



## DG711/DG511 Pipe Laser



- » CONSTRUCTION TOUGH
- » EXTREMELY RELIABLE
- » EASIEST TO USE



Color-coded panel clearly indicates the line and grade functions to minimize crew training and setup errors.

The industry's largest display lets you see the % Grade from outside the manhole. Protective coating prevents damage from stones and debris.

Spectra Precision Laser proven performance and quality...supported by the industry's leading service centers.

Armor-Plated housing provides unmatched protection from sewage effluents and cleans up like new.

Rubberized front bumper lets you set the unit upright on concrete while also providing protection from knocks when going down the manhole.

Full-function remote included with the DG711 permits On-Off, Line and Grade adjustments, as well as Line Set/Check functionality.



**DG711**



**DG511**



Both models have a Steep Grade Option, to manually "rake-in" grades up to 100%.

Universal Connector lets you hook up to an optional 12V battery, and allows fast service diagnostics and software upgrades.

Versatile pivot point easily establishes your start point:

- Reflective Target enhances a laser plumb bob
- Super-bright LED enables easy instrument or optical plummet alignment
- Use the two color "+" marks for plumb bobs

Both units can be programmed by your dealer to provide LCD Panel instructions in English, Dutch, Finnish, French, German, Italian, Japanese, Portuguese, Spanish or Swedish.

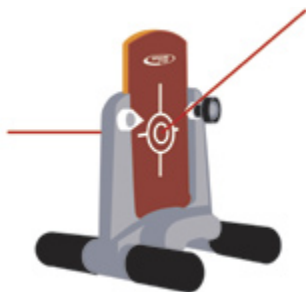
Remote controls line and offers full on-off capability if left in the manhole overnight.



# RUGGED, RELIABLE, REPEATABLE

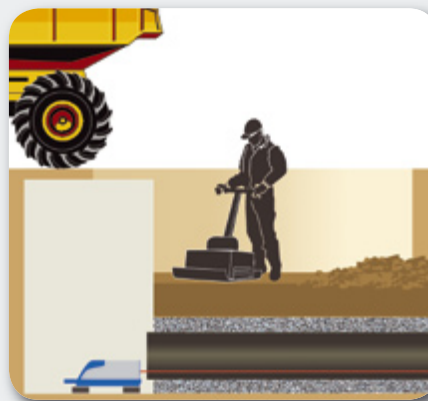
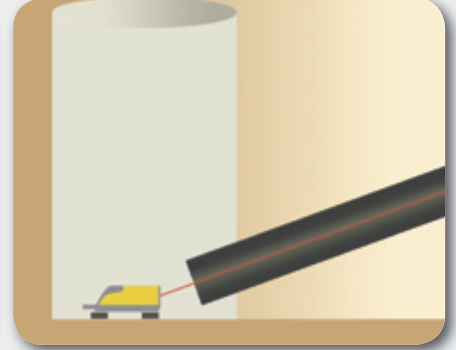
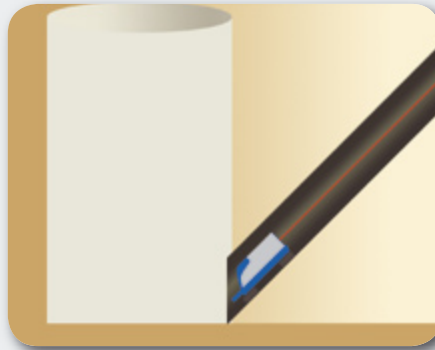
Your job sites involve some of the harshest conditions found in any industry. You need equipment that can stand up to corrosion from acids, chemicals, salts and other destructive underground elements, as well as to the physical abuse typical in the construction industry. The Spectra Precision Laser DG711 and DG511 pipe lasers from Trimble are designed to meet those conditions.

Built tough for long-lasting performance and reliability, the DG711 and DG511 pipe lasers are completely waterproof and designed to ensure easy cleanup. They are also easy to assemble with a full range of setup accessories available, and easy to use with straightforward, “no-instructions-required” controls. They even keep track of their own maintenance needs, notifying you at regular intervals (you decide how often) when it's time for a checkup. The DG711 and DG511 pipe lasers are simply the toughest, smartest tools you'll ever own!

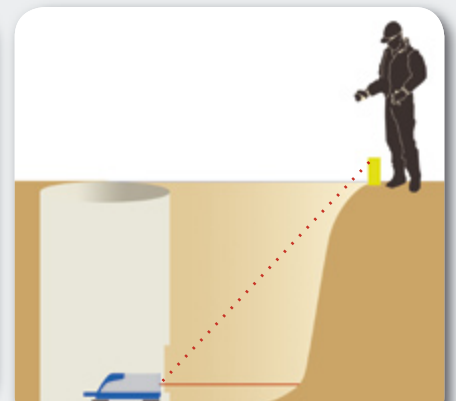


Our patented Target Lens collects the beam and transfers the spot up at the angle viewed by the pipe layer, making it very easy to see the laser beam.

**SELF-LEVELING:** The DG711 and DG511 feature the largest automatic leveling range in the industry providing quick, easy setups, regardless of grade. Unlike traditional pipe lasers, they eliminate the need for rough leveling and minimize crew training. Simply set up the laser in the pipe, manhole or open cut without the need to swivel or rough level the unit. No need to reset the unit or HI, over the center point when rough leveling.



**LINE ALERT:** This unique feature is ideal for working in high-vibration or wet conditions where the pipe lasers may be disturbed. The beam flashes to notify you that the setup line has been disturbed, eliminating the necessity of rework. Combined with the self-leveling warning, you'll always complete the job correctly, on time and on budget! Only available on the DG711.



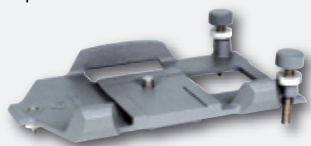
**LINE SET:** The Line Set/Check capability of the pipe laser allows you to raise the beam outside of the trench for fast line setup or checking. Raising the laser beam out of the trench to an above-ground stake saves you time—instead of having to move the excavator off line during setup of the pipe laser, you can just get on with your job. In addition, the Line Set-Check feature is ideal for rechecking the line in pipe jacking puts after each push. Only available on the DG711.

**Contractor-defined accessories assure fast, easy setups under all conditions.**

**Mounts and Tripods**

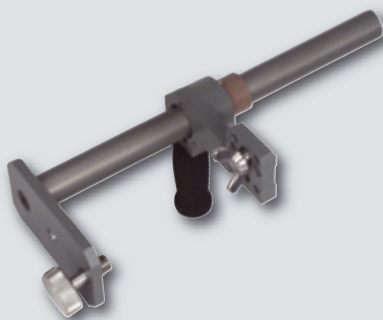
**1230 (English) and 1237 (Metric) Invert Plates –**

Unique heavy-duty plate provides an easy way to self-center the laser in pipes in the 250 – 400 mm (10 – 15 inch) diameter range, or to be used as a stable base for open cut setups with the 1239 Pole Kit. Eliminates the need for multiple foot screws. Kit includes leveling feet for the 1230 and 1237 invert plates.



**1239 Extended Height Vertical Pole Kit –**

Attaches to all mounting plates and T-bars to set the laser at the correct elevation in open cut, flat bottom, or drop manholes.



**1244 T-bars –**

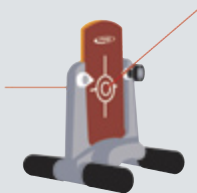
Two sizes simplify manhole, drop manhole, or large diameter pipe setups ranging from 84 cm to 2 m (2 ft. 9 inches to 6 ft. 8 inches). Provides secure mounting for high theft or vibration areas.



**Underground Accessories**

**956 Optically Enhanced Pipe Target –**

Uses special optical elements to enhance beam brightness. Has two adjustable inserts to self-center in pipes from 150 to 500 mm (6 to 21 inches) in diameter. Level vial facilitates use in other positions and in larger pipe.



**Spectra Precision Laser LL200 Auto Leveling Grade Checking Laser –**

Complete package with tripod and grade rod lets one person check grade anywhere, above or below ground, along the pipe run.



**1211 Automatic Laser Plummet –**

Auto plumbing-- visible red laser that replaces the 5/8 x 11 instrument hold down on tripods or on the 1017 Manhole Mount. Versatile—lets you decide to first position the laser, or the instrument, over the manhole centerline for varying job conditions.



**936 Adjustable Large Pipe Target –**

Self-centers in 400 to 800 mm (15 – 30 inch) pipes. Can also be clamped to a 2 x 4 timber for larger pipe sizes.



**1017 Manhole Mount –**

Attaches to a manhole cone or riser so any 5/8 x 11 instrument can be easily plumbed over the pipe laser.



**929 Blower –**

Variable speed, high-capacity output, minimizes beam refraction to prevent grade sag. Operates on 12V DC.



**1214 Line String Adapter –**

Adheres to the top pivot point to provide accurate string positioning for quick setup.



**EW1160-1**

Provides additional one-year increments of warranty coverage up to a total of three years. Eliminates unplanned repair expenses, and is honored globally at authorized service centers.





**1233 Scope Kit –**  
Helps align the laser for over-the-top setups, or one-person second-day setups in large pipe. Includes adapter.



**1161 Heavy-Duty Tripod –**  
Non-warping cured wood legs provide a stable setup for over the top setups, or grade checking. Includes Safety Chains to prevent tipover.



**Power Options**

**P20/P20B Alkaline Battery Pack –**  
Great backup if you forget to charge the unit. Insert four D-cell alkaline batteries and get over 40 hours of use. Included with the DG711.



**P21 12V DC Battery Power Cable –**  
Another option for providing power for extended periods of operation or for backup in remote areas.



**P22 Cigarette Lighter Charger –**  
Provides the ability to charge the battery pack overnight in the work vehicle or for a refresher charge to finish the workday.



**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 and Quick Grade	Yes	
Line Set/Check	Yes	
Line Alert	Yes	
Temperature Compensation	Yes	
Grade Compensation	Yes	
Maintenance Interval Notification	Selectable Intervals: 3, 6, 12, 18 or 24 Months	
Warranty Period	5 Years	5 Years

**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 inches)	
Diameter	14 cm (5.5 inches)	
Housing material	Armored Die Casting	Hard Anodized Aluminum
Battery type and life	NiMH / 60 Hours with Daily Setup at 20° C (68° F)	
Battery pack	Sealed (NiMH), 0-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 (10 ft.)	

**WIRELESS REMOTE SPECIFICATIONS**

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

**THE ORIGINAL AND STILL THE LEADER.**



## CONSTRUCTION TOUGH

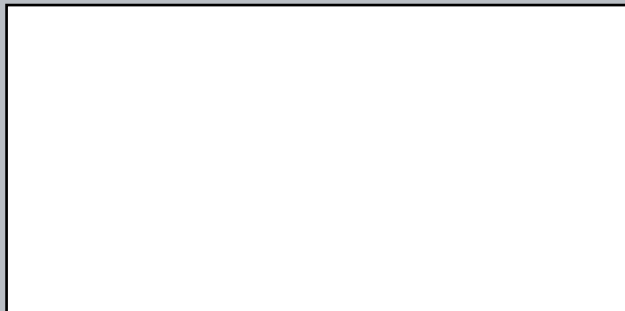
Well known for their innovative features and rugged dependability, Spectra Precision Lasers are used by more construction professionals around the world than any other brand.

## STRONGEST WARRANTY

With the largest dealer and service network in the industry, no other company can match the service and support you'll get with Spectra Precision Lasers.

## EASIEST TO USE

Spectra Precision Lasers have the most advanced productivity features you'll find, because you make a lot more money working than you do setting up lasers.



YOUR LOCAL SPECTRA PRECISION LASER DISTRIBUTOR

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