

# General Construction Laser **SOLUTIONS GUIDE**



# PRECISION LASER LEVELS

## Spectra Precision Laser LL100

### Features & Benefits

- Complete system in one case-includes LL100 laser, HR320 receiver, C59 receiver clamp, tripod, and choice of grade rod-allowing convenient storage for transportation
- Retail packaging increases showroom sales
- Easy to transport, easy to store, easy to use
- Fully automatic self-leveling rotating laser provides fast and accurate setup
- Robust design withstands a 3ft (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 1,000 ft (300 m) diameter area for increased productivity



A complete leveling crew in a case

### 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

All product numbers include LL100 transmitter, HR320 receiver, C59 rod clamp, case, retail carton graphics, 2 D and 2 AA Alkaline Batteries

PART NO.	RECEIVER	ROD	TRIPOD	CASE
LL100	HR320	No	No	Universal Hard Case
LL100-1	HR320	GR151 Tenths	Q104025	Gun Case
LL100-2	HR320	GR152 Inches	Q104025	Gun Case
LL100-3	HR320	GR153 Metric	Q104025	Gun Case
LL100-5	HR320	66408 Metric Cut/Fill	Q104025	Gun Case

## Spectra Precision Laser LL300

### Features & Benefits

- Rugged design with removable 'hard hat' rotor protection provides superior drop and weather protection
- 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
- 1300 ft (400 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 HR350 or CR600 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 with CR600 receiver

PART NO.	RECEIVER	POWER	REMOTE	ROD	TRIPOD	RETAIL PACKAGE
LL300	HR350	4 D Alkaline	No	No	No	No
LL300-1	HR350	4 D Alkaline	No	GR151 Tenths	2161	Yes
LL300-2	HR350	4 D Alkaline	No	GR152 Inches	2161	Yes
LL300-4	HR350	Rechargeable pack*	No	No	No	No
LL300-10	CR600	4 D Alkaline	No	No	No	No
LL300-11	CR600	4 D Alkaline	RC601	GR151 Tenths	2161	Yes
LL300-13	CR600	4 D Alkaline	RC601	GR153 Metric	2161	Yes
LL300-14	CR600	Rechargeable pack**	No	No	No	No

All product numbers include LL300 transmitter and case. \*Rechargeable pack comes with charger. EU, AU and GB versions available.

## Spectra Precision Laser LL400

### Features & 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
- Energy-efficient design offers choice of NiMH rechargeable or alkaline batteries for lower operating costs
- Increases productivity with fast setups, fewer controls, and automatic self leveling
- 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 HL700 or CR600 receivers



Longest range, highly accurate leveling solution

### Applications

#### General Construction Apps

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

#### Machine Control Apps

- 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	REMOTE	ROD	TRIPOD	RETAIL PACKAGE
LL400	HL700	4 D Alkaline	No	No	No	No
LL400-4	HL700	NiMH pack*	No	No	No	No
LL400-10	CR600	4 D Alkaline	No	No	No	No
LL400-14	CR600	NiMH pack*	No	No	No	No
LL400-1	HL700	4 D Alkaline	No	GR151 Tenths	2161	Yes
LL400-2	HL700	4 D Alkaline	No	GR152 Inch	2161	Yes
LL400-3	HL700	4 D Alkaline	No	GR153 Metric	2161	Yes
LL400-11	CR600	4 D Alkaline	RC601	GR151 Tenths	2161	Yes
LL400-13	CR600	4 D Alkaline	RC601	GR153 Metric	2161	Yes

All product numbers include LL400 transmitter and case. \*NiMH pack comes with charger. EU, AU and GB versions available.

# Spectra Precision Laser LL500

## Features & Benefits

- 1,800 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 100ft (1.5 mm per 30 m) with temperature compensation provides highly stable, repeatable accuracy even under large temperature changes
- Uses alkaline or rechargeable batteries-so you are less likely to run out of power and the unit keeps working with no downtime due to power loss
- Visible “spotting” beam for determining receiver mounting placement making it faster to find the on-grade position
- Comes with a choice of HL700 or CR600 receivers allowing you to choose the best option to suit your application



*Long range, highly accurate leveling solution*

## Applications

General Construction Apps

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

Machine Control Apps

- 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
LL500-4	HL700	Ni-Cad/NiMH	No	No	No
LL500-10	CR600	4 D Alkaline	No	No	No
LL500-14	CR600	Ni-Cad/NiMH	No	No	No
LL500-1	HL700	4 D Alkaline	GR151 Tenths	2161	Yes
LL500-2	HL700	4 D Alkaline	GR152 Inch	2161	Yes
LL500-3	HL700	4 D Alkaline	GR153 Metric	2161	Yes
LL500-11	CR600	4 D Alkaline	GR151 Tenths	2161	Yes
LL500-13	CR600	4 D Alkaline	GR153 Metric	2161	Yes

All product numbers include LL500 transmitter and case. \*NiMH pack comes with charger, EU, AU and GB versions available.

## PRECISION LASER LEVELS

# Spectra Precision Laser GL512 and GL522

## GL512 and GL522 Features

- Automatic electronic self-leveling provides fast, easy level, grade, and vertical alignment setups
- Single or dual grade application capability
- Full function 2-way radio remote control has the same functions and display as the laser keypad
- Very long operating range-2,600 ft (800 m) diameter (GL522) for increased machine control capability and fewer setups over the jobsite
- Radio communication between the HL750 and the laser provide automatic Grade Matching and PlaneLok
- Electronic Leveling Vibration Filter dampens vibrations typically experienced in high winds or on high vibration job sites
- Automatic temperature and grade compensation keep the units accurate throughout the day or night
- Very rugged with low service costs; takes a drop of up to 3 ft (1 m) onto concrete
- Mask mode eliminates interference with other crews on the jobsite
- Pointing mode allows “Over the Top” pipe laying for house connections (GL522)
- High capacity Nickel-Metal Hydride battery pack reduces operating costs



## Specifications

Laser type/class	<5 mW 635 nm, Class 3A/3R (GL522) 3 mW 650 nm, Class 2 (GL512)
Drop height on concrete	1 m (3 ft)
Operating diameter (w/HL750)	800 m, 2600 ft (GL522) 600 m, 2000 ft (GL512)
Compensation method	Yes, every 5°C
Level/vertical accuracy	10 arc seconds 1.5 mm @ 30 m (1/16" @ 100 ft)
Grade range	-10 to +15% Dual Axes (GL522) -10 to +15% Single Axes (GL512)
Grade accuracy	0.015% 3 mm @ 30 m (1/8" @ 100 ft)
Grade resolution	0.001% up to 9.999% 0.01% at higher grades
Grade compensation	Yes
Transmitter battery life (4 x D NiMHs)	55 hours
Mask mode	User selectable to any window, 3 max
Remote control type	Full 2-way communication, operation and security lock with transmitter
Remote control range	100 m (330 ft) radius
Rotation speed	0 (GL522), 300, 600 RPM selectable
RC402 battery life (2 x AA Alkaline)	130 hrs continuous 1 year under normal use
Standby mode	Yes
Display backlight	Yes, auto shutoff after 8 seconds
Mounting threads	5/8" x 11 Horizontal and Vertical
Operating temperature	-20° to +50°C (-4° to 122°F)
Dust and waterproof	Yes - IP66
Dimensions	21L x 18W x 20H cm (8.3L x 7.1W x 7.9H in)
Weight	3.1 kg (6.8 lb)
Warranty	2 Years

*Maximum Versatility for Leveling, Grading, and Vertical Alignment*

## GRADE LASER LEVELS

### The Most Advanced Grade Lasers. Ever.

Trimble's innovative technology ensures higher accuracy than ever before over a variety of machine control and general construction applications. Plus, unique features help reduce beam drift errors and speed up setup and grade changing to optimize worker and machine productivity.

The Spectra Precision Laser GL700 Series from Trimble has four robust models, so you can select the right laser transmitter for the right application. Each model in the GL700 Series is designed to be simple to set up and use.

#### GL710 Single Grade

An easy-to-learn, easy-to-use one-person grade laser, economical and accurate up to a 3,000 ft (900 m) diameter. Ideal for general construction, site preparation, trenching and pipe laying applications.



#### GL720 Dual Grade

This economical choice has +/-10% in the X-axis grade range and -0.5 to +25% Y-axis grade range with high accuracy up to 3,000 ft (900 m) diameter. Ideal for general construction and machine control grade applications.



#### GL722 Dual Grade

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



#### GL742 Steep Grade Laser (to 110%)

The GL742 includes all the features of the GL722 - including full Radio Remote - with the increased capability of achieving a steep grade range of 110%. Ideal for all general construction and machine control applications, as well as steep slope applications such as highway embankments, seawalls and landfills.



**THE GL700 SERIES CAN BE USED WITH TRIMBLE AND SPECTRA PRECISION LASER RECEIVERS.**

For example, the Spectra Precision Laser HL750 and CR600 receivers, and the Trimble LR410 which is part of the Trimble Grade Control System family.

## SPECIFICATIONS

SPECIFICATIONS	GL512	GL522	GL710	GL720	GL722	GL742
<b>Slope capability</b>	single	dual	single	dual	dual	dual
<b>Grade range X axis</b>	N/A	-10% to +15%		-10% to +10%	-10% to +10%	-5% to +5%
<b>Grade range Y axis</b>	-10% to +15%	-10% to +15%	- .5% to +25%	- .5% to +25%	- .5% to +25%	- .5% to +110%
<b>Grade resolution</b>	.001% up to 9.999% grade	.001% up to 9.999% grade	0.0001%	0.0001%	0.0001%	0.0001%
<b>Accuracy</b>	1/16" @100'	1/16" @100'	1/32" @100'	1/32" @100'	1/32" @100'	1/32" @100'
<b>Operating diameter</b>	2000'	2600'	3000'	3000'	3000'	3000'
<b>Self leveling range</b>	5 deg	5 deg	15 deg	15 deg	15 deg	15 deg
<b>Laser type / class</b>	650nm, <3.4mW, class 2	650nm, <5mW, class 3A/3R	670nm, 3.4mW, class 2	670nm, 3.4mW, class 2	670nm, 3.4mW, class 2	670nm, 3.4mW, class 2
<b>Standard Rechargeable Battery Pack / Battery Life</b>	10ah NiMH / 55 hours	10ah / 55 hours	10ah / 30 hours	10ah / 30 hours	10ah / 30 hours	10ah / 30 hours
<b>Optional 4 D Alkaline Battery life</b>	90 hrs Alkaline	90 hrs Alkaline	25 hrs 6 D Alkaline	25 hrs 6 D Alkaline	25 hrs 6 D Alkaline	25 hrs 6 D Alkaline
<b>IP66 dust and waterproof</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Rotation speed</b>	300, 600 RPM	0, 300, 600 RPM	300, 600, 900 RPM	300, 600, 900 RPM	300, 600, 900 RPM	300, 600, 900 RPM

FEATURES	GL512	GL522	GL710	GL720	GL722	GL742
<b>'Grade Match' Function / Range</b>	Automatic / 260 ft (80 m)	Automatic / 260 ft (80 m)	No	No	Automatic / 1000 ft (300m)	Automatic / 1000 ft (300m)
<b>Horizontal 'PlaneLok' Capability / Range</b>	Automatic / 260 ft (80 m)	Automatic / 260 ft (80 m)	No	No	Automatic / 1000 ft (300m)	Automatic / 1000 ft (300m)
<b>Vertical 'PlaneLok' Capability / Range</b>	Automatic / 260 ft (80 m)	Automatic / 260 ft (80 m)	No	No	No	No
<b>Automatic Grade Axis Alignment</b>	No	No	No	No	Yes	Yes
<b>Electronic Leveling Stabilization (Wind &amp; Tall tripod performance)</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>2-way RADIO Remote Control</b>	YES / RC402	YES / RC402	No	No	YES / RC702	RC702
<b>Remote Control Range</b>	330 ft (100 m)	330 ft (100 m)	N/A	N/A	1000 ft (300 m)	1000 ft (300 m)
<b>Temperature compensated</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Grade compensated</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Beam Masking feature</b>	Yes	Yes	No	No	No	No
<b>Visible (spotting) laser beam</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Vertical self leveling Operation</b>	Yes	Yes	No	No	No	No
<b>Beam Pointing feature (ie Pipe Laser mode)</b>	No	Yes	No	No	No	No
<b>Warranty</b>	24 months	24 months	24 months	24 months	24 months	24 months

## LASER MACHINE DISPLAY RECEIVERS

### Tough, Affordable Spectra Precision Laser Machine Display Receivers

#### Spectra Precision Laser Machine Display Receiver

##### Features & Benefits

- **Versatile, 360-Degree Reception**  
Works with all types of rotating lasers and on all types of machinery for fast, no-hassle setup.
- **Multiple Accuracy Choices**  
Offers maximum flexibility to meet jobsite requirements, from rough grading to final finishing.
- **Adjustable, Ultra-bright LED with Green On-Grade Display**  
Provides user selectable, easy-to-see display to match ambient lighting conditions.
- **Long Battery Life**  
Keeps your machine working.
- **Out-of-Laser Beam Indication**  
Selectable on /off indicator directs which way to move and get back in the beam.
- **Automatic Shut-off**  
Conserves battery life when the receiver is not in use.
- **Low Battery Warning**  
Provides advance notice when battery replacement is required to keep workflow moving.
- **Two-Year Warranty**  
Reliability you can count on.
- **Power Options**  
Choose NiMH rechargeable batteries, optional alkaline batteries, or a power cord that connects directly to the machine power.
- **Rugged & Waterproof**  
Durable polycarbonate and aluminum die cast housings withstand all weather and construction site conditions. Internal isolating shock mounts protect the electronics.

#### LR20

##### For Improved Productivity on Compact Machines

Stand alone display receiver for mini excavators, backhoes and scrapers, skid steer attachments, box blades, pulled scrapers and small dozers

- Allows compact machines to achieve tighter tolerances without the need for a grade checker
- Use for general construction grade and depth control, landscaping, building pads, sports fields, concrete flatwork, storm drains, utility
- Super bright grade display with green "ongrade" LEDs provides superior depth/elevation indication
- 360-degree laser reception provides increased working area and range
- Push button setup for ease of use and application flexibility



#### LR30

##### For General Excavating

Used on dozers, backhoes, excavators and levelers

- Use on grading and excavating equipment including: dozers, graders, scrapers, skid steers and levelers
- Five channels of grade information plus directional and out-of-beam indicator
- Three selectable accuracies meet job tolerances from rough grading to final finishing
- Used with CB20 Single Control Box
- Full 360° reception picks up the laser beam from all directions



## LR50

### For Excavating and Grading

Features built-in blade tilt and excavator boom plumb indicator

- Built-in blade tilt indicator helps the operator keep the blade level for increased accuracy and productivity
- Center On-grade provides an equal amount of grade information above and below on-grade. Use on dozers, graders, scrapers and box blades
- Built-in plumb indicator for fast, accurate grade checking
- Offset on-grade gives you more range above grade using the entire receiver for more productive excavation
- Up to six channels of grade information plus directional out-of-beam indicators
- Use as a stand-alone display receiver or with CB25 or CB30 Control Boxes



## LR60

### For Excavating

Features excavator boom plumb indicator, plus angle compensation indicator

- Patented Angle Compensation Indicator automatically calculates and corrects the grade display for the angle of the dipper arm
- Check grade with the dipper arm extended or retracted up to 30 degrees
- Built-in plumb indicator for fast, accurate grade checking
- Center On-grade provides an equal amount of grade information above and below on-grade. Use on dozers, graders, scrapers and box blades
- Offset on-grade for productive excavation
- Up to nine channels of grade information plus directional out-of-beam indicators
- Four selectable accuracies for each on-grade location
- Use as a stand-alone display receiver or with CB25 or CB30 Control Boxes



SPECIFICATIONS	LR20	LR30	LR50	LR60
<b>Number of Display Channels</b>	5-Channel Display	5-Channel Display	5-Channel Display 6-Channel Display in	9-Channel Display excavating mode
<b>Accuracy: Center on grade (grading)</b>	Fine: 5 mm (0.20 in) Standard: 10 mm (0.40 in) Wide: 20mm (0.80 in)	Fine: 5 mm (0.20 in) Standard: 12 mm (0.45 in) Wide: 32mm (1.25 in)	Fine: 5 mm (0.20 in) Standard: 10 mm (0.40 in) Wide: 20mm (0.80 in)	Setup: 5 mm (0.20 in) Fine: 10 mm (0.40 in) Standard: 20 mm (0.80 in) Wide: 40mm (1.5 in)
<b>Accuracy: offset on grade (excavating)</b>	Fine: 12mm (0.50 in) Standard: 25mm (1.0 in) Wide: 50mm (2.0 in)	NA	Fine: 12mm (0.50 in) Standard: 25mm (1.0 in) Wide: 50mm (2.0 in)	Setup: 6 mm (0.25 in) Fine: 12mm (0.50 in) Standard: 25mm (1.0 in) Wide: 50mm (2.0 in)
<b>ACE—Angle Compensation Mode</b>	NA	NA	NA	Fine: 12 mm (0.50 in) Standard: 25 mm (1.0 in)
<b>Blade-Tilt Accuracy</b>	NA	NA	± 0.5°, ± 1.5°, ± 2.5°	NA
<b>Plumb-Swing Accuracy</b>	± 0.5°, ± 1.5°, ± 2.5°	NA	± 0.5°, ± 1.5°, ± 2.5°	Standard: (12 mm 0.5 in) Angle Compensation Mode: 25 mm (1.0 in)
<b>Vertical Reception</b>	203 mm (8 in)	171 mm (6.75 in)	171 mm (6.75 in)	222 mm (8.75 in)
<b>LED Battery Life</b>				
<b>Alkaline Bright/Dim</b>	NA	50 hrs/75 hrs	45 hrs/60 hrs	45 hrs/75 hrs
<b>Ni-MH Bright/Dim</b>	NA	40 hrs/50 hrs	30 hrs/45 hrs	40 hrs/50 hrs
<b>Li-Ion Continuous</b>	35 hrs	NA	NA	NA

## LASER CONTROL BOX

### CB30 Dual Control Box

#### Features & Benefits

- Simultaneous, automatic control of lift and tilt of blade or attachment for less passes required to grade saving time, material, and fuel
- Highly featured to fit multiple machine and application types and priced for quick return on investment
- Super-bright LEDs provide easy-to-see elevation indication in any light for setup and operation

#### Used on compact machines, including

- Skid-steer loaders with attachments such as 6-way dozer blade, grader blade, box blade, loader bucket for automatic control requiring lift or lift and tilt control
- Small dozer with lift or lift and tilt automatic control
- Small graders for lift and tilt control



#### Applications

- Building pads
- Sports fields
- House pads

SPECIFICATIONS	CB30
Single Auto Control	Yes
Dual Auto Control	Yes
Slope Control	Yes
Elevation Coupling	Yes
On-grade LEDs	Green
High/Low LEDs	Red
Valve Compatibility	Proportional Time (On/Off), Proportional Current, and Proportional Voltage

### Spectra Precision Laser Control Boxes for Affordable Automatic Blade Control



## Spectra Precision Laser DG711 and DG511

### Features & Benefits



- Rugged design is built for long lasting performance and reliability in the destructive underground environment
- DialGrades feature the largest automatic self-leveling range in the industry providing quick, easy setups
- The DG711 features Line Alert where the beam flashes to notify you that the setup line has been disturbed, eliminating the necessity of rework
- Maximum legal strength red laser beam and pipe targets with optical elements to enhance beam brightness make the beam easily visible in a variety of conditions
- Remote Controls for line and power included, DG711 remote control is full function with grade control and Line Set/Check function
- A full range of setup accessories and power options are available and are easy and straightforward to use



*Rugged pipe lasers built for lasting performance, reliability, and repeatability*

### Applications

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

PART NO.	ACCESSORY	POWER
<b>DG511</b>	Standard Package	NiMH Recharge
<b>DG511-2</b>	1233 Sighting scope, mounting block & 1161 heavy duty tripod	NiMH Recharge
<b>DG511-3</b>	1230 Metal plate w/ adjustable legs (inches)	NiMH Recharge
<b>DG511-5</b>	1230 Metal plate & 1239 vertical pole (inches)	NiMH Recharge
<b>DG511-6</b>	1237 Metal plate & 1239 vertical pole (metric)	NiMH Recharge
<b>DG511-7</b>	Standard Package	Alkaline
<b>DG511-9</b>	External power cable	Alkaline
<b>DG711</b>	Standard Package	NiMH Recharge
<b>DG711-2</b>	1233 Sighting scope, mounting block & 1161 heavy duty tripod	NiMH Recharge
<b>DG711-3</b>	1230 Metal plate w/ adjustable legs (inches)	NiMH Recharge
<b>DG711-5</b>	1230 Metal plate & 1239 vertical pole (inches)	NiMH Recharge
<b>DG711-6</b>	1237 Metal plate & 1239 vertical pole (metric)	NiMH Recharge
<b>DG711-7</b>	Standard Package	Alkaline
<b>DG711-9</b>	External power cable	Alkaline

### Performance Specifications

	DG711	DG511
Grade Range	-15% to +40%	
Self-Leveling Range	Complete grade range (no rough leveling required)	
Line Range	20°	
Line Center	Yes	
Grade Zero & Quick Grade	Yes	
Line Set/Check	Yes	No
Line Alert	Yes	No
Temp. Compensation	Yes	No
Grade Compensation	Yes	
Maintenance Interval Notification	Selectable Intervals: 3,6,12,18 or 24 Months	
Warranty Period	2 Years	1 Year

### Laser Classification

Laser output	4.5-5 mW (maximum allowable)
Laser classification	3A/3R

### General Specifications

Weight	3.6 kg (8.0 lbs)
Length	37.5 cm (14.75 in)
Diameter	14 cm (5.5 in)
Housing material	Armored Die Cast Hard Anodized Aluminum
Battery type & life	NiMH/60hrs with Daily Setup at 20°C (68°F)
Battery pack	Sealed (NiMH), O-Ring Sealed Removable (Alkaline)
Operating voltage	6-16V DC
Operating temperature	-20° to 60°C (-4° to 140°F)
Storage temperature	-30° to 60°C (-23° to 140°F)
Waterproof	Continuous Submersion at 3 m (10ft)

### Wireless Remote Specifications

Functionality	7 Button Power, Line and Grade Adjustment, Line Set	3 Button Power, Line Adjustment
Through the Pipe Range	225 m (750ft)	
Front/Over the Top Range	150 m (500ft)	
Rear Range	10 m (30ft)	
Battery life	3 Years/36 Months	2 Years/24 Months

# DEPTH DISPLAY SYSTEMS

## DDS300

### More Flexibility

The Spectra Precision Laser DDS300 Display System is ideal for contractors and owner operators with multiple machines needing flexibility in their excavating solution. The DDS300 depth display system uses a combination of angle sensors and a laser receiver to provide depth and slope information to meet your needs for simple depth information to complex profile work. Optional sensors are available for excavators using VA booms and tilt buckets. For more flexibility, the laser receiver can be removed and used on another machine for depth display. The system's wireless communications means that you can move the system from machine to machine easily and quickly without dealing with cables.

### Wireless Simplicity

The components of the DDS300 System are simple in design, but create powerful advantages and features for users. The angle sensors report exact angle position of the boom, stick and bucket via wireless radio signals to the powerful control box. The control box computes the bucket position and displays the information on the 7" color touch screen display. Using the laser receiver as reference allows the user to continue digging without multiple benchmarks.

### More Productivity

Helping you get to grade faster is the heart of the DDS300 system, but the system can increase your profitability and productivity in more ways than just moving dirt:

- Fast installation and set up
- Laser receiver option eliminates multiple benchmarks
- No grade checker needed, since the display shows you exact bucket location
- Longer continual excavating, since you can work in low light situations
- Lower fuel costs and less wear of equipment by getting each job done faster
- More accurate readings in any position of the arms results in less rework due to "overcuts" and "undercuts"
- Reduced material cost and transport costs
- Reduced risk of damaging electrical, gas and sewage lines
- Multiple applications increases machine and operator flexibility
- A safer working environment; keeps the grade checker away from trench and machine swing area



## Wireless, Laser-Referenced Systems For High Productivity Excavating and Grading

The Spectra Precision® Laser DDS300 Display System from Trimble introduces a new level of productivity for compact equipment including backhoes, mini-excavators and smaller excavators.

The DDS300 is ideal for a range of excavation work on the building construction jobsite, including the excavation of basements and footers as well as trenching for sewage and utility installation.

The system utilizes wireless, laser and angle sensor technology along with a bright 4 color in cab display to provide dynamic real-time positioning information for the bucket at all times.

This dynamic real-time information allows the operator to excavate, trench, grade or cut profiles more quickly and accurately than traditional laser-referenced machine guidance systems.

The wireless connectivity between sensors on the boom stick and bucket and the in-cab control box eliminate cables, and makes the system extremely easy-to-install---significantly reducing installation time to about an hour.

### Depth Display System Benefits

- Wireless system that is easily installed and easily moved from machine to machine
- Real-time dynamic depth display improves the accuracy and productivity of trenching, excavating and grading
- Cost effective system works on any small or mini excavator and backhoes

### Used on:

- Mini Excavators
- Backhoes
- Small/Medium Excavators
- Wheeled or Tracked

## More Applications: Excavation, Grading, Profiles

Basements



Foundations



Footer



Trenching



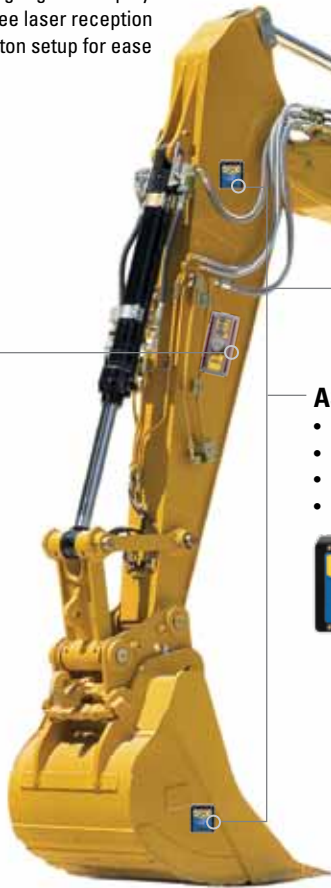
Flat Bottom

WIRELESSLY CONNECTED COMPONENTS



**LR20 Laser Receiver**

- Super bright grade display
- 360 degree laser reception
- Push button setup for ease of use



**AS300 Angle Sensor**

- Single-axis sensor
- 360 degree range
- Gravity-referenced
- Wireless communication



**CB300 Operator Display**

- 7" Color touch screen
- Easily mounted
- Intuitive menus
- Many functions
- Stores profile templates
- Audible Alarm



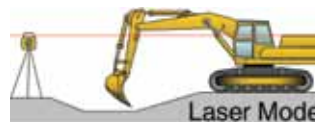
**Basements**



**Foundations**



**Footer**



**Trenching**

**Flat Bottom**



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**Rental Locations**

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