

# DIRECT READING RODS

HIGHEST QUALITY - LARGEST SELECTION

LASER/OPTICAL

TOUGH – LIGHTWEIGHT – VERSATILE

MADE IN REDMOND, OREGON  
USA

## FEATURES

**Aluminum front and rear rods.**

Made of high strength clear anodized aluminum for lightweight, rugged, dependable operation. They will not rust, split, splinter, swell or warp in any environment.

**Tape has heavy duty matte textured face.**

Easy on the eyes in bright sunlight.  
Protects the tape numbers from wear and fading.

**Tape lock grommets are oversized,**  
heavy duty brass. Greatly minimizes the problem of tape tearing.

**Detector rail is black, high density,  
U.V. stabilized for long life.**

Specifically designed to not become brittle when exposed to ultraviolet rays or direct sunlight.

**Solid tape lock with internal brake slide.**

Stronger, trouble-free operation.

**Tape lock pin cannot puncture tape.**

Designed not to tear, puncture or rip tape when pushed against tape face instead of the grommet hole.

**DuPont nylon parts.**

Tough and rugged for long-lasting life. Same material used for ski bindings and motorcycle parts.



# LASERLINE MFG., INC.

LaserLine Mfg., Inc. is the world's largest manufacturer of direct reading (Lenker style) grade rods. We are proud to offer the highest in quality, selection and service.

## HOW THEY WORK:

### Direct Reading/True Elevation Grade Rod

Direct Reading, or True Elevation (also known as Lenker style) is a Grade Rod with a moveable tape face allowing you to set the actual benchmark elevation, or any elevation, above or below the bench into the rod. The actual true elevation above sea level is read on these rods, thus eliminating errors caused by adding or subtracting. Since no math is involved, grade shots are much faster than conventional style rods. On most jobsites, the bench elevation is typically established by survey, and all elevations on that project are above that or below primary bench elevation.



#### EXAMPLE:

In the USA, these elevations are typically represented in feet, tenths and hundredths of a foot as per the example.

		Read on rod as
Bench Elevation	2352.50	2.50
Bldg. A Footing Elevation	2351.50	1.50
Bldg. B Finish Floor Elevation	2353.85	3.85
Catch Basin #12	2349.28	9.28

### Laser Version Direct Reading/True Elevation Rods

For use with a laser detector. There is a special rail slide and Laserline detector bracket that lets the laser detector travel the full working length of the rod. This allows faster and easier readings because it takes the awkwardness out of having to loosen the detector, move the detector, then tighten the detector for each reading.



Refer to "Detector Brackets Match Guide" (last page) for your bracket selection.

### Optical Version Direct Reading/True Elevation Rods









Are used with optical instruments and have no special rail for the laser detector. All tape faces have large scales and are easy to read at a distance when using an optical instrument.








Laserline offers the largest selection of direct reading (Lenker style) grade rods available.










**GR 1000 SERIES** LASER VERSION

							
<b>GR1000</b>	<b>GR 1000</b>	<b>GR 1000T</b>	<b>GR 1000I</b>	<b>GR 1000ICF</b>	<b>GR 1000IT</b>	<b>GR 1000M</b>	<b>GR 1000MCF</b>
· 10' Direct Reading	· 10' Direct Reading	· 10' Direct Reading	· 10' Direct Reading	· 10' Cut & Fill only	· 10' Direct Reading	· 3 Meter Direct Reading	· 3 Meter Direct Reading
· Feet, tenths, hundredths	· Feet, tenths, hundredths	· Feet, tenths, hundredths	· Feet & inches	· Inches	· Tenths OR inches	· Metric scale	· Plus Metric Cut & Fill
· Plus cut & fill							
5' 10½" – 10' 1¾"	5' 10½" – 10' 1¾"	5' 10½" – 10' 1¾"	5' 10½" – 10' 1¾"	5' 10½" – 10' 1¾"	5' 10½" – 10' 1¾"	5' 10½" – 10' 1¾"	5' 10½" – 10' 1¾"

**GR 1450 SERIES** LASER VERSION

				
<b>GR1450</b>	<b>GR 1450</b>	<b>GR 1450T</b>	<b>GR 1450M</b>	<b>GR 1450MCF</b>
· 15' Direct Reading	· 15' Direct Reading	· 15' Direct Reading	· 5 Meter Direct Reading	· 5 Meter Direct Reading
· Feet, tenths, hundredths	· Feet, tenths, hundredths	· Feet, tenths, hundredths	· Metric scale	· Metric scale
· Plus cut & fill			· Plus cut & fill	· Plus cut & fill
8' – 14' 8¼"	8' – 14' 8¼"	8' – 14' 8¼"	8' – 15' 11¼"	8' – 15' 11¼"

**GR 10 SERIES** OPTICAL VERSION

						
<b>GR10T</b>	<b>GR 10T</b>	<b>GR 10I</b>	<b>GR 10I</b>	<b>GR 10M</b>	<b>GR 15T</b>	<b>GR 15M</b>
· 10' Direct Reading	· 10' Direct Reading	· 10' Direct Reading	· 10' Direct Reading	· 3 Meter Direct Reading	· 15' Direct Reading	· 5 Meter Direct Reading
· Feet, tenths, hundredths.	· Feet, tenths, hundredths.	· Feet, inches	· Feet, inches	· Metric scale	· Feet, tenths, hundredths.	· Metric scale
5' 5" – 9' 7"	5' 5" – 9' 7"	5' 5" – 9' 7"	5' 5" – 9' 7"	5' 5" – 9' 7"	8' – 14' 8¼"	8' 5" – 15' 11¼"

NOTE: Any of the above Direct Reading Rods can be ordered with a 4 Foot Extension (EX) that slides into the rear rod section, and when deployed, adds 4 extra feet to the working range of the Grade Rod.

# DETECTOR BRACKETS - GR 1000 & GR 1450 RODS

## MATCH GUIDE

DETECTOR BRAND & MODEL	B-1	B-2	BI-LA	BI-T	BI-T3	B-550	BI-LS70-80	B-STORM	B-LT	UB-1
AGL LS-4	✓						✓			✓
AGL LS-100									✓	✓
AMA D6, D7	✓									✓
Apache Cyclone			✓							
Apache 34, 44 Lightning	✓									✓
Apache Lightning 2, Twister									✓	✓
Apache Storm								✓		
CST Berger LD100, 120, 200, 400	✓									✓
David White LD18	✓						✓			✓
Futtura CRI										✓
Futtura CR2+									✓	✓
Laser Alignment 4, 5, 6, 7, 8	✓									✓
Laser Reference (Pro Shot) 4-5-7	✓						✓			✓
Laser Reference R-8									✓	✓
Leica Rod Eye Basic										✓
Leica LPD 15, 30	✓									✓
Leica Rod Eye Digital								✓		
Leica Rod Eye Pro			✓							✓
Leica Rod Eye Plus									✓	✓
Nikon 3, DS-30, LS-6	✓									✓
Quadriga LY10	✓									✓
Sokkia LR100	✓						✓			✓
Sokkia MLR									✓	✓
Spectra Precision 1077, 1274, 1275	✓									✓
Spectra Precision 1175, 1177, 3075		✓								✓
Topcon LS30, LS50, LS70, LS80							✓			✓
Trimble HR200	✓									✓
Trimble HR300					✓					✓
Trimble HR250, 320, 350									✓	✓
Trimble HR400, 500, CR600				✓						✓
Trimble HR550						✓				✓
Trimble HL700/750/450								✓		
All other detectors (all brands)										✓

### 4-FOOT ROD EXTENSION

Works with any Laserline Direct Reading Rod!

Slides conveniently inside the rear rod when not in use. Allows you to extend the rod in one-foot increments up to four additional feet! Grade rod collapses down to original size when not in use.

### CARRYING/STORAGE BAGS

Sturdy black cordova nylon with strap, velcro flap and pocket for bracket and detector.

**1000-1301:** 10-foot • 3-meter

**1000-1302:** 15-foot • 5-meter

### REPLACEMENT TAPES

**1000-1023:** 10 foot • tenths plus cut/fill

**1000-1504:** 15 foot • tenths

**1000-1026:** 10 foot • tenths

**1000-1035:** 3 meter plus cut/fill

**1000-1036:** 10 foot • inches • cut/fill only

**1000-1024:** 3 meter

**1000-1037:** 10 foot • inches • tenths

**1000-1503:** 5 meter plus cut/fill

**1000-1038:** 10 foot • inches

**1000-1502:** 5 meter

**1000-1501:** 15 foot • tenths plus cut/fill