

2015 CONSTRUCTION DISTRIBUTOR CATALOG

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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INTERIOR LASERS
LASER LEVELS
GRADE LASERS
MACHINE RECEIVERS
RECEIVERS
OPTICAL

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Welcome to our latest catalog where you can see our wide variety of positioning tools ranging from various lasers to optical instruments This catalog is special as we are celebrating a significant event, the 50th Anniversary of the invention of construction laser. It was an exciting beginning in 1965 for Bob Studebaker in Dayton, Ohio when he introduced the construction laser to the world. Bob's invention transformed the way work was done and is still done on construction jobsites worldwide. The company Bob worked for, LaserPlane - Spectra Physics, would become part of Trimble Navigation in 2000. Over the 50 years, we have continued to follow Bob's lead and bring forth new and innovative products to the construction industry. On page (or below) is a timeline that shows many of

the innovations Spectra Precision has introduced to construction professionals. The evolution of the laser has now made it hard to find a jobsite that doesn't utilize a laser sometime during the project. Our products help our customers do their work faster with proven accuracy. Our toughness allows us to offer the best warranties in the industry. We invented and continue to reinvent our industry.

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

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

Warranty/Service

Shockproof Products Built for the Construction Environment





all Spectra Precision products that show the "Shockproof" icon are ruggedized and designed to withstand a 1m (3ft) drop onto concrete and tripod tip-over up to 1.5m (5ft) resulting in reduced downtime and lower repair costs.

Spectra Precision products are designed to be used in the

conditions is expected. Environmental conditions are often

harsh, with water, mud and concrete being encountered on a

daily basis. At Spectra Precision this is considered with every

product. Products occasionally get dropped or knocked over;

tough construction environment where performance in arduous

Industry Leading Warranty and Service Support

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

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

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

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

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

Worldwide Service Network

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

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

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





LT58

The go-to ceiling laser



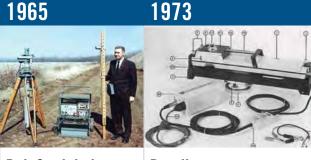
2015

LL400HV

Longest range. highly accurate, horizontal/vertical leveling solution



2002 2008 2010 2012 2013 2009 **DG711** LL100/HV101 **GL522** 5.2XL **UL633 DR400** dual grade lasers pipe laser new generation combination the MOST the Rod-Less of fully automatic Grade Checker with anodized with extended point and versatile aluminum lasers functions, and crossline laser construction with HL750 radio laser... EVER! housing receiver and radio control



Bob Studebaker

with the 1st rotating laser in the world



Rotolite

1st rotating laser for interior work



945U

1976

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



EL-1

1981

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



1984

1st pipe laser with internal battery and infrared remote control

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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. What is Grade Matching?

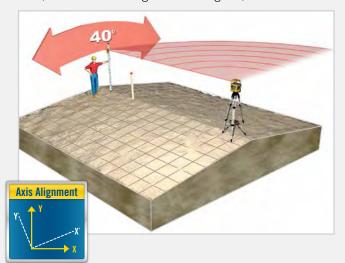
Grade Matching allows a user to match the fall of the ground or between two existing elevations without complex calculations.

- 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



6. What is Automatic Axis Alignment?

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



7. Can a laser be knocked over or dropped?

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

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

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



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LL100N

Affordable, Easy to Use Laser Level











Key Features and Benefits

- When system case configuration purchased includes LL100N laser, HR320 receiver, C59 receiver clamp, tripod and choice of grade rod - a complete leveling crew in case
- Easy to transport, easy to store, easy to use
- Fully automatic self-leveling rotating laser provides fast and accurate setup



- Robust design withstands a 3 ft (1 m) tripod tip over and still remains functional, reducing costs for downtime or repair
- 3 Year No-Downtime warranty keeps productivity high and operating costs low
- One-person elevation control up to a 1,150 ft (350 m) diameter

Applications

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

Part No.	Receiver	Rod	Tripod	Case
LL100N	HR320	No	No	Small 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

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

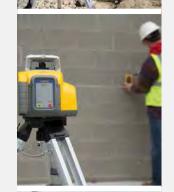




Medium-Range, **Highly Accurate Leveling Solution**









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 position
- 1650 ft (500 m) operating diameter

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

Applications

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

Part No.	Receiver	Power	Rod	Tripod	Case
LL300N	HL450	4 D Alkaline	No	No	Small Case
LL300N-1	HL450	4-D Alkaline	GR151 Tenths	Q104025	System Case
LL300N-2	HL450	4-D Alkaline	GR152 Inches	Q104025	System Case
LL300N-3	HL450	4-D Alkaline	GR153 Metric	Q104025	System Case
LL300N-4	HL450	Rechargeable pack*	No	No	Small Case
LL300N-8	HR320	4 D Alkaline	No	No	Small Case

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











LL300S

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



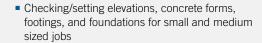


Key Features and Benefits

- 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
- 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
- Comes with a choice of HL450 or HL760. Fingerprinting function can be used when used in conjunction with HL760 receiver.





- Basic slope work such as driveways and ramps
- Excavating, digging footings, and septic tanks





Part No.	Receiver	Power	Rod	Tripod	Case
LL300S	HL450	4 D Alkaline	No	No	Small Case
LL300S-1	HL450	4 D Alkaline	GR151 Tenths	Q104025	System Case
LL300S-2	HL450	4 D Alkaline	GR152 Inches	Q104025	System Case
LL300S-3	HL450	4 D Alkaline	GR153 Metric	Q104025	System Case
LL300S-4	HL450	Rechargeable pack*	No	No	Small Case
LL300S-7	HL760	4 D Alkaline	No	No	Small Case
LL300S-47	HL760	Rechargeable pack*	No	No	Small Case
LL300S-17	HL760	4 D Alkaline	GR151 Tenths	Q104025	System Case
LL300S-27	HL760	4 D Alkaline	GR152 Inches	Q104025	System Case
LL300S-37	HL760	4 D Alkaline	GR153 Metric	Q104025	System Case
All part numb	ers include LL300S	transmitter and case. *Recha	rgeable pack comes w	ith NiMH batteries	and charger.







LL400HV

Longest Range, Highly Accurate Horizontal/Vertical Leveling Solution





Key Features and Benefits

- 2,600 ft (800 m) working diameter which increases productivity by reducing need for multiple set-ups on a large job site
- Fast setup, minimal training time and automatic self-leveling minimize operating costs and boost productivity
- Highly rugged design and patented lighthouse seal protects the rotor head and glass and offers superior drop and weather protection for reduced downtime
- Single-axis slope mode provides grade matching with self-leveling cross axis for improved accuracy
- Automatic Grade Match and PlaneLok capability using the optional RC402N remote control

- Energy-efficient design offers choice of NiMH rechargeable or alkaline batteries for lower operating costs
- Temperature calibrated for high accuracy over wide temperature changes
- IP66 dust- and water-proof to withstand harsh jobsite conditions
- Flexible power options and minimal power costs due to long battery life
- Customizable with choice of HL760 or CR600 receivers. Fingerprinting function can be used when used in conjunction with HL760 receiver.

General Construction Applications

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

Machine Control Applications

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

Part No.	Receiver	Power	Rod	Tripod	Case	Retail Package
LL400HV	HL760	4 D Alkaline	No	No	Small Case	No
LL400HV-1	HL760	4 D Alkaline	GR151 Tenths	Q104025	System Case	Yes
LL400HV-2	HL760	4 D Alkaline	GR152 Inches	Q104025	System Case	Yes
LL400HV-4	HL760	Rechargeble pack	No	No	Small Case	No
LL400HV-10	CR600	4 D Alkaline	No	No	Small Case	No
All	part numbers ind	lude LL400HV tra	nsmitter and case.	*Rechargeable pa	ck comes with charg	ger.



















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



General Construction Applications

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

Machine Control Applications

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





Part No.	Receiver	Power	Rod	Tripod	Retail Package
LL500	HL700	4 D Alkaline	No	No	No
LL500-1	HL700	4 D Alkaline	GR151 Tenths	2161	Yes
LL500-2	HL700	4 D Alkaline	GR152 Inches	2161	Yes
LL500-3	HL700	4 D Alkaline	GR153 Metric	2161	Yes
LL500-4	HL700	NiMH	No	No	No
LL500-10	CR600	4 D Alkaline	No	No	No
LL500-11	CR600	4 D Alkaline	GR151 Tenths	2161	Yes
LL500-14	CR600	NiMH	No	No	No
	All part numbers incl	ude LL500 transmitte	er and case, *NiMH pa	ack comes with charge	r.



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.











HV302

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













Key Features and Benefits

- The housing is rugged, lightweight and IP66 weatherproof making it easy for contractor carry and use in demanding jobsite conditions, reducing repair downtime
- Fully automatic self-leveling in both horizontal and vertical for fast, accurate setup in horizontal and vertical applications
- Single-axis manual slope mode with 'cross-axis' self-leveling allows grade matching for basic slope work, while maintaining accuracy in the cross-axis
- Automatic Grade Match and PlaneLok using RC402N and HL760
- Highly visible 3A/3R beam and superior scanning functions making it easier for interior layout and aligning over longer range job sites (visible diameter of 330 ft (100 m)
- Long-range remote control operation allows convenient access to key functions across
- Flexible power options, including rechargeable battery pack, AC power and alkaline batteries, combined with low battery warnings, reduces downtime by having multiple power options

Applications

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

Part No.	Receiver	Wall Mount	Ceiling Target	Remote
HV302	HL450	No	No	No
HV302-1	No	M302	Yes	RC402N
HV302-2	HR150U	M302	Yes	RC402N
HV302-7	HL760	No	No	No
HV302GC-2	HR320	No	No	RC402N

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



















HV301G

Rugged Green Beam Laser System for Interior Construction









Key Features and Benefits

- High visibility green beam is four times more visible than standard red beam lasers allowing work at longer distances and in brighter conditions
- Automatic self-leveling in horizontal and vertical applications increases productivity with fast setups and minimal training
- Infrared remote with 360° access is standard and allows operation of key functions over

- Scanning function positions the beam in the work area
- Includes all the features and functions of the HV301
- Durable construction can withstand tough jobsite conditions
- Temperature compensation for accurate use throughout the day
- Intuitive one-touch operator controls allow anyone to get to work quickly

- Installation of ceilings
- Layout, leveling, and aligning of interior walls
- Interior finishing work

- 1 m (4 ft) marks
- Installation of raised access floors

Part No.	Receiver	Wall Mount	Ceiling Target	Remote	
HV301G	No	M300	Yes	RC601	
HV301G-2	HR150U	M300	Yes	RC601	
All part numbers include HV301G laser glasses, target, transmitter, case and NiMH battery pack with charger.					















GL412N / GL422N

Single and Dual Grade Lasers with Vertical Alignment











RC402N Remote Contro



Key Features and Benefits

- GL412N / GL422N are grade plus horizontal and vertical lasers. Simple, accurate dial in grade from -10% to +15% (Single GL412N, Dual GL422N)
- Up to 2,600 ft (800 m) working diameter which increases productivity by reducing need for multiple set-ups on a large job site
- Fast setup, minimal training time and automatic self leveling minimize operating costs and boost productivity
- Highly rugged design and patented lighthouse seal protects the rotor head and glass and offers superior drop and weather protection for reduced downtime
- 2-way full function remote control allows grade changes to be made from anywhere on the jobsite
- Temperature calibrated for high accuracy over wide temperature changes
- IP66 dust and water-proof to withstand harsh jobsite conditions
- Customizable with choice of HL760 or CR600 receivers
- Mask mode eliminates interference from other crews on the jobsite
- Automatic Grade Match and PlaneLok

Applications

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

- Driveways and ramps
- Trenching
- Sport fields, tennis courts (GL422N only)
- Steep slope road embankments and ditch banks

Part No.	Receiver	Clamp	Remote		
GL412N / GL422N	HL760	C70 Adapter for receiver	RC402N		
GL412N-14 / GL422N-14	CR600	C50 Rod Clamp and C51 Magnetic Mount	RC402N		
All part numbers include GL412N/GL422N transmitter, case and NiMH rechargeable battery pack and charger.					















GL612 / GL622

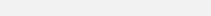
Versatile Automatic Single and Dual Grade Laser for Level, Grade, and **Vertical Alignment**











RC602 Remote Control

- GL612 / GL622 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

Key Features and Benefits

- 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 (GL622only) is easy to setup for increased accuracy.
- PlaneLok automatically locks on to an existing

and remote display capabilities

elevation or vertical alignment point which eliminates all drift or possibility of error due to improper calibration or weather

Radio communication between the laser and

Grade Match displays the existing grade

over unknown ground and eliminates time

spent searching for grade plans, and over

consuming and error prone calculations, time

HL750 Laserometer allow advanced features

5 Year "No Cost" Warranty

General Construction Applications

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

HL750 Applications

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

Part No.	Receiver	Clamp	Remote
GL612 / GL622	HL750	C70 Adapter for receiver	RC602
GL612-14 / GL622-14	CR600	C50 Adapter for receiver and C51 mag. Mount	RC602
GL612-1 / GL622-1	2 x HL750	2 x C70 Adapter for receiver	RC602

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



















GL710, GL720, GL722

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













Key Features and Benefits

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

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
All part n	umbers include transmitter, case	e and NiMH rechargeable batte	ery pack and charger.







Universal Laser UL633

The Most Versatile Construction Laser, Ever







Key Features and Benefits

- Full control for horizontal level, single or dual grade, vertical alignments or setting out 90° angles- providing the ability to do so much more from one single laser
- 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

Part No.	Receiver	Spot Finder SF601	Clamp	Remote
UL633	HL750	No	Rod Clamp with Bubble Vial	RC603
UL633-1	2 x HL750	No	Rod Clamps with Bubble Vial	RC603
UL633-14	HL750	with adapter with rubber strap plus 956 target and target plate	Rod Clamp with Bubble Vial	RC603
UL633-24	2x HL750	with adapter with rubber strap	Rod Clamps with Bubble Vial	RC603
All part numbers include transmitter, case and NiMH rechargeable battery pack and charger.				







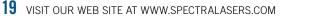












DG511

DialGrade — The Pipe Laser Standard



DG711

Toughest Laser You Will Find In A Pipe











Key Features and Benefits

- Rugged design that is built for long lasting performance and reliability in the destructive underground environment
- Largest automatic self-leveling range in the industry providing quick, easy set-ups
- Bright, powerful beam that can be seen in any conditions combined with a patented target that bends the beam upwards from the pipe to make it easier to see from a standing position.
- 3 Button infra-red remote control allows the user to adjust the alignment to the centre of the pipe but keeps operation simple.
- Different power options although the laser will run for a week on a single charge.

Applications

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

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

Part No.	Accessory	Power
DG511	Standard package (recharge)	NiMH Recharge
DG511-2	1233 Sighting scope, mounting block & 1161 heavy duty tripod	NiMH Recharge
DG511-3	1230 Metal Plate w/adjustable legs (inches)	NiMH Recharge
DG511-5	1230 Metal Plate & 1239 vertical pole (inches)	NiMH Recharge
DG511-6	1237 Metal Plate, 1239 vertical pole (metric)	NiMH recharge
DG511-7	Standard package (alkaline)	Alkaline
DG511-9	External power cable	Alkaline
DG511-13	1233 Sighting scope, excludes 956 target and RC601	NIMH Recharge









Key Features and Benefits

- Rugged design with nickel alloy anti-corrosion housing built for tough pipe laying conditions.
- Largest self-leveling range in the industry allowing the user to have full control over the grade range and eliminates the need to give the laser a "bump" to get to grade.
- The DG711 has additional on-board software that provides more control and eliminates costly errors. Line Alert mode notifies the user the laser set up has been disturbed with a flashing beam.
- Quick, easy set-up for aligning to a manhole above the trench can be achieved by using the Line Set/Check function from the laser or by using the fully functional remote control.

- Line scan function allows the user to quickly align to the centre of the target in the pipe making set-up quick and easy.
- 7 button infra-red remote control allows the user to have full control over the laser from the other end of the pipe. Setting alignment and setting grade can be achieved with minimum of fuss.
- On-board menu is available in 16 languages.
- Full range of set-up accessories and power options are available and are easy and straightforward to use.

- Installation of gravity flow sanitary pipelines
- Storm sewer pipelines

- Pipe jacking
- Tunnel boring

Part No.	Accessory	Power
DG711	Standard package (recharge)	NiMH Recharge
DG711-2	1233 Sighting scope, mounting block & 1161 heavy duty tripod	NiMH Recharge
DG711-3	1230 Metal Plate w/adjustable legs (inches)	NiMH Recharge
DG711-5	1230 Metal Plate & 1239 vertical pole (inches)	NiMH Recharge
DG711-6	1237 Metal Plate, 1239 vertical pole (metric)	NiMH recharge
DG711-7	Standard package (alkaline)	Alkaline





HR150U Receiver

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



Applications

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



Key Features and Benefits

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

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 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
- 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
- Simultaneous elevation LEDs signal in low light levels and over a longer range provide easier
- Excavation mode puts more reception height and elevation information above grade for higher utilization in digging and staking applications
- C70 Adapter with Bubble Vial included

conditions; it is totally waterproof and can withstand a drop of 10 feet (3 meters) onto concrete

- reading in poor light • Two clamp positions for cut/fill or excavation.
- Three-year "No Excuses" warranty

HL750 Radio Digital Readout Receiver

Digital readout and robust performance



Applications

- Checking elevations
- Basement excavation
- Septic tank installation
- Checking footings and
- Checking sub-base materials
- Screeding concrete
- Vertical alignment (with laser in vertical mode)

Key Features and Benefits

- The HL750 with radio communication is a stand alone receiver that works with all red beam laser transmitters providing a digital readout for elevation control in millimetres or fractional inches, eliminating the need to get "on-grade" when taking measurements.
- The internal radio allows the receiver to be paired with a second HL750 for long range wireless remote display or monitoring – even when the second receiver is out of sight. This can be particularly important when using a laser for vertical alignment as the paired receiver can be given to a crane operator to see what is being seen at ground level when putting steel or building facades into position. It also works with the GL612, GL622 and UL633 to provide advanced functions such as grade matching, axis alignment and PlaneLok.
- When working in deep excavations the capture mode allows the user to pick up the laser elevation without having to adjust the receiver to the on-

for reduced downtime.

grade position -it tells you how far off on-grade Anti-strobe sensor stops construction strobe lights from setting off the receiver, reducing

HL750

CAPTURE T

mm in ◀))

- Will take a drop of upto 10ft (3m) onto concrete
- Clamp comes with patented reversible jaw to allow a more solid fix to round or square rods.

HL760 / HL760U Radio Digital Readout Receiver

Highly Versatile Receiver for Basic and Advanced Leveling and Aligning



Applications

- Remote grade checking with cable free Remote Display
- Wireless monitoring of foundations and
- 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
- Large 5 inch (12.7 cm) reception height acquires the beam quickly and makes it easy to stay in the beam
- The HL760 / HL760U has an internal, long range 330 ft (100m) radius, high speed digital radio built inside that allows the receiver to communicate with any other HL760 / HL760U: LL300S, LL400HV, HV302, GL412N / GL422N laser transmitters
- Machine operators can monitor elevation shots taken by another person or foremen can monitor elevations and cut/fill readings from anywhere on
- Anti-strobe sensor stops construction strobe lights from setting off the receiver, and makes it easier to identify true laser beam signals



- Multiple deadband setting allows adaptation to meet all your jobsite requirements
- Dust and weatherproof housing withstands a drop of up to 10 ft (3 m) onto concrete for reduced downtime
- Two clamp positions for cut/fill or excavation
- Three-year "No Excuses" warranty
- C70 Adapter with Bubble Vial included
- 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.





⊕ Frimble

DR400

The Rod-Less Grade Checker





DR400 in Distance Meter Mode (Note: Beam is emitted from bottom, Screen is reversed for easy reading)



DR400 in Laserometer Mode



- When used in DigiRod mode all readings are compensated. No need to worry if you are holding the receiver plumb or not. The receiver displays the accuracy of the compensated reading. This is the only receiver on the market that provides compensated readings.
- 30 degree in any direction angle compensation
- Eliminate errors from miss-reading the rod and doing cut & fill calculations – use for direct readings or cut & fill from a benchmark with no rod up to 6m (19 ft)
- Safe to use no need to enter a trench to check for levels as you can take a reading into a trench with up to 30° in any direction angle compensation

- Large, easy to read graphical display even calculates readings from a benchmark and shows you whether the reading is above or below the
- Anti-strobe sensor no interference from flashing lights on machines
- Designed for tough jobsite conditions will withstand a drop from 1m (3ft) directly onto concrete and comes with a 5 year warranty (3 years no cost)
- **Digital readout** as long as the laser strikes the receiver it will calculate the on grade position



- Check elevations guickly without conventional grade rods that get damaged easily
- Increase worker safety by reducing the need to enter trenches to check levels
- Eliminate calculation errors as it does the calculations for you
- Eliminate inaccurate readings from the rod not being plumb – unique compensated readings
- Contactless reading eliminating the need to place a rod on wet concrete
- Having the DigiRod on your belt eliminates the need to carry grade rods around jobsite

Applications

- Excavations
- Foundations, concrete forms and footings
- General grading

- Cut & Fill, Direct and Indirect Measurements
- Anywhere where cut & fill readings are required quickly and with no calculations

CR600 Combination Receiver

Machine or Rod Mounted **Combination Receiver**



Key Features and Benefits

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



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

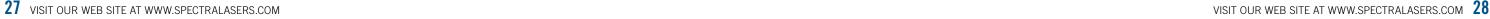
- Leveling and aligning forms
- Screeding concrete













Automatic Level

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





Key Features and Benefits

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

- Water resistant construction
- Includes hardshell case
- Two-person leveling across the job site
- Leveling forms and footers
- Checking elevation
- Measuring cut and fill

AL20M

Part No.	Power/Damp	Tripod	Rod
AL20M	20X / Magnetic Damped	No	No
AL20M-1	20X / Magnetic Damped	Yes	15 ft, 10ths
AL20M-2	20X / Magnetic Damped	Yes	15 ft, inches
AL20M-3	20X / Magnetic Damped	Yes	5 m, metric

AL24A, AL24M

Part No.	Power/Damp	Tripod	Rod
AL24A	24X / Air Damped	No	No
AL24M	24X / Magnetic Damped	No	No
AL24A-1	24X / Air Damped	Yes	15 ft, 10ths
AL24M-1	24X / Magnetic Damped	Yes	15 ft, 10ths
AL24A-2	24X / Air Damped	Yes	15 ft, inches
AL24M-2	24X / Magnetic Damped	Yes	15 ft, inches
AL24A-3	24X / Air Damped	Yes	5 m, metric
AL24M-3	24X / Magnetic Damped	Yes	5 m, metric

AL28M

Part No.	Power/Damp	Tripod	Rod
AL28M	28X / Magnetic Damped	No	No
AL28M-1	28X / Magnetic Damped	Yes	15 ft, 10ths
AL28M-2	28X / Magnetic Damped	Yes	15 ft, inches
AL28M-3	28X / Magnetic Damped	Yes	5 m, metric

AL32A

Pa	art No.	Power/Damp	Tripod	Rod
1	AL32A	32X / Air Damped	No	No

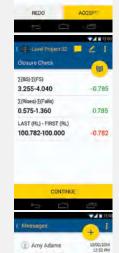
Electronic Fieldbook App

Simplifies Level Recording









Key Features

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

User Benefits

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

Applications

■ All level work – Height of Collimation, Rise & Fall and Cut & Fill

Use with laser (Cut & fill) or auto-level for all applications





DET-2 Construction Theodolite

Full Featured Digital Theodolite for Construction









Key Features and Benefits

- 2 arc seconds angular accuracy accurate enough for any construction job, yet the display resolution can be tailored to any operator's preferences for fast readings
- Vertical axis compensation tilt sensor provides the highest level of accuracy and can be turned on or off depending on job requirements
- Dual LCD with large characters easy to see angle readings eliminate errors and reduces eye fatigue
- Simple six button keypad quick setups and simple operation with low operator learning curve
- Large suite of programmable settings provide multiple options for various users and job requirements including zero position of vertical angle
- Measurement units in degrees, gon, or mils
- 90 Degree angle audible notification for quick

turning and set out of right angles

- Instant conversion of vertical angles to percent of grade - convenient for slope work and when used in conjunction with Dialgrade® pipe work
- NiMH rechargeable battery pack and charger lower operating cost with reusable batteries
- Alkaline battery pack standard provides backup and eliminates downtime if the charge is lost in the middle of a job
- Each DET-2 comes equipped with a plumb bob, NiMH rechargeable battery pack and charger, alkaline battery pack, adjustment tools, rain hood, multi-language user guide, and hardshell, compact, o-ring sealed, carrying case

Applications

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

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

LP30 / LP50 Laser Pointers

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









Key Features and Benefits

- The LP30 projects 3 beams one beam up, one down and one horizontal beam
- The LP50 projects 5 beams one beam up, one down and three beams at 90 degrees to
- Self-leveling, and universal accessories allow for setup in multiple applications
- Patented technology... highly visual in all conditions for better productivity
- Beam flashes if it becomes out of level for any reason

- Easily fits in your tool belt so it's always at hand
- 3 year instant exchange warranty minimizes downtime
- Able to withstand a 3-foot (1 meter) drop... IP54 rated
- LP30 ships in retail box with soft pouch, target and mounting accessory
- LP50 ships in retail carton with hard case. target, ceiling plate and mounting accessory

- Level, horizontal and vertical layout, checking plumb
- Point transfer
- Checking square with LP50
- Layout of interior walls, drywall track installation

- Drywall track installation
- Cabinet & trim installation, finish carpentry
- Reference points for sprinkler systems, HVAC, lighting

Part No.	Description	Dots
LP30	3 beam point laser with target, magnetic bracket in a pouch	3
LP50	5 beam point laser with target, magnetic bracket in a hard case	5





LT20 Crossline Laser

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





Key Features and Benefits

- Capable of handling interior horizontal, vertical or plumb positioning application
- Extra bright lines
- Automatic self-leveling assures accuracy and fast setup
- 3 year instant exchange warranty minimizes downtime
- Water, mud, and shock resistant, able to withstand a 3-foot (1 meter) drop onto concrete... IP54 rated
- Included clamp for ceiling installation



Applications

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









Drywall track installation

Cabinet & trim installation, finish carpentry

Part No.	Receiver	Case
LT20	No	Soft Pouch



Two Tools in One



Key Features and Benefits

- Eliminates the need for a contractor to purchase two tools - a 5-beam pointer and a crossline laser - by combining both into one simple small product
- Automatic self-leveling assures accuracy
- The industry's brightest crossline laser for easy viewing in all conditions
- Easy-to-see lines with a biased upwards beam that intersects the plumb up point
- Soft pouch includes bely loop so it's always at hand

- Set it up once and work plumb, level and square in the whole area
- 3 year instant exchange warranty minimizes downtime
- Water, mud, and shock resistant, able to withstand a 3-foot (1-meter) drop onto concrete... IP54 rated
- HR220 receiver can be added for exterior applications for maximum jobsite versatility



- Level, horizontal and vertical layout, square, and plumb
- Building, layout, and squaring of interior walls
- Point transfer
- Acoustical ceiling installation

- Drywall track installation
- Cabinet and trim installation, finish carpentry
- General construction elevation control with HR220 receiver
- Exterior building decks, patios, columns, and posts

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









LT56 Rugged Universal **Laser Layout Tool**

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











Key Features and Benefits

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

Applications

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

LT58 Laser Tool

The Go-To Ceiling 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 red laser beams that can be used for vertical 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 vertical fine adjust, fine rotation, magnetic mounting for steel columns and multiple tripod mount sizes
- Simple Operation and set up automatic self levelling, constant beam, no rotation

- Ceilings
- Level, horizontal and vertical laout, square
- 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.	Receiver	Case
LT58	No	Hard Case













QM Series Quick Measure Lasers Digital Distance Measuring





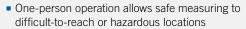


QM55

QM75

QM95





- Tough and rugged, designed for construction -Drop spec of 5 feet (1.5 m)
- Sealed against dust and water simply wash it off if it gets dirty
- More accurate than traditional measuring tapes
- Small, compact fits in your pocket or toolbelt
- Illuminated display easy to read in low light
- Long battery life up to 8000 measurements

Applications

- Measuring distance
- Measuring for material estimation

QM55

Area and volume functions

Easy quick calculations of common tasks

Pythagoras functions

Provides indirect height or width for inaccessible areas

QM95

High accuracy

■ ±1.0 mm (±1/24 inch) accuracy for precise work

Long range measurements

■ 200 m (650 feet) range

 Safely measurement on places, where hard to reach

QM75

Small and compact

Fits in your pocket; easy to carry and transport

Simple to operate

Press a single button and measure

QML800 — Interior Layout X Marks the Spot







Key Features and Benefits

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

- Multiple possibilities to select points directly from the map, by entering its coordinates or from the list of points previously uploaded
- Most floors can be laid out in one day or lesscomplete before materials clutter the floor
- Typical 65% reduced layout time and 50% labor reduction over traditional layout methods
- No distance measure errors, no math errors
- In and out before other trades start storing materials on the floor
- Point maps can be entered easily using CAD export or CSV file
- Includes license for CAD point file creation software

Applications – Interior Layout

- Drywall
- HVAC
- Plumbing

- Electrical
- Warehouse, retail and factory layout

Part No.	Includes:
QML800	Lasers, Android tablet controller, tripods, beam interceptor, LP30 plumb pointer, chargers, laser glasses in a hard case







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

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

LR30 & LR30W Receiver

Used on Dozers, Box Blades, Levelers





Applications

- Machine mounted grade checking
- Grading and leveling

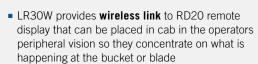




Key Features and Benefits

- 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



 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

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

doca on grading macrines				
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

- LR50W provides wireless link to RD20 remote display in cab for easier reference by the
- Robust and built for jobsite environment 2 year warranty

avoid over-digging

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.	Description		
RD20	RD20 Remote Display		
RDM-1	Mount, RD10 Swivel		
010983	Cable, RD10 + RD20 Power, Lighter/power adapter		
MM-1	Magnetic Mount for LR Receivers		
DM-20	Bulldozer Bolt-On Mount		

MM-1 Magnetic Mount



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

DM-20 Dozer Bolt-On Mast



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

Product Application

Machine Type	Model App	olication
Backhoes	Use CR600 or LR20 or LR50	Excavating
Skid-steer Loader	Use CR600 or LR20 or LR30 or LR30W (w/remote display)	Grading
Mini Excavator	Use CR600 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





Cases



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

Wall Mounts



for HV101



for HV301/HV301G



M302 Wall mount

Remote Control



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

Laser Glasses



Model Number: Q100206

Increases the visibility of the laser beam under bright light conditions

Target



Model Number: 1176-6 Magnetic Visiline Target

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

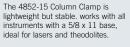
Clamps



Model Number: 4852-14 Batter Board Clamp

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







4852-11

Tilting Base, Laser





Accessories and Components for Universal Laser



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



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



Q104865 Adapter for SF601 allows various setups



HL750 Laserometer to measure and display beam location



Sighting Scope

Pipe Laser Accessories



929 Blower



1017 Manhole Mount



936 Adjustable Large Pipe Target

P21 Power Cable



P20/P20B Alkaline Battery Pack



956 Optically Enhanced Target



1161 Heavy-Duty Wood Tripod





1239 Extended Height Vertical Pole

Accessories and Components for DigiRod



1230/1237 Metal Invert Plate

Model Number: 0400-1930 Clip on pouch for DR400



Model Number: Q100206 Laser Glasses





Model Number: C70 Clamp with Bubble Vial



Model Number: 0400-1900 Handle for DR400

Accessories and Components for Laser Receivers: All receivers include rod clamps (CR600 includes rod clamp and magnetic mount)



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



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



C51 Magnetic Mount included with CR600 receiver



C50 Adapter included with CR600 receiver



	Laser Levels				Horizont	al and Vertic	al Lasers	
	LL100N	LL300N	LL300S LL400HV LL500			HV101	HV302	HV301G
Accuracy	1/8 in @ 100 ft 3 mm @ 30 m (20 arc seconds)	3/32 in @ 100 ft 2.2 mm @ 30 m (15 arc seconds) 1/16 in at 100 ft 1.5 mm at 30 m (10 arc seconds)				1/8 in @ 100 ft 3 mm @ 30 m (20 arc seconds)	1/16 in at 100 ft 1.5 mm at 30 m (10 arc seconds)	3/32 in @ 100 ft 2.2 mm @ 30 m (15 arc seconds)
Operating diameter	1,150 ft (350 m)	1,650 ft (500 m)	2,600 ft (800 m)		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: 1,650 ft (500 m) Visible: 500 ft (150 m)
Self- leveling range	=	±5 degrees electron	5 degrees electronic servo self-leveling ±11 minutes			±5 degree	es electronic servo s	self-leveling
Power source	2 × D-cell Alkaline batteries	4 D-cell Alkaline Standard, NiMH optional				2 × D-cell Alkaline batteries		standard, Alkaline skup
Battery life	80 hrs Alkaline	90 hrs Alkaline, 45 hrs NiMH		Alkaline, s NiMH	175 hrs Alkaline, 100 hrs NiMH,	50 hrs Alkaline	60hrs Alkaline, 45 hrs NiMH	45 hrs Alkaline, 18 hrs NiMH
Water res.	Yes, IP54		Yes, IP66			IP54	Yes, IP66	Yes, IP54
Size L × W × H	8.5 × 6.7 × 6.0 in (22 x 17 x 15 cm)	$10.7L \times 7.7W \times 7.9H$ in (27.2L \times 19.7W \times 20.1H cm)			10.8 × 7.5 × 7.5 in (27 × 19 × 19 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)	9.6 x 6.5 x 7.3 in (24 x 17 x 19 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 lb (2.7 kg)
Warranty	3 Year, with instant exchange	5 Years				3 Year, with instant exchange	5 Y	ears

Laser Display Receivers								
	LR20	LR30 (W)	LR50 (W)	LR60 (W)				
Number of Display Channels	5-Channel Display		5-Channel Display 6-Channel Display in excavating mode	7-Channel Display 8-Channel Display in excavating mode				
Accuracy: Center On-Grade mode (Grading)	Fine: 0.20 in (5 mm) Standard: 0.40 in (10 mm) Wide: 0.80 in (20 mm)	Fine: 0.20 in (5 mm) Standard: 0.45 in (12 mm) Wide: 1.25 in (32 mm)	Fine: 0.20 in (5 mm) Standard: 0.40 in (10 mm) Wide: 0.80 in (20 mm)	Setup: 0.20 in (5 mm) Fine: 0.40 in (10 mm) Standard: 0.80 in (20 mm) Wide: 1.6 in (40 mm)				
Accuracy: Offset On-Grade mode (Excavating)	Fine: 0.50 in (12 mm) Standard: 1.0 in (25 mm) Wide: 2.0 in (50 mm)	NA	Fine: 0.50 in (12 mm) Standard: 1.0 in (25 mm) Wide: 2.0 in (50 mm)	Setup: 0.25 in (6 mm) Fine: 0.50 in (12 mm) Standard: 1.0 in (25 mm) Wide: 2.0 in (50 mm)				
ACE—Angle Compensation Mode		NA						
Blade-Tilt Accuracy	NA NA	4	± 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/422N GL612 / 622						
Accuracy	1/16	in at 100 ft (10 arc	, 1.5 mm seconds)	at 30 m			
Operating diameter			00 ft 0 m				
Self-leveling range	±5 degree electronic s self-levelii	ervo	е	±14 degr lectronic self-leve	servo		
	-10 to +15	5%	-25 to	+25%	-25 to +25%		
Grade range	Single	Dual	Single	Dual	X, Y, Z axis		
Power source	4)	4 x D-cell NiMH battery pack					
Battery life	35 hrs Ni 50 hrs Alka		MH aline				
Rotation speed	300, 600 r	300, 600 rpm) - 900 rpm		
Water resistant		Yes,	IP66				
Size L × W × H	10.7L × 7.7W × (27.2L × 19.7W ×			.4 x 5.9 x 4 x 15 x 2			
Weight		6.8 lbs	(3.1 kg)				
Warranty	5 Years		5 Years		5 Years		
	Wireless Remot	e Specifica	tions				
Remote control type 2-way communication	RC402N	1	RC	602	RC603		
Battery life		130 hrs continuous 1 year normal use					
Range		330 ft (100 m)					

Pipe Lasers							
	DG711	DG511					
Grade range	-15% t	0 +40%					
Self-leveling range	Complete grade range (no rough leveling required)						
Line range	2	0°					
Line center	Y	'es					
Grade zero & Quick grade	Y	'es					
Line set/check / Line alert	Yes	No					
Temperature compensation	Yes No						
Grade compensation	Y	'es					
Waterproof	Continuous submersion at 10 ft (3 m)						
Laser classification / output	3A/3R / 4.5–5 mW (maximum allowable)						
Weight	8.0 lbs (3.6 kg)						
Length	14.75 in (37.5 cm)						
Diameter	5.5 in (14 cm)						
Housing material	Armored die casting	Hard anodized aluminum					
Battery type and life	NiMH / 60 hrs with	daily setup at 20° C					
Battery pack	Sealed (NiMH), Seale	ed removable (alkaline)					
Warranty	5 Years	5 Years					
Wireles	s remote specifications						
Functionality	7 button power, Line and Grade adjustment, Line set	3 button power, Line adjustment					
Through the pipe range	750 ft	(225 m)					
Front / Over the top range	500 ft (150 m)						
Rear range	30 ft (10 m)						
Battery life	3 Years	2 Years					

Laser Tools								
	LP30 / LP50	5.2XL	LT20	LT56	LT58			
Self-level range		±4° from level						
Working range - Visible		100 ft (30 m)	80 ft (25 m)	Green beam 100 ft (30 m) Red beams 80 ft (25 m)				
With detector	N/A	250 ft (75 m)	N/A	200 ft (65 m)	N/A			
Accuracy		1/16 in @ 17 ft 1.5 mm @ 5 m	1/32 in @ 17 ft 1.0 mm @ 5 m					
Battery type	2 x AA alkaline	3 x AA	alkaline	Lithium-ion, 7200 mAh, 3.7 V				
Battery life	20 hrs, alkaline	35/15 hrs (point/line beams) 10 hrs (all beams on)	20 hrs, alkaline	> 25 hrs all beams on	19 hrs – Green Beam 11 hrs - All Beams			
Dimensions	3.5x4.1x2.4 in 8.9x10.4x6.1 cm	4.5x5.2x3.1 in 11.5x13x8 cm	4.3x2.3x4.1 in 11.0x5.8x10.4 cm	4.6x6.0x3.3 in 15.2x11.6x8.4 cm				
Weight	0.69 lb (0.31 kg)	1.1 lb (0.5 kg)	0.8 lb (0.35 kg)	1.48 lb (0.67 kg)				
Warranty		3	Years, with instant exchange					



Automatic Levels								
	AL20M	AL24A	AL24M	AL28M	AL32A			
Magnification	20×	24	1×	28x	32x			
Accuracy	±2.5 mm*	±2.0	mm*	±1.5 mm*	±1.0 mm*			
Aperture		30 mm 36 i						
Shortest focus			0.6 m					
Compensator dampening	Magnetic	Air	Mag	Air				
Warranty	3 Year, with instant exchange							
	*Note: Standard deviation according to DIN 18723 on one kilometer of double leveling							

	DET-2										
Telesc	Telescope Optical Plummet		Angle Measuring System		Vials		Button Functions		Other Specs		
Image	Erect	Image	Erect	Minimum reading	1" or 5"	Tubular	30"/2 mm	ON / OFF	Power	Dust/Water	IP-54
Mag.	30X	Mag.	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	1 Year
Stadia Ratio / constant	100 / 0							V%	Convert vertical degrees to %		

QM Series Quick Measure Lasers								
Specification	QM55	QM55 QM75 QM95						
Range	50 m (165 ft)	70 m (230 feet)	200 m (650 feet)					
Accuracy	± 1.5 (± 1/	± 1.0 mm (± 1/24 in)						
Units of measure	m, ft, in, ft-in	n, ft-in m, mm, ft, in, yds						
Automatic shut off	3 minutes	3 minutes 10 minutes						
Battery life	5000+ measures	sures 8000 measures						
Power supply	2 x AAA 1.5V	2 x A	A 1.5V					
Drop performance	1.5 m (5 ft)	1.5 m	n (5 ft)					
Dust & Water resistance	IP54	IP55	IP54					
Laser type / power	635nm visible red / < 1 mW		isible red / mW					
Dimensions	52 x 28 x 125 mm (2.0 x 1.1 x 4.9 in)	34 x 42 x 125 mm (1.3 x 1.6 x 4.9 in)	62 x 28 x 120 mm (2.4 x 1.2 x 4.7 in)					
Weight with batteries	187 g (6.6 oz)	144 g (5.1 oz)	217 g (7.7 oz)					
Warranty	3 Years							

				THEOLOGIC		
Spectra Precision Laser Applications	Laser Pointers - LP30 - LP50	Line Generator - 5.2XL - LT20 - LT56 - LT58	Handheld Distance Measuring Device - QM55 - QM75 - QM95	Laser Levels - LL100N - LL300N - LL300S - LL400HV - LL500 Optical Levels - AL20 - AL24 - AL28 - AL32	Horizontal Vertical Lasers - HV101 - HV302 - HV301G	Grade & Universal Lasers - GL412N - GL422N - GL612 - GL622 - GL710 - GL720 - GL722 - UL633
	General C	Construction	n			
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
	In	terior				
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			