JAVELIN *Series Dual Grade Lasers*

Hits the target every time

LASER ALIGNMENT
by Leica Geosystems

Leica Geosystems

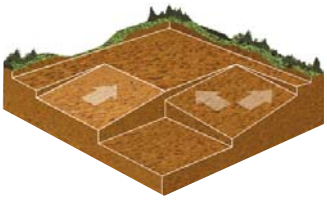
JAVELIN *hits the target every time*

Javelin and Javelin-s – The Finest in Grade Control Lasers.

Javelin-s

The Javelin series lasers are robust, reliable, easy-to-use tools. They are both waterproof, so all the important components are protected from wet weather. The Javelin can also be combined with our GPS system to provide the ultimate in 3D control. The distinctive design, using total station technology, incorporates a rechargeable nickel metal-hydride battery pack, with remote control capability for the Javelin-s.

Javelin



Whether you need level, single grade, or dual grade, Javelin saves time, labor, and material costs.

Other Key Features

- **Accurate** – Accuracy that remains stable over the operating range.
- **High Speed Rotation** – Selectable, up to 1200 rpm for smooth, accurate speed control.
- **Wind Sensitivity Settings** – Allows work to continue even in adverse conditions.
- **Easy Grade Entry** – Large and small increments of grade are quickly input into the Javelin.
- **Elevation Alert** – Monitors the height of the instrument (H.I.) to prevent elevation errors.
- **Long Range** – Up to 3,000 feet (900 meters) working diameter.
- **Automatic Self-leveling** – High speed and accurate, the Javelin-s servo system covers the entire 50% range without re-positioning the laser. The Javelin can be switched to manual operation when needed.
- **Steep Slopes** – Up to 20% in either axis with the Javelin, and up to 50% with the Javelin-s.
- **Crowns** – Set up the Javelin with the crossfall on the Y-axis. Press the Y-Axis Swap Button and the crossfall reverses without moving the laser.

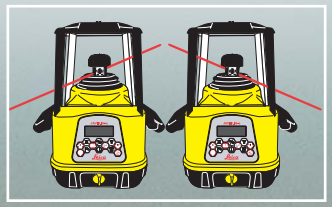


Illustration of the Y-axis swap

Easy-to-Use Keypad

- Power on and off.
- Easily switch between auto and manual modes.
- Increase grade of the X and Y-axes.
- Selects X-axis.
- Selects Y-axis.
- Decrease grade of the X and Y-axes.
- Prevent elevation changes with the H.I. (elevation) Alert.
- Reverse crossfall with the Y-Axis Swap.
- Change wind sensitivity.
- Change rotating head speed.

Javelin-s Special Features

Line Finding for critical axis alignment – Station a prism at a second control point, rough align the laser, press the Line Finding button, and the Javelin-s will align itself.

Angle Measurement for layout work – Align the Javelin-s to a control point on one axis, press the unique Angle Setting button, enter the angle (up to 90°) and slope required, and the Javelin-s will automatically re-align itself to the selected position.

Fine Grading

Rough Grading

General Construction

Excavating

Rod-Eye Pro Sensor provides four levels of accuracy and a loud audio speaker.

Javelin-s Remote Control Capability

The Javelin-s laser system features an optional two-way radio frequency controlled remote control device, designed to work up to 800 feet (245 m)* from the laser transmitter. Two-way communication means that the user has complete control of the laser. Grade changes are completed and communicated back to the user in just seconds. The remote control shuts off after 5 minutes of inactivity to conserve battery power.

* Under optimal conditions

Specifications

Working Range	3,000 feet (900 m) diameter
Self-leveling Accuracy	± 6 arc seconds*
Self-leveling Range	± 3°
Grade Capability	
Javelin	Up to ± 20% in both axes
Javelin-s	Up to ± 50% in both axes**
Head Speeds	300 to 1200 Rpm
Battery Type	NiMH
Battery Life	Up to 30 hours with NiMH battery pack†
Laser Diode	635 nm visible
Laser Class	Class II FDA / Class 2 IEC
Dimensions (Height x Width x Depth)	
Javelin	12.3 x 12 x 10.6 inches (312 x 305 x 269 mm)
Javelin-s	14.4 x 12 x 10.6 inches (366 x 305 x 269 mm)
Operating Temperature	+14°F to +122°F (-10°C to +50°C)
Weight	18.1 lbs (8.2 kg) with batteries
Environmental	Waterproof to IPX-7 standard

Remote Control Specifications

Distance	500 feet (150 m) typical; Up to 800 feet (245 m)
Frequency	2.402–2.478 GHz
Battery Life	12 hours of continuous use†
Battery Type	4 AA-Alkaline batteries
Size	4.25 x 2.25 x 7.62 inches (108 x 57 x 194 mm)
Weight	25 oz (0.72 kg)

* 23°F to +95°F (-5°C to +35°C). Accuracy is derated outside this range
** Maximum total grade using both axes up to 55%
† Battery life is dependant upon environmental conditions
Specifications are subject to change without notice

Land Leveling, Agriculture

Steep Slopes, Landfills

JAVELIN *... Hits the target every time*

Leica Geosystems

Integrated Solutions for the Construction Industry that are Rugged, Reliable and offer Exceptional Customer Value

The Leica Geosystems Construction Business Segment has been strategically built to focus on the needs of the customer. Leica Geosystems is a pioneer of the survey world. Our history goes back 80 years and is marked by numerous developments that have shaped the course taken by surveying, photogrammetry and GPS. Renowned names such as Kern Aarau, Wild Heerbrugg and more recently Laser Alignment are among the companies that have become part of what is today Leica Geosystems. Combined, these companies have played a major role in shaping the vision of our organization, deepening our knowledge of customer needs and providing market-leading product technologies and solutions. Leica Geosystems' distribution companies and representatives provide you with support in 128 countries. Leica Geosystems – Global resources serving each customer individually.

The Leica Geosystems Construction Segment Family of Products

Construction lasers – Whether it's general construction, pipe laying, machine control, or interior walls and ceilings, our lasers are built to handle any environment.

Automatic levels – Professional optical levels are built for the construction site. They are quickly set up, very precise, and top every comparison of price to performance ratios.

Leader in GPS and TPS technology – Used worldwide in projects that demand the highest standards, designed for various applications and ease-of-use. We developed the first reflectorless total stations in 1998, and our experience with GPS dates back to 1967.

Conventional and 3D Machine Control Systems – Boost productivity, increase accuracy, and reduce operator fatigue by converting heavy equipment to laser, sonic, GPS and TPS guided control. We have applications for excavating, mining, grading, agriculture, and precision paving.

DIGI™ System – The location system provides a fast and safe solution for tracing buried utility services.

Software and accessories – Integrated software solutions and a complete series of tripods, staffs, our patented 360° prisms, batteries, chargers, and everything you need to extract the best performance from your instrument.

Your Dealer:

Leica Geosystems GR LLC is an ISO 9001 Registered Company.

Laser class 2 in accordance With IEC 825-1 and EN 60825-1 Laser class II in accordance with FDA 21CFR CH.1 § 1040

LASER ALIGNMENT by Leica Geosystems

Leica Geosystems

Leica Geosystems GR LLC
6330 28th Street SE
Grand Rapids, MI 49546 USA
Phone 616-949-7430
www.laseralignment.com
www.leica-geosystems.com