

Product Specs

February 2009

Spectra Precision Laser Dealer Confidential

Spectra Precision Laser LR20 Display Laser Receiver

Rugged New Laser Receiver for compact machine applications

The Spectra Precision® Laser LR20 laser receiver is a rugged, electronic receiver that detects laser light generated by rotating lasers. It works with all common rotating lasers and will detect both visible and invisible beams.

The LR20 laser receiver is designed for use as a standalone display receiver on compact machines such as mini excavators, backhoes and scrapers.

Power to the LR20 receiver comes from NiMH rechargeable batteries. The LR20 receiver is designed to be moved from machine to machine with features and setup options for multiple applications and specifications. The 8-in. laser reception height ensures maximum laser control across the site.



Standard Features

- 8-in., 360-degree laser reception Increased working area and range
- Polycarbonate housing and elastomer over molding —Rugged durability for years of reliable use
- Super bright grade display w/green "on-grade" LEDs Superior depth/elevation indication
- Push button setup —Ease of use and application flexibility
- Precise laser strike positions— More accurate grade control. The LR20 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.
- Designed for construction—Shock mounted electronics for stable performance and tough 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.

Installation

Trimble Construction Division, 5475 Kellenburger Road, Dayton, OH 45424, USA

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The Spectra Precision® Laser LR20 laser receiver mounts to round masts from sizes 13 mm to 51 mm (.5 to 2 in.) O.D. tube. The Spectra Precision Laser Mini Magnetic Mount is ideally suited for mini excavator, backhoe and skid steer applications. Set up the laser in an appropriate location for receiver visibility and efficient machine operation and turn it on.

LR20 Specifications

LR20 Specifications				
Specification	LR20			
Beam Reception Range	360 degrees	360 degrees		
Operating Range	Over 250 m (7	Over 250 m (750 ft) radius, laser dependent		
Laser RPM	Minimum: 105	Minimum: 105; Maximum: 1200		
Vertical Reception	203 mm (8 in)	203 mm (8 in)		
Accuracy:	Fine	Standard	Wide	
Center On-Grade	5 mm	10 mm	20 mm	
(Grading)	(0.20 in)	(0.40 in)	(0.80 in)	
Offset On-Grade	12 mm	25 mm	50 mm	
(Excavation)	(0.50 in)	(1.0 in)	(2.0 in)	
Plumb-Swing Accuracy	$\pm 0.5^{\circ}, \pm 1.5^{\circ},$	$\pm 0.5^{\circ}, \pm 1.5^{\circ}, \pm 2.5^{\circ}$		
Display Output	Bright or Dim	Bright or Dim		
Power Options	Alkaline - 5 "A	Alkaline - 5 "AA" Cell – Standard		
	5 "AA" NiMH replaceable.	5 "AA" NiMH battery pack, non field replaceable. Power Cable – 10 -30 V dc		
	Power Cable –			
Battery Life – Li-Ion	35 hours	35 hours		
(Continuous in beam)				
Battery Recharge Time	3-4 hours	3 – 4 hours		
Automatic Shutoff	75 minutes wit	75 minutes with no laser beam		
Out-of-Beam Indication	High and Low	High and Low		
Remote Display Option	No	No		
Automatic Control Option	Not in current	Not in current state		
Dimensions (LxWxD)	Approx. 24.1 x	Approx. 24.1 x 11.1 x 4.7cm (9.50 x 4.38 x		
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	1.87 in), 1.13 kg (2.5 lbs)	
Mounting Pipe	Large Hook: 38 mm to 51 mm (1.5 to 2.0 in.) OD Tube	
	Small Hook: approx 13 mm to 38 mm (.5 to 1.1 in) OD Tube	
Storage Temperature	-40° C TO +70° C (-40° F TO +158° F)	
Unit Drop	'3 Random Drops Onto Concrete @ 1.5 m (5 ft) at Room Temperature	
Vibration	TNL standard profile for pole mounted machine control equipment	
Operating Temperature	-20° C to +60° C (-4° F to 140° F)	
Warranty	2 Years	

^{*}Specifications subject to change without notice