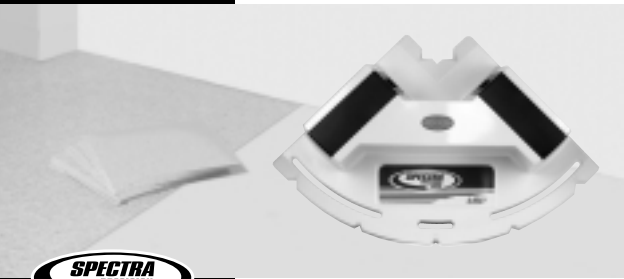


LG2 Line Generator User Guide



www.trimble.com



Introduction

Thank you for choosing the LG2 Spectra Precision® Laser from the Trimble® family of precision hand-held lasers. This simple-to-use tool allows you to generate two lines on the floor at 90° angles for surface layout including tile, stone, brick, carpet, and hardwood flooring. Unlike lines drawn from chalk, the LG2 projects two laser beams over wet mastic or concrete. Precise angles of 90°, 67.5°, 45°, and 22.5° are easily established with the LG2's built-in protractor.

Before using the laser, be sure to read this operator's manual carefully. Included in it is information about setting up, using, and maintaining the laser. Also included in this manual are **CAUTIONS** and **Notes**. Each of these words represents a level or danger or concern. A **CAUTION** indicates a hazard or unsafe practice that could result in *minor* injury or property damage. A **Note** indicates important information unrelated to safety.

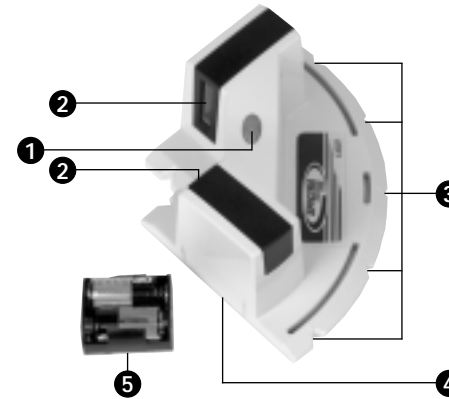
Your comments and suggestions are welcome; please contact us at:

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Features

Laser

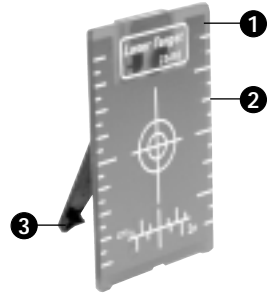


- ① Power Button
- ② Lens
- ③ Angle References (90°, 67.5°, 45°, and 22.5°)
- ④ Battery Housing
- ⑤ Battery Pack

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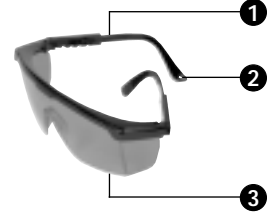
Target

- ① Reflective Surface
- ② Reference Marks
- ③ Target Stand



Laser Glasses

- ① Adjustable Temples
- ② Neck Cord Holes
- ③ Lens



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Installing/Removing the Batteries



CAUTION: The batteries should be removed when storing the laser more than 30 days.

1. Turn the screws counterclockwise and remove the battery-housing door.
2. Remove the battery pack from the battery housing.
3. Install/remove the 2 C-cell batteries.

Note: When installing the batteries, be sure to note the positive (+) and negative (-) diagrams molded on the battery pack. The laser has reverse-polarity protection so that if the batteries are installed incorrectly, no damage occurs to the laser.

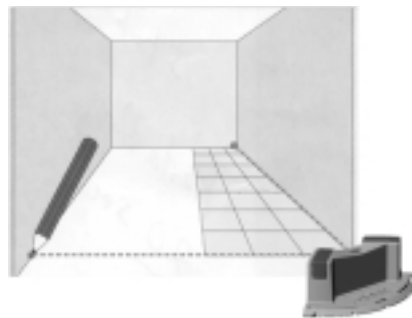
4. Insert the battery pack into the battery housing.
5. Put the battery-housing door in place. Insert the screws and turn them clockwise.

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Setting Up and Using the Laser

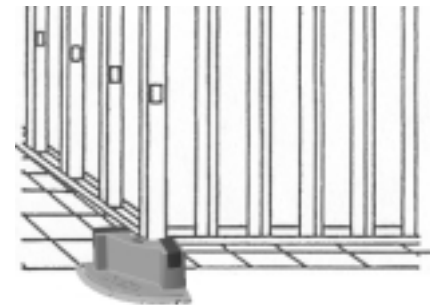
1. Press the power button.
2. Position the laser so that it's appropriate for your application needs.
3. If necessary, align the laser beam(s) with a reference point(s). The freestanding target increases the beams' visibility.
4. Use the laser beams as line references.

Note: When checking precision angles (90°, 67.5°, 45°, and 22.5°) or squaring walls, the laser beams can be aligned with the walls or at an offset from them.



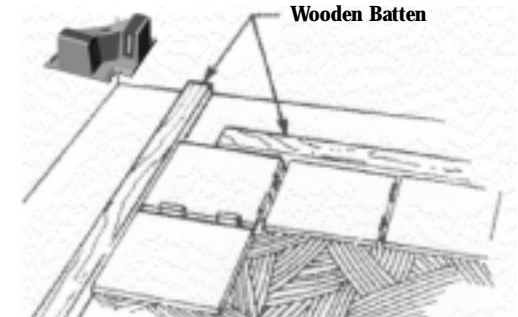
Checking Precision Angles

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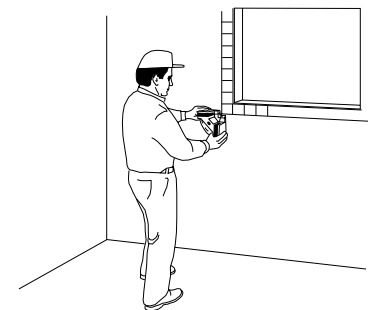


Squaring Walls

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Installing Tile

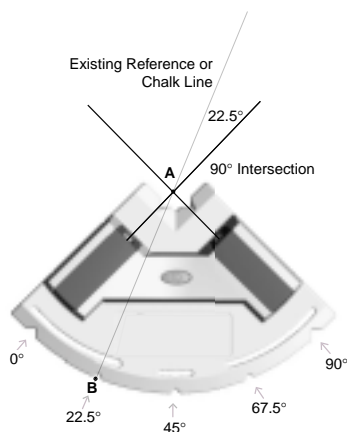


Squaring Wall Cutouts & Fixtures

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Establishing Common Angles (90°, 67.5°, 45°, and 22.5°)

1. Mark the point on the floor where the laser beams intersect (point A).
2. Using the angle references as a guide, mark the point on the floor that corresponds to the angle you want to establish (point B).
3. Rotate the laser so that the 0°-angle reference is on point B. Make sure that the laser beams still intersect at point A.



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Increasing the Beams' Visibility

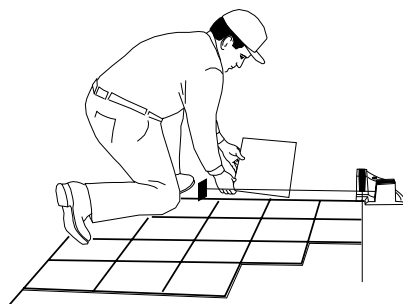
The laser beams' visibility can be increased when working in really bright conditions, such as working near window openings or outside walls.

1. Work toward the laser.
2. Use the target.
3. Use the laser glasses.

CAUTION: Do not use these glasses as safety glasses.

Note: The neck cord holes can be used to tie a string through so that you can hang the glasses around your neck and have them available when needed.

Note: The glasses should only be worn long enough to establish the reference point. Wearing them longer than necessary can affect your eyes' sensitivity to seeing color.



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Checking Calibration

Before each use, be sure to check the laser for signs of damage. If the laser has been dropped or subjected to other rough treatment, it should be checked for accuracy.

Refer to the sketch for the location of the laser at each step and for the location of the marks made at each step. All marks can be made on the floor by following the beam to the floor. All marks are to the beam center.

Locate an area at least 10 m x 5 m (30 ft x 15 ft)

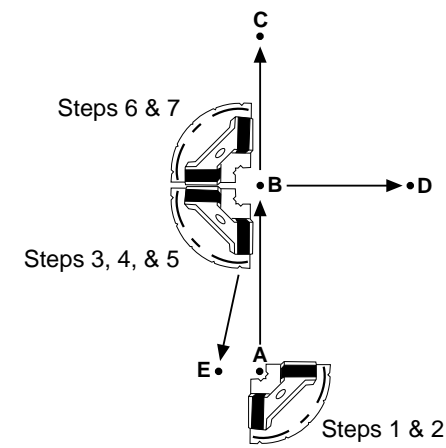
1. Mark a point (A) on the floor at one end of the room.
2. Place the laser so that the laser beams intersect over point A with one of the beams pointing toward the far end of the room.
3. Mark a point (B) on the floor at about the center of the room, on the laser line.
Note: To ensure accuracy, the distances from B to A, to C, and to D should be equal.
4. Mark a point (C) on the far wall close to or on the floor.
5. Place the laser so that the laser beams intersect over point B, making sure that one of the beams is on point C. Mark point D.
6. Turn the laser 90° so that the intersecting laser beams are over point B, making sure that one beam is over point D and the other is pointing in the direction of point A. Mark point E as close as possible to point A.

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7. Measure the difference between points A and E and compare with the following:

Room length or distance between A and C	90° angle is in calibration if the distance between A and E is:
10 m (30 ft)	<3 mm (<1/8 inch)

If the difference is more than shown in the chart, contact your local authorized service center for exchange or replacement.



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Specifications

Accuracy	6 mm @ 15 m (1/4 in. @ 50 ft)
Working Range*	15 m nominal, up to 30 m (50 ft nominal, up to 100 ft)
Laser Class	2
Laser Type	635 nm
Battery Type	2 C-cell alkaline
Battery Life	30 hours (alkaline)
Operating Temperature Range	0° to 45° C (32° to 113° F)
Size (L x W x H)	36 x 30.5 x 20 cm (14 x 12 x 8 in.)
Weight	1.3 kg (2.87 lb)
Protective Case Contains	Laser, users guide, batteries, target, and laser glasses
Warranty	One year limited

*Depending on ambient condition

Notice to Our European Union Customers
For product recycling instructions and more information, please go to: www.trimble.com/environment/summary.html

Recycling in Europe
To recycle Trimble WEEE, call: +31 497 53 2430, and ask for the "WEEE associate," or mail a request for recycling instructions to:
Trimble Europe BV
c/o Menlo Worldwide Logistics
Mierheide 45
5521 DZ Eersel, NL

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Maintenance and Care

You will get years of service from your laser by following the maintenance and care recommendations in this manual. However well the product is designed, mishaps do occur and the most common problems associated with these are covered in the following areas. Any damage to the laser caused by improper maintenance and care voids the warranty.

Handling Precautions

When transferring the laser from one location or job site to another, be sure to carry it in its protective carrying case.

System Cleaning

For maximum performance and accuracy always keep the lenses clean. Use only a good quality glass cleaner on a soft cloth to clean the exterior of the laser, its lenses, and the laser glasses.

CAUTION: A dry cloth or abrasive organic cleaner could scratch or damage these surfaces.

CAUTION: Do not submerge the laser.

Storage

When you're not using the laser, store it in its protective case.

CAUTION: Do not store the laser in a wet case. If the case gets wet, let it dry before storing the laser in it.

CAUTION: The batteries should be removed when storing the laser more than 30 days.

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Battery Disposal

Some states and local areas have regulations regarding the disposal of batteries. Be sure to dispose of discharged batteries properly.

Laser Safety

This laser uses a Class 2 laser, which complies with the requirements based on the IEC825-1/EN60825 standards (Class 2 based on 21CFR 1041). This laser may be operated without the need for any additional protective measures. Nevertheless, as with the sun, care should be taken to avoid looking directly into the light source.

CAUTION: Never look directly into the laser beam.

Please keep the laser out of the reach of children.



Warranty

Trimble warrants the Spectra Precision Laser LG2 to be free of defects in material and workmanship for one year. This warranty period is in effect from the date the system is delivered by Trimble or its authorized Dealer to the purchaser, or is put into service by a Dealer as a demonstrator or rental component.

Additionally, items covered by the standard Trimble one-year warranty are the accessories. All other components not manufactured Trimble but sold as a part of the system, such as tripods and grade rods, will carry a 90 days warranty or the manufacturer's warranty, whichever is greater.

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Trimble or its Authorized Service Center will repair or replace, at its option, any defective part of components of which notice has been given during the warranty period. A Warranty Registration Card must be filled out properly and on file with Trimble Service Department before warranty repair or replacement can be approved. Travel and per diem expenses, if required, to and from the place where repairs are made will be charged to the purchaser at the prevailing rates.

Customers should send products to the nearest Authorized Factory Service Center for warranty repairs, freight prepaid. In countries with Trimble Service Subsidiary Centers, the repaired products will be returned to the customer, freight prepaid.

Any evidence of negligent, abnormal use, accident, or any attempt to repair equipment by other than factory-authorized personnel Trimble certified or recommended parts, automatically voids the warranty.

Special precautions have been taken to ensure the calibration of the laser; however, calibration is not covered by this warranty. Maintenance of the calibration is the responsibility of the user.

The foregoing states the entire liability of Trimble regarding the purchase and use of its equipment. Trimble will not be held responsible for any consequential loss or damage of any kind.

This warranty is in lieu of all other warranties, except as set forth above, including an implied warranty merchantability of fitness for a particular purpose, is hereby disclaimed. This warranty is in lieu of all other warranties, expressed or implied.

