

Product Specs

December 2005

Spectra Precision Laser Dealer Confidential

Spectra Precision Laser LR60 Receiver

Weatherproof 360° laser receiver

General Description

The Spectra Precision[®] Laser LR60 Receiver is designed to be used as a stand-alone display receiver for backhoes, excavators, dozers and trenchers. Engineered for use in harsh environments, the LR60 is 100% weatherproof and features 360-degree laser detection.

Standard Features

- Patented Angle Compensation—for excavation automatically calculates and corrects the grade display for the angle of the dipper arm.
- **Built-in plumb indication**—for quick and accurate grade checking on excavators and backhoes.
- **Offset On-grade**—provides more information above grade using the entire receiver for productive excavation.
- **Selectable accuracy**—lets you match your application requirements. Using the right accuracy for the job means clearer feedback to the operator and less display "jitter." Work to the tolerances demanded by the job by selecting the correct on-grade accuracy.
- **Selectable on-grade accuracy**—allows configuration of the LR60 to match the job site tolerances.
- **Precise laser strike positions**—for more accurate grade control. Unlike other laser receivers that provide only 5 to 7 fixed relative grade regions, the LR60 laser receiver provides a continuous, absolute laser strike position to precisely measure the actual height deviation from "On Grade." This feature gives you the highest accuracy and grade performance.



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- **Greater Detection Height**—the LR60 offers 222 mm (8.75 in.) of detection height, keeping you in the laser beam longer. Regardless of your application, from rough grading to fine grading, display to automatic, the LR60 ensures more grade information—even on the toughest jobs.
- **Designed for construction**—Shock mounted electronics for stable performance and tough aluminum/poly carbonate housing for superior knock and drop protection. Sealed housing and battery chamber is designed and built to the most demanding construction industry standards.
- **Receiving Windows**—include four sets of photocell that are equally spaced to allow for 360 degree reception.
- Super-Bright LEDs—are highly visible and graphically display blade or bucket position.
- **Power Button**—turns the receiver on and off. It also acts as a "shift" key for secondary receiver functions.
- Liquid Crystal Display—indicates the current receiver settings and battery status.
- **Touch-Panel Buttons**—allow the settings to be adjusted.
- **Mounting Knobs**—are attached to stainless steel clamps that allow for quick and easy installation to the mast or magnetic mount.
- **CB25 Control Box Option**—Use the LR50 as a stand-alone display receiver or combine with the CB25 control box to create affordable automatic blade control for dozers.

Specifications

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FEATURE	SPECIFICATION
Beam Reception Range	360 degrees
Operating Range	Over 460 m (1500 ft), radius laser dependent
Laser RPM	Minimum: 105; Maximum: 1200
Vertical Reception	222 mm (8.75 in.)
Accuracy—On-Grade Deadbands	Setup: 5 mm (0.20 in.)
(Grading)	Fine: 10 mm (0.40 in.)
	Standard: 20 mm (0.80 in.)
	Wide: 40 mm (1.60 in.)
Accuracy— On-Grade Deadbands	Setup 6 mm (0.25 in.)
(Excavation)	Fine: 12 mm (0.50 in.)
	Standard: 25 mm (1.0 in.)
	Wide: 50 mm (2.0 in.)
ACE—Angle Compensation Mode	Fine: 12 mm (1/2 in.)
	Standard: 25 mm (1.0 in.)
Plumb Swing Range	
Standard	± 2.5°
Angle Compensation Mode	$\pm 10^{\circ}$ to $\pm 30^{\circ}$
Display Output	Bright, Dim, or Off
Power Options	Alkaline—4 x "C" Cell—Standard
	Nickel Metal Hydride—4 x "C" Cell
	Power Cable—10 -30 V dc
Battery Life—Alkaline	75 hours, Display Dim
(Continuous in beam)	45 Hours, Display Bright
Battery Life—Ni-MH	50 hours, Display Dim
(Continuous in beam)	40 hours, Display Bright
Battery Recharge Time	3–4 hours
Automatic Shut Off	75 minutes with no laser beam
Out of Beam Indication	High and Low
Remote Display Option	Yes
Automatic Control Option	Yes
Dimensions (LxWxD)	394 mm x 142 mm x 149 mm
	(15.50 in. x 5.58 in. x 5.88 in.)
Mounting Pipe	
Round Tube (Outside Diameter)	42 mm to 50 mm (1.66 in. to 2.00 in.)
Square Tube	38 mm (1.5 in.)
Operating Temperature	-20 °C to +60 °C (-4 °F to 140 °F)

^{*}Specifications subject to change without notice