance
- Laser Radio the CR700 is radio-compatible with the GL400N / GL600N series grade lasers and the HV302 enabling the use of time saving functions such as Grade Match, Fingerprinting, PlanLok and Axis Alignment
- IP67 dustproof, waterproof, weatherproof
- 10-foot (3 m) Drop Guarantee almost destruction proof, extremely robust; eliminates downtime
- Digital Read-Out the CR700 provides the exact distance from on-grade numerically
- Remote Display pair the CR700 receiver with an HL760 receiver to be used as a remote display — useful for machine operators and site supervisors



- Fingerprint On/Off a menu function allows the CR700 to enable or disable Fingerprinting, which pairs the receiver with a particular laser, eliminating erroneous readings from multiple lasers
- Backlight Receiver can be viewed in the dark or low light conditions
- Vertical Drift Alarm Warns if the laser is disturbed when using in the vertical mode
- 3-Year Warranty the best warranty on laser receivers





Includes C70 adapter with bubble vial Includes C71 Magnetic Mount

Applications

- Digging footings
- Basement and trench excavations
- Checking sub-base materials
- Setting and checking elevations

Leveling and aligning forms

- Screeding concrete
- Vertical alignment



### **OPTICAL INSTRUMENTS**



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









Air dampened model shown

#### Key Features and Benefits

- Choice of magnetic or air dampened automatic compensators
- Double-sided, continuous horizontal tangent drives
- Stadia lines for simple distance measurement
- Convenient horizontal angle measurement
- Built in bubble mirror and sighting guide
- Metal housing for increased durability

#### AL20M

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

#### AL24A, AL24M

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

- Water resistant construction
- Includes hardshell case
- 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

#### AL32A

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

### **OPTICAL INSTRUMENTS**

# **DET-2 Construction Theodolite Full Featured Digital Theodolite** for Construction



90 Degree angle audible notification - for quick

Instant conversion of vertical angles to percent of

NiMH rechargeable battery pack and charger -

Alkaline battery pack standard - provides backup

and eliminates downtime if the charge is lost in

Each DET-2 comes equipped with a plumb bob,

NiMH rechargeable battery pack and charger,

hood, multi-language user guide, and hardshell,

alkaline battery pack, adjustment tools, rain

compact, o-ring sealed carrying case

lower operating cost with reusable batteries

in conjunction with Dialgrade® pipe work

grade - convenient for slope work and when used

turning and set out of right angles









#### **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 eve 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

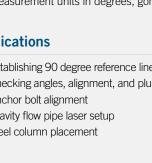
#### **Applications**

- 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

the middle of a job

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



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### LASER DISTANCE METERS











#### **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

#### **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)

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

### LASER TOOLS

### 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

- Level, horizontal and vertical layout, checking plumb
- Point transfer
- Checking square
- Layout of interior walls

- 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
- 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 1215-1560	Soft Pouch	2 x AA Alkaline
YEAR WARRANTY DECHANE	1m (3ft)	ensator Lock. Magnetic Mou	nt ONE BUTTON FUNCTION		
90° Layout	5 Beam Poin	It Transfer	Green 90° Layout	5 Beam Poi	nt Transfer

### **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

- Level, horizontal & vertical layout, square, & plumb
- Building, layout, & squaring of interior walls
- Acoustical ceiling installation (small rooms)

- 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
- 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 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
- HR1220 receiver can be added for exterior applications for maximum jobsite versatility

- Level, horizontal and vertical layout, square, and 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 HR1220 receiver
- Exterior building decks, patios, columns, and posts

Part No.	Magnetic Bracket	Target	Case	Receiver	Batteries
LT52R	M152	Red Ceiling/Floor 23416	Hard Case 1215-1741	No	Lithium-Ion, Charger 1215-1610
LT52G	M152	Green Ceiling/Floor 1215-1560	Hard Case 1215-1741	No	Lithium-Ion, Charger 1215-1610
LT52G-2	M152	Green Ceiling/Floor 1215-1560	Hard Case 1215-1741	HR1220	Lithium-Ion, Charger 1215-1610





# LT56 Rugged Universal Laser Layout Tool

# Simple to use – Perfect for Interior Construction



- One tool to use on every job every day. HR1220 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
- General construction elevation control with HR1220 receiver
- Reference points for sprinkler systems, HVAC, lighting
- Exterior building deck footings, patios, columns, & posts









#### 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

- Level, horizontal & vertical layout, square, & plumb
- Building, layout, & squaring of interior walls
- Acoustical ceiling installation
- Drywall track installation
- Cabinet & trim installation, finish carpentry

Part No.	Magnetic Bracket	Target	Case	Receiver	Trivet	Batteries
LT56	1215-1650	Red Ceiling/Floor 23416	Hard Case 1215-1641	No	No	Lithium-Ion, Charger 1215-1310
LT56-2	1215-1650	Red Ceiling/Floor 23416	Hard Case 1215-1641	HR1220	No	Lithium-Ion, Charger 1215-1310
LT56-3	1215-1650	Red Ceiling/Floor 23416	Hard Case 1215-1641	No	M156	Lithium-Ion, Charger 1215-1310



### LASER TOOLS

### **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

- 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	Receiver	Trivet	Batteries
LT58G	1215-1650	Green Ceiling/Floor 1215-1560	Hard Case 1215-1640	No	No	Lithium-Ion, Charger 1215-1610
LT58G-2	1215-1650	Green Ceiling/Floor 1215-1560	Hard Case 1215-1641	HR1220	No	Lithium-Ion, Charger 1215-1610
LT58G-3	1215-1650	Green Ceiling/Floor 1215-1560	Hard Case 1215-1641	No	M156	Lithium-Ion, Charger 1215-1610



### MACHINE DISPLAY RECEIVERS



# LR20 Receiver

**Compact Receiver for Compact Machines** 



#### Applications

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

#### **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

- Footers, storm drains, utility, sewage
- General construction grade and depth control



 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

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

- LR30W provides wireless link to RD20 remote display that can be placed in cab 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



### MACHINE DISPLAY RECEIVERS

### 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

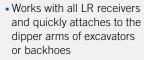
#### Applications

- 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

# Part No.DescriptionRD20RD20 Remote DisplayRDM-1Mount, RD10 Swivel010983Cable, RD10 + RD20 Power, Lighter/power adapterMM-1Magnetic Mount for LR ReceiversDM-20Bulldozer Bolt-On Mount

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

SPEGTRA



- 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<sup>™</sup> 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 A	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

## LASER ACCESSORIES



### **ACCESSORIES - TRIPODS**

# **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



#### **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

1161	2161	2162
4		

SPEGTRA

Part No.	Material	Extension
1161	Wood	Extends from 3 ft 2 in to 5 ft 3 in (96 cm to 160 cm)
2161	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)



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.

v	Tri-Max	4
	Ţ	

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

### **ACCESSORIES - GRADE RODS**

# **Aluminum Grade Rods**

#### **Applications**

- Grading
- Leveling
- Sitework

### **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

- Landscaping
- Foundations
- 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

Landscaping Foundations

# **Fiberglass Grade Rods**

#### **Applications**

- Grading
- Leveling
- Sitework

#### **Key Features and Benefits**

- CR Series Leveling Rods are perfect for laser detector mounting - no special brackets are required
- Rectangular shape with rounded back corners for better gripping
- SVR oval fiberglass rods are a surveying standard. Additional
- models available SVR 25 features a short collapsed length (58-1/2
- inches) for convenient storage

#### **Applications**

- Laser Grade Checking
- Leveling
- Sitework
- Key Features and Benefits
- Direct Elevation (DE) rods are made of aluminum
- Laser DE rods feature a side rail for attaching optional bracket for laser receiver
- Continuous tapes are stainless steel

Fiberglass is non-conductive

# **Specialty Grade Rods**

#### Landscaping

- Foundations
  - Latch in back locks the band in any position to match a benchmark elevation
  - Wear resistant Delrin<sup>®</sup> end-rollers

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
7321-40	13 ft	4	Inches
	13 ft	4	Tenths

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CR

1987854321

SVR

Part No.	Length	Model	Scale
92021	13 ft	CR	Tenths
92022	13 ft	CR	Inches
92041	16 ft	CR	Tenths
92042	16 ft	CR	Inches
92031	20 ft	CR	Tenths
92032	20 ft	CR	Inches
Part No.	Length	Model	Scale
98010	25 ft	SVR	Tenths
98011	25 ft	SVR	Inches
98012	7.6 m	SVR	Metric

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



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

### **SPECIFICATIONS**



	Laser Levels					Horizontal and Vertical 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: 250 ft (75 m)	Receiver: 2600 ft (800 m) Visible: 250 ft (75 m)		
Self-leveling range	±5 deg	grees electronic serv	vo 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 backup			
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)		10.7L × 7.7W × 7.9H in (27.2L × 19.7W × 20.1H cm)		8.5 × 6.7 × 6.0 in (22 x 17 x 15 cm)	10.7L × 7.7W × 7.9H in (27.2L × 19.7W × 20.1H cm)	10.7 × 7.7 × 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		

	Laser Display Receivers							
	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)         Fine: 0.20 in (5 mm)           Standard: 0.45 in (12 mm)         Standard: 0.40 in (10 Wide: 1.25 in (32 mm)           Wide: 1.25 in (32 mm)         Wide: 0.80 in (20 m		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	NA	Ą	$\pm 0.5^{\circ}, \pm 1.5^{\circ}, \pm 2.5^{\circ}$	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					

## SPECIFICATIONS

Grade & Universal Lasers							
	GL412N /	GL422N	GL612N	/ GL622N	UL633N		
Accuracy			t 100 ft, 1. (10 arc sec	5 mm at 30 onds)	m		
Laser type / classification	639 nm,	Class 2		9 nm, 2, 3 mW	650 nm, Class 3A/3R, <5mW		
Operating diameter		:	2600 ft (80	00 m)			
Self-leveling range	±5 de electron self-le	ic servo		±14 degr electronic self-leve	servo		
	-10 to	+15%	-25 to	o +25%	-25 to +25%		
Grade range	Single	Dual	Single	Dual	X, Y, Z axis		
Power source		4 x D-cell NiMH battery pack					
Battery life	35 hrs 50 hrs /			35 hrs N 40 hrs Alk			
Rotation speed	300, 60	)0 rpm	GL612N: 300, 600, 750 rpm GL622N: 0 to 900 rpm		0 - 750 rpm		
Water resistant			Yes, IP6	56			
Size L × W × H	10.7L × 7.7 (27.2 × 19.7			9.4 x 5.9 x (24 x 15 x 2			
Weight			6.8 lbs (3.	1 kg)			
Warranty	5 Ye	ears	5 \	/ears	5 Years		
	Wireless	s Remote Sp	ecification	s			
Remote control type 2-way communication	RC4	02N	RC602N		RC603N		
Battery life		13	30 hrs cont	tinuous			
Range	330 ft (	100 m)		490 ft (15	0 m)		

Pipe Lasers							
	DG813	DG613/DG613G					
Grade range	-12% te	0 +40%					
Self-leveling range	(no rough leveling red	grade range quired) also automatic n the cross axis					
Line range	20°	±1°					
Line center	Y	es					
Menu with variable settings	Y	es					
Line set/check / Line alert	Y	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 sub	omersion 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		I3G: 30 hrs) with daily at 20° C					
Battery pack	Sealed (NiMH), Seale	d removable (alkaline)					
Warranty	5 Y	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° fro	m level	±4° fro	m level		
Working range - Visible	100 ft (30 m)	115 ft (35 m)	100 ft (30 m)	115 ft (35 m)	100 ft (30 m) Lines 200 ft (60 m) Points	115 ft (35 m) Lines 230 ft (70 m) Points	80 ft (25 m)	100 ft (30 m)		
With HR1220 detector	N/A		N/A		260 ft (80 m)		260 ft (80 m)			
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 @ 50 ft (3 mm @ 15 m)			
Battery type	2 x	AA	3 x AA		Lithium-Ion		Lithium-Ion			
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 beam 11 hrs all beams		
Dimensions		ix4.1x2.4 in 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 in	stant exchange					

**HR / HL Laser Receivers** HR150U HR1220 HR320 HL450 HL700 HL760 / HL760U Working Radius 3 - 650 ft 3 - 1500 ft 3 - 100 ft 3 - 250 ft 3 - 650 ft 3 - 1500 ft \*Laser Dependent (1 - 460 m) (1 - 30 m) (1 - 80 m) (1 - 200 m) (1 - 200 m) (1 - 460 m) Laser Detection 2 in 3 in 2 in 4 in 5 in 5 in Height (50 mm) (80 mm) (50 mm) (102 mm) (127 mm) (127 mm) 720 ft **Radio Working** N/A N/A N/A N/A N/A Radius (220 m) 1/64 - 1/2 in **Accuracy Range** 1/8 in 1/16 - 1/8 in 1/16 - 1/4 in 1/64 - 1/4 in 1/64 - 1/2 in (Deadband) (3 mm) (1 - 2 mm) (2 - 6 mm) (0.5 - 10 mm) (0.5 - 10 mm) (0.5 - 10 mm) 3 Accuracy Settings 1 2 2 6 6 Green - On Grade Green - On Grade Green - On Grade **LED Grade Indicators** Red - High N/A N/A N/A Red - High Red - High Blue - Low Blue - Low Blue - Low "Fingerprinting" No No No No No Yes 2 x 2 x 2 x 2 x 2 x 2 x **Power Supply** AA Alkaline AA Alkaline AA Alkaline AA Alkaline AA Alkaline AA Alkaline **Battery Life** 50+ hrs 40+ hrs 70+ hrs 60+ hrs 60+ hrs 60+ hrs Auto Shut Off 24 hr 30 min 30 min 30 min 30 min - 24 hr 30 min - 24 hr **IP** Rating IP67 IP66 IP67 IP67 IP67 IP67 Warranty 3 Years 3 Years 3 Years 3 Years 3 Years 3 Years

GL700 Series Lasers							
Model	GL710	GL720	GL722				
Servo Deadband Accuracy	3/	64 in at 100 ft, 1.2 mm @ 30 m, (8 arc second	ds)				
Range (Diameter)		3,000 ft (900 m)					
Axis Grade Range X	NA	-10 to +10%	-10 to +10%				
Axis Grade Y		-0.5 to +25%					
Grade Resolution		0.001%					
Power Source		NiMH 6 x D cell					
Battery Life		30 hrs					
<b>Rotation Speeds</b>		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 Remote Specifications					
General	Ra	dio Type, 2.4 gHz digital, encrypted to each la	ser				
Operating Range	750 ft (225 m)	general operation	500 ft (150 m) automatic alignment				
Battery Life		100 hrs					
Warranty		2 Years					

SPECTRA

# SPECIFICATIONS

Automatic Levels								
	AL20M	AL24A	AL24M	AL28M	AL32A			
Magnification	20×	24	4×	28x	32x			
Accuracy	±2.5 mm*	±2.0 mm*		±1.5 mm*	±1.0 mm*			
Aperture			30 mm					
Shortest focus			0.6 m					
Compensator dampening	Magnetic	Air	Magnetic	Magnetic	Air			
Warranty	2 Year instant exchange							

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

	DET-2										
Telesc	ope	Optical	Plummet	Angle Measu	ring System	Vial	s	Butt	on Functions	Other S	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	Ν	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 - GL622N - 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					

### Build a Stronger Business with Spectra Precision Products

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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.

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Specifications subject to change without notice

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