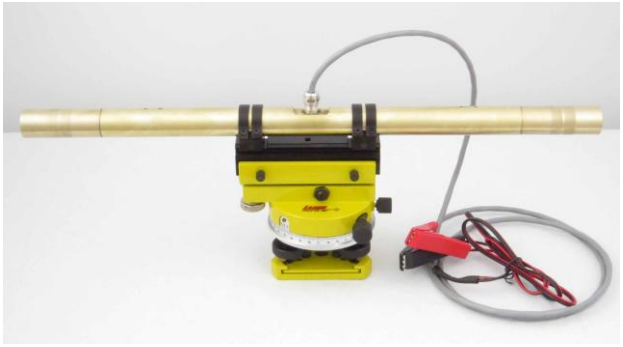


SE-20 Solar Powered, Tracking Alignment Laser System using the GLX70012V-PV Dual Beam Alignment Laser - Specifications and Operating Instructions.

Warning
Do Not Direct the Laser Light into the Eye!

Power: 2 - 520 nm, Class IIIa Laser Diodes
<5 mw Maximum Output
12VDC @ <200mA
Range: >2000 ft
Dimension: 1” Dia. x 20” Long

Constructed from solid brass with an "0" ring seal and strain relief, the SE-20 Solar Powered, Tracking Alignment Laser System includes the dual beam, GLX70012V-PV Alignment Laser which is water resistant to IP65 Standards. The Green Laser Beams are concentric to the outside diameter of the laser case and co-axially aligned.

GLX70012V-PV Laser, Adapter and Battery

SE-20 Solar Panel and Carrying Case

The GLX70012V-PV Dual Green Beam, Alignment Laser System works in conjunction with the BE12VSP Solar Panel that charges the 12V SLA RoHS Compliant Battery. Opening the carrying case and orienting the solar panel towards the sun produces adequate power to operate the dual lasers and maintain the battery’s nominal charge. Fully charge the battery at .5A for 20 hours before extended use.
The 1” Ring Set and AP353A Magnetic Mounting Base plate secures the dual green beam laser assembly to the AP1000 Leveling Adapter Plate. The AP1000 Leveling Adapter Plate provides horizontal azimuth and vertical micrometer adjustments for precise laser beam alignment reference between slew motors and bear bores. See AP1000 Leveling Adapter Plate Instructions attached. Check pile heights and straightness over the job site.

Check torsion bar alignment and straightness by shooting laser beams parallel but offset to the torsion bar. Measure from the center of the laser beam to the center of the Slew motor and bearings for straightness.

Caution - Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

OPERATION

Connect the power cable alligator clips to a 12V – 14VDC power source. The nominal operating voltage is 12VDC @ 200mA.

To turn both lasers on, connect the positive (red) battery clip to the positive post of the 12V battery and the negative (black) battery clip to the negative post of the 12V battery. To turn both lasers off, remove either the positive or negative clip from its respective battery post.

This product is warranted for a period of one year from the date of purchase for manufacturing defects. The manufacturer reserves the right to repair or replace this product if it fails due to manufacturing defects during the warranty period. ***Abuse, neglect or disassembly of the laser voids this warranty***. Like any other tool, the service that this product will provide is dependent on the care it receives. Please return it to Laser Tools Co., Inc. for service and repair.

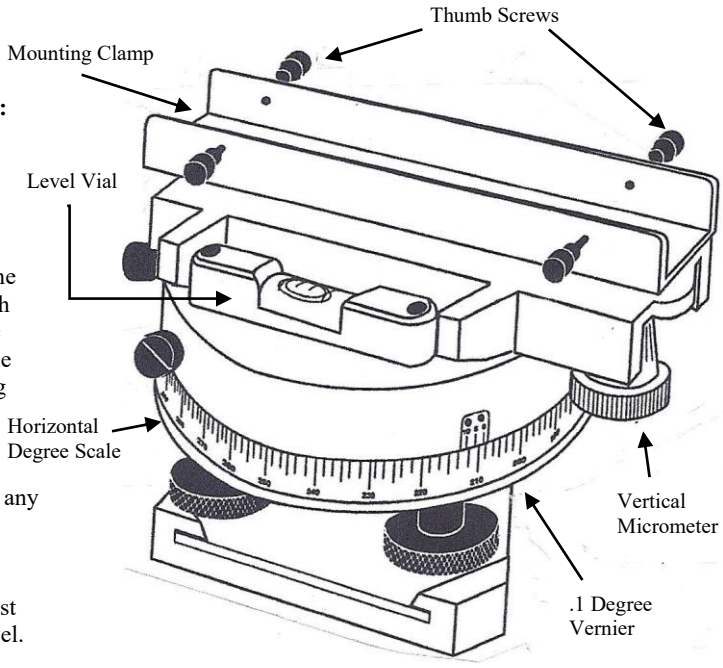
Model SE-10 Solar System Includes:
GLX70012V-PV Dual Beam Alignment Laser complete with 5’ power cord and two battery clips.
Dual Green Laser Beams Class IIIa @ 520nm <5mW
AP351 1” Ring Set
AP353A 5” Magnetic Mounting Base Plate
AP1000 Leveling Adapter Plate
BE12VSP SLA 12VDC 9 AH Battery RoHS Compliant
Solar Cell 10W Max 18V @ .55A

Optional Accessories:

GDT 250	Dual Magnetic Target 4” x 8” with retro-reflective green film and magnetic spot target
SE-4X32	Optical Scope for viewing laser dot on target. Includes windage and elevation finger adjustments. No tools are required.
GL1000	Optional Cylindrical Lens Line Generator. Used with GL700 and GLX70012V-PV Alignment Lasers. Projects a 10-foot line from a distance of 100 feet.
Model AP45	Optional Soft Carrying Case 21” Long. Plush Lined and Padded with Full Length Zipper.
Model AP46	Hard Shell Carrying Case 26” x 8” x 10”

AP 1000 Operating Instructions

The AP1000 Transit Adapter provides a premium leveling support for use during horizontal and vertical layouts. The horizontal layout scale is marked in 360-degree increments and includes a .1-degree vernier scale for fine azimuth adjustments. The vertical adjustment is a precision micrometer that provides 1/16" resolution @ 100 feet for slope and grade positioning. One complete revolution of the vertical micrometer in either direction is equal to 1% of grade change.



How to use the AP 1000 Transit Adapter: Mounting Clamp:

l. Mount the AP1000 to a construction grade tripod with a 5/8"-11tpi mounting thread.

2. Level the bubble on the AP1000 Transit Adapter by positioning the bubble parallel to two of the leveling feet and adjusting either or both of the leveling feet to bring the bubble to center. Rotate the top plate 90 degrees in either direction (the level vial should be in line with the third leveling foot) and center the bubble within the vial by adjusting the third leveling foot.

3. Repeat step 2. until the bubble stays centered in both positions. The bubble should now stay centered when the top plate is turned to any position.

4. Mount a laser level to the API000 Mounting clamp, position the laser level over the third leveling foot used in step 2. above and adjust the vertical micrometer so the bubble within the laser level reads level.

5. Swivel the laser level 180 degrees and check the bubble. If the bubble is slightly *out* of level, adjust the vertical micrometer to bring the bubble half-way to center and then adjust the third leveling foot to bring the bubble completely to center. In other words, adjust for each half of the error with the vertical micrometer and third leveling foot respectively.
Note: The zero mark on the vertical micrometer scale won't necessarily line up with the index mark after the laser is leveled. Just note the number position on the micrometer for a "Home" level reference and work from there.

How to operate:

The horizontal degree scale is read using the .1-degree index mark on the side of the top plate. The. l degree vernier is used by adjusting each progressive .1 (0-10) degree index mark to the next full degree mark on the horizontal azimuth ring. Precise positioning is obtained by locking the top plate to the stationary bottom plate with the locking knob then using the fine horizontal adjustment knob.

The vertical micrometer is designed so that one complete revolution of the micrometer is equal to 1% of grade change. Each increment of the micrometer is equivalent to a ¼" change at 100 feet. The total adjustment range is approximately +/- *5* degrees of angle.

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