GradeLight Pipe Lasers

Fit the Tightest Inverts...High Reliability Features
**Built to Last**
AGL is the Original Manufacturer of the pipe laser, and our four decades of experience benefit you in this newest design.

The durable housing uses die casts and extrusions for superior strength.

Inside, additional die cast parts coupled with stainless steel, brass, and aluminum bar stock add to its precision and reliability. These high quality materials minimize drift over the broad operating temperature ranges encountered.

**Easy Alignment**
High Visibility LED Line Pivot Point is a fast reference for centering. Easily seen from outside the manhole.

**Grade Reference Points**
on both sides make it easy to set elevation.

**Large Display is Viewable from Outside Most Manholes**
- **Line Indicator** shows the beam position relative to the adjustment range.
- **Status at-a-glance** shows self-leveling status, battery indicator, electronic level vial showing cross axis level position, and lock status of laser and remote.
- **Unique Dual Color Grade Display** Color changes to denote Positive or Negative Grade (to .001% increments) to minimize costly input errors.

**Simple Up 👆 Down 👇**
- **Enter Grade with a Rolling Counter or Digit Select Method.** Press and hold a grade button for a few moments. After release, it will automatically increase (or decrease) until you press the key again to stop. Grade can also be entered by selecting the digits using the key.
- **Press 👈 to reset to zero grade.**
- **Press 👉 to reset line adjust range.**
SET UP... The Way You Work

In The Pipe

One Leg Set Covers Multiple Pipe Sizes
Unique slide legs adjust for 8", 10", and 12" pipe, as well as non-standard heights. Metric set for 200, 250, and 300mm. Built-in feet cover 6" (150mm) pipe.

Three-leg design is self-centering, providing stability when setting up on uneven surfaces, and allowing quick leveling-up.

Eliminates multiple small feet that can easily get lost, and attach holes that cross thread or fill up with jobsite debris.

6" pipe 150mm 8" pipe 200mm 10" pipe 250mm 12" pipe 300mm

Above Ground

Open Cut

Fine Height Adjust Trivet
Provides a stable set-up on any rocky or dirt surface. The hardened points can dig into a brick base.

Tight Pre-poured Inverts or Small Manholes

The Shortest Length
Less than 10.5" (265mm) long. Even the tightest 6" (150mm) 90° inverts pose no set-up problem.

Flat Bottom Manholes

Wide Array of Accessories make set-up in any condition, whether flat bottom or pre-poured manhole, easier. Set-up with the trivet, rod group or leg set and you will see the difference. AGL also accommodates specialty applications and has the bandwidth to custom make special requests.

Instrument Package

Instrument Package includes the necessary accessories to use the UNIQUE Rod & Cross-brace system that has been a proven technique for over 45 years.
ALIGN...The Way You Work

**Manhole Mount**
Unique Design lets you attach any alignment instrument including our Special Transit with back-sight capabilities.

Rotary crank allows easy movement to quickly get over a point.

Mount adapts to base sections and risers, and comes with an easy tilt mechanism to quickly plumb the instrument.

**AutoTarget System**
The GL3000 communicates with the AutoTarget using IR. Place the GL3000 and the AutoTarget in the pipe and activate the target. The rotating laser will automatically find the center of the AutoTarget. It’s also possible to use a standard receiver of any rotating laser instead of the AutoTarget. After activating the vertical laser, it can be moved with the remote control, left or right, into the correct direction for precise alignment.

The GL3000 vertical rotating beam will also indicate a vertical level exactly in the direction of the laser beam. This is useful in finding a range pole outside of the ditch for aligning a machine, hub stakes, fence posts, bridge columns, etc.

**Manual Alignment**
The manual alignment function allows directing the laser by remote control to a reference rod outside the excavation without later having to set the grade-setting control again in the manhole.

1. Set desired grade.
2. Press the red alignment button.
3. Direct laser beam to reference rod.
4. Return the beam to the desired setting and line by pressing the alignment button.

**Rod & Crossbrace System**
When used with the Special Transit, it makes an excellent one-person alignment system. Allows the laser to be set at any height on the graduated rod.

Adjustable manhole crossbrace length is 30-60" (76-152cm). Additional sections can be added.

**GL2700 Features**

**GL3000 Features**

**Stringline**
Stringline Hook on every laser provides a center pivot location for alignment.

**Above Ground**
Alignment Scope has a large field of view and a red filter for easy beam locating, even in bright sun light.

**Rod & Crossbrace System**
When used with the Special Transit, it makes an excellent one-person alignment system. Allows the laser to be set at any height on the graduated rod.

Adjustable manhole crossbrace length is 30-60" (76-152cm). Additional sections can be added.
VERSATILE... The Way You Work

Power Options

Li-ion Rechargeable
Highest performance battery. Can be removed and charged separately.

Alkaline Pack
for when you forget to charge.

Optional 12V Cord
Charges while operating. Standard with GL3000.

Owner ID and Check Calibration
User Selectable feature lets you put in your company name and phone information as a theft deterrent to display at unit power-up. Lets you set the service interval desired -- up to 2000 hours.

Unique Target

Magnetic base attaches to trench box side wall after pipe setting for better airflow that minimizes refraction.

Base design mounts target panel at the front of the base, not in the center. This allows easier viewing at the front of the pipe. Accommodates multiple pipe sizes from 6” to 10” (150 to 250mm) and 12”-15” (300mm-380mm).

AutoTarget

The unique AutoTarget allows the user to align the pipe on second day set-up with ease and accuracy. Simply place the AutoTarget at the end of the last joint laid. Place the Pipe Laser in the pipe with the correct grade and press the red align key on the AutoTarget. The built-in rotating laser will scan left, then right and then find the center of the target. After aligning, remove the AutoTarget and replace with a standard target and get to work. No hassles, No Problems!

Wide Self-Leveling Range Means NO ROUGH LEVELING!
Allows you to set grade inside or outside the pipe from +40% to -10%.

Accidents Happen!
This Laser Can Take It!
**Heavy Duty Blower For Refraction Control**
Minimizes laser drift for long pipe runs where there is more than a 20°F temperature difference between the trench top and bottom.

**Above Ground Target**
Special Reflective Coating helps enhance beam visibility when used in direct sunlight.

**Large Pipe Leg Set**
Tall Leg Set for 15-24" pipe; metric set for 375-600mm pipe.

**AutoTarget**
Use to quickly and easily align for second day set-up.

**Remote Control**
Moves the beam left or right for line, and puts the laser in standby or locked modes. Press adjustment range. Press to quickly re-center.

**AutoCenters to the Target.**

**ACCESSORIES... The Way You Work**

**Use the Handle Rod Mount**
to attach to a trivet or to the rod and cross brace system.

**AutoTarget for the GL3000**
The laser scans to the left edge, using the built-in rotating laser.

**Bracket for AutoTarget**
Easily attaches the AutoTarget to a pole, grade rod, post or stake.

**AutoTarget for the GL3000**
The laser scans to the right edge, using the built-in rotating laser.

**Clip-in Target**
Optional clip-in targets for 6", 8", 10", and 12" size pipes.

**AutoTarget**
Use to quickly do Line Check on the GL2700 and to turn the Rotating Laser ON for the GL3000.
Auto Levels

ZAL100 Series
With the ZAL100 Series GeoMax introduces an automatic level to the construction industry designed for your daily leveling and checking tasks with outstanding price-to-performance ratio. Meeting the IP54 class specifications guarantees all weather operation of the ZAL100 Series and provides you with an instrument that “Works when you do!”.

ZAL300 Series
Built for toughest conditions
The ZAL300s class leading optics and magneX™ compensator are imbedded in a sealed and protected housing making it highly resistant in all weather conditions.

Flexible and ergonomic
With four different types of magnifications, 20x, 24x, 28x and 30x, the ZAL300 series offers the accuracy of your choice.

The patented magneX™ compensator system from GeoMax used in the ZAL300 series with magnetic dampening makes stuck a thing of the past.

Grade Laser

GradoPlane 25X
The GradoPlane 25x levels up fast, even when inputting the maximum grade of 25%. Level, single or dual grade is simple to enter with either rolling counter or entry by digit. Seven power options offer flexibility (1) one rechargeable NiMH battery pack (2) 4 “D” batteries (3) 2 rechargeable NiMH battery pack (4) 8 “D” batteries (5) 4 “D” batteries + battery pack (6) AC power charger (7) 12v power source.

The beam masking feature makes the unit safe on roadways. The GP25X is perfect for those storm drain jobs where a wide area is needing to be covered.

EZDig PRO

Depth Control for Excavators
• Ideal for keeping flowline and ditch to grade plus maintaining the proper depth.
• Wireless sensors mounted on the excavator are calibrated to the machine, measuring movement and angle of the bucket, boom, and dipper stick.
• Provides real-time depth information, 20 times a second; no lag time.
• Can be installed and calibrated in 45 minutes or less; no welding required.

Keep your Machine Digging!
# Specifications

## GRADELIGHT

<table>
<thead>
<tr>
<th>Feature</th>
<th>GL3000</th>
<th>GL2700</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Leveling Range</td>
<td>+45% to -15%</td>
<td></td>
</tr>
<tr>
<td>Grade Range</td>
<td>+40% to -10%</td>
<td></td>
</tr>
<tr>
<td>Grade Entry</td>
<td>Rolling counter or digit select</td>
<td></td>
</tr>
<tr>
<td>Grade Display</td>
<td>0.001%</td>
<td></td>
</tr>
<tr>
<td>Azimuth Range</td>
<td>Total range: 20 ft. at 100 ft. (6m at 30m)</td>
<td></td>
</tr>
<tr>
<td>Accuracy</td>
<td>± 1/16&quot; at 100' (± 5mm at 100m; ± 10 arc sec.; ± .005%)</td>
<td></td>
</tr>
<tr>
<td>Temperature drift</td>
<td>1°/C arc seconds per degree C</td>
<td></td>
</tr>
<tr>
<td>Beam Type/Output</td>
<td>Visible laser diode, 635nm, &lt; 5mW, Class 3R</td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td>IP68; nitrogen purged</td>
<td></td>
</tr>
<tr>
<td>Power Supply</td>
<td>1) Rechargeable lithium ion battery pack</td>
<td>2) 110/230V AC converter (charge and run simultaneously)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3) Spare battery compartment for 4 “D” alkaline batteries</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4) Std. 12V power cord</td>
</tr>
<tr>
<td>Battery Life @ 32°C/0°C</td>
<td>40 hrs. Li-ion battery; 50 hrs. alkaline</td>
<td></td>
</tr>
<tr>
<td>Charging Time</td>
<td>5 hrs. maximum</td>
<td></td>
</tr>
<tr>
<td>Mounting</td>
<td>5/8 x 11 (female mounting thread)</td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-4° to 122°C (-20° to +50°C)</td>
<td></td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-4° to 140°C (-20° to +60°C)</td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>Diameter: 5.5” (140mm). Length: &lt;10.5” (265mm)</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>7.6 lbs (3.5 kg) with alkaline battery</td>
<td></td>
</tr>
<tr>
<td>Warranty</td>
<td>2 year (additional year warranties available)</td>
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</tr>
</tbody>
</table>

## ROTATING LASER (GL3000 ONLY)

<table>
<thead>
<tr>
<th>Feature</th>
<th>GL3000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Range</td>
<td>600’ (190m) with handheld receiver; 500’ (150m) with AutoTarget</td>
</tr>
<tr>
<td>Detection Angle</td>
<td>20° (40° @100°)</td>
</tr>
<tr>
<td>Rotation Speed</td>
<td>1250 rpm</td>
</tr>
<tr>
<td>Beam Type</td>
<td>Visible Laser Diode, 635nm, &lt;5mW, Class 3R</td>
</tr>
<tr>
<td>Scan Length (Azimuth)</td>
<td>Narrow Mode: 5’ @ 100°; Wide Mode 10.5’ @ 100’</td>
</tr>
</tbody>
</table>

## REMOTE CONTROL

<table>
<thead>
<tr>
<th>Feature</th>
<th>GL3000</th>
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</thead>
<tbody>
<tr>
<td>Operating Range</td>
<td>600’ (190m) front (through the pipe); 25’ (7.6m) from rear</td>
</tr>
<tr>
<td>Batteries</td>
<td>3 AA alkaline</td>
</tr>
<tr>
<td>Battery Life</td>
<td>2,000 hrs (1 year)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>4.7” x 2.35” x 1.2” (119 x 60 x 30mm)</td>
</tr>
</tbody>
</table>

Specifications subject to change without notice.