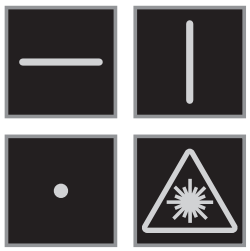
ENGLISH

93MCLPG

INSTRUCTION MANUAL

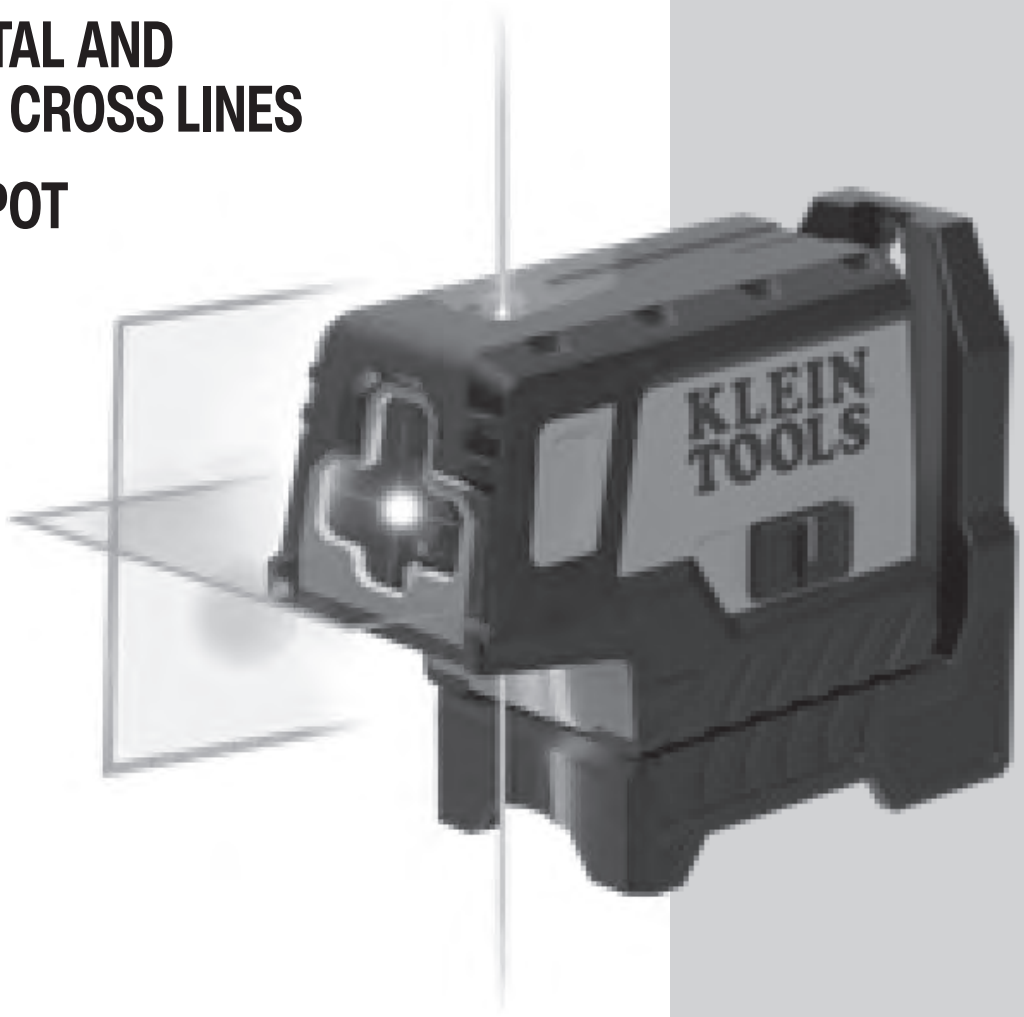
Green Compact Cross Line Laser Level with Plumb

- HORIZONTAL AND VERTICAL CROSS LINES
- PLUMB SPOT





IP54



CE

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GENERAL SPECIFICATIONS

Klein Tools 93MCLPG is a self-leveling laser alignment instrument that can be used to deliver horizontal and/or vertical cross lines for alignment and layout applications. Furthermore, 93MCLPG can also deliver a plumb spot directly above the instrument.

- **Operating Altitude:** 6562 ft. (2000 m)
- **Relative Humidity:** <80% non-condensing
- **Operating Temperature:** 14°F to 122°F (-10°C to 50°C)
- **Storage Temperature:** -4°F to 140°F (-20°C to 60°C)
- **Laser:** 508-530 nm, ≤ 1mW each beam. Class 2 Laser Product
- **Accuracy:** ±3/16" per 33' (±5 mm per 10 m)
- **Battery Type:** 3× 1.5V AA Alkaline
- **Dimensions:** 4.45" × 2.98" × 2.2" (113 × 76 × 56 mm)
- **Weight:** 16.3 oz (463 g) including batteries and bracket
- **Calibration:** Accurate for one year
- **Standards:** Conforms to: EN61326-1:2013, EN60825-1:2014.
  Complies with 21 CFR 1040.10 and 1040.11 except for conformance with IEC 60825-1 Ed. 3., as described in Laser Notice No. 56, dated May 8, 2019.
- **Ingress Protection:** IP54 Dust & Water Resistant

Specifications subject to change.

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⚠ WARNINGS

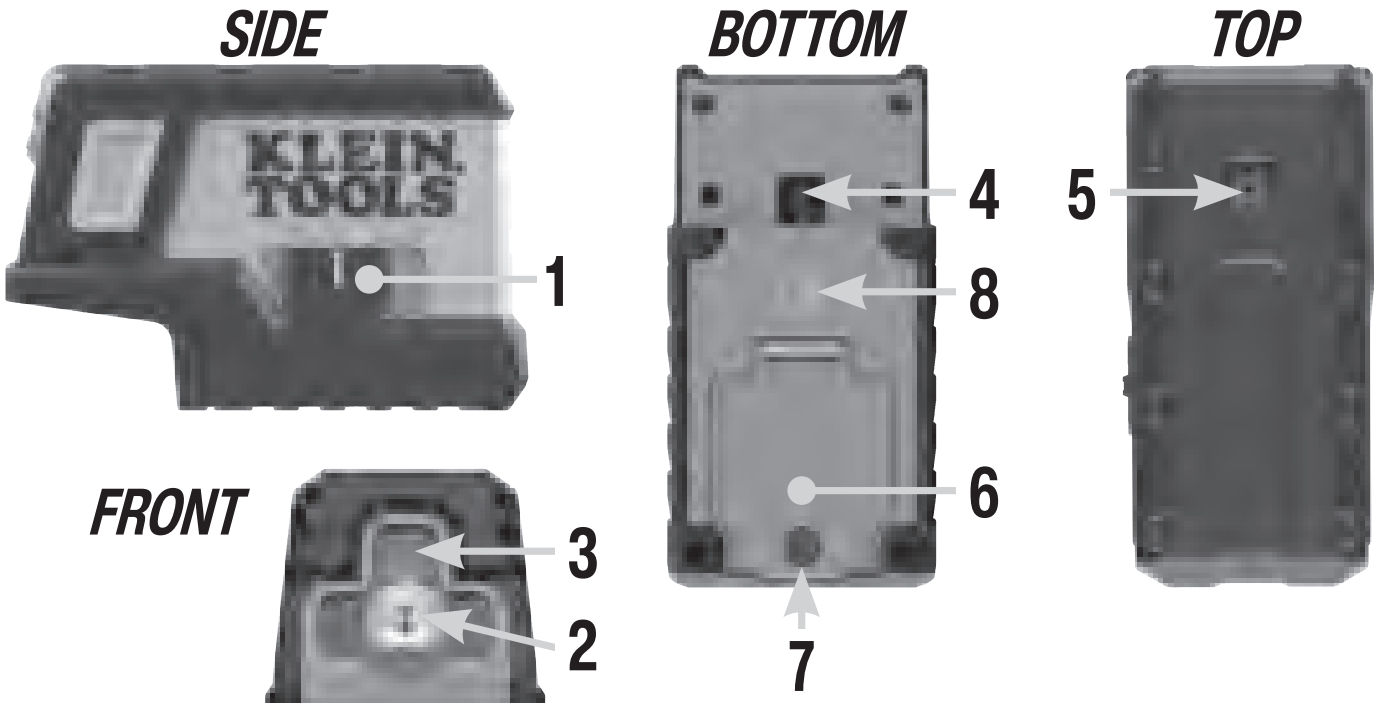
To ensure safe operation and service of the instrument, follow these instructions. Failure to observe these warnings can result in serious personal injury, fire, or electrical shock. Retain these instructions for future reference.

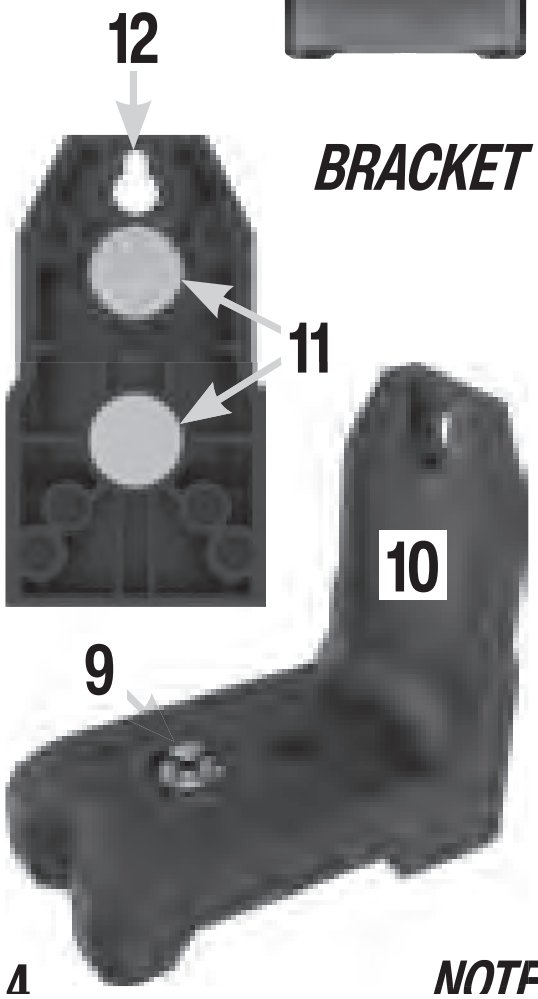
⚠ ***WARNING: LASER RADIATION. DO NOT STARE INTO BEAM. Class 2 Laser.***

- Exposing eyes to laser radiation can result in severe and permanent eye injuries.
- **NEVER** look directly into the laser beam emitted by this instrument.
- **DO NOT** use the instrument if it appears to be damaged.
- **DO NOT** modify the instrument in any way, as to do so could result in emission of hazardous laser radiation than could result in severe eye injuries.
- **DO NOT** use optical equipment such as lenses, prisms, optical scopes, etc. to transmit, retransmit, or view the laser beam as this could result in severe eye injuries.
- This product should not be used by untrained operators or operators who have not read and fully understood the instructions.
- **DO NOT** remove warning labels from this instrument as this could result in serious personal injury and increases the risk of exposure to hazardous laser irradiation.
- This instrument is IP54 dust & water resistant. Following any contact with water, thoroughly dry the instrument with a dry, lint-free cloth.
- There are no user serviceable parts in this instrument.

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FEATURE DETAILS





1 Power/Pendulum Lock/Unlock Switch
2 Horizontal Line Aperture
3 Vertical Line Aperture
4 Lower Plumb Spot Aperture
5 Upper Plumb Spot Aperture
6 Battery Compartment Door
7 Battery Door Screw
8 1/4-20 Tripod Mount
9 1/4-20 Mounting Screw
10 Magnetic Mount Bracket
11 Magnets
12 Nail Mounting Keyhole

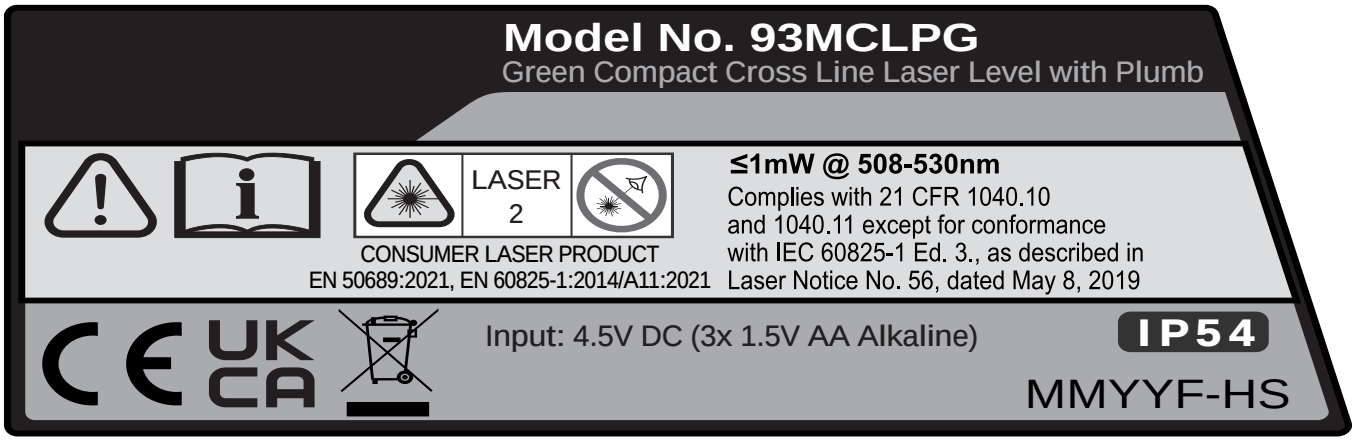
NOTE: There are no user-serviceable parts inside.

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SYMBOLS ON INSTRUMENT

	WEEE: Electronics disposal		Hazardous laser radiation
LASER 2	Laser Class 2		Warning or Caution
	Battery Polarity		DO NOT stare into beam or view directly with optical instruments
	Read instructions		
CE	**Conformité Européenne:** Conforms with European Economic Area directives		
IP54	Ingress Protection IP54 Rating – Dust & Water Resistant		

Side warning label



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OPERATING INSTRUCTIONS

TURNING LASER BEAMS ON/OFF

Set the Power/Pendulum Lock/ Unlock Switch (1) to the unlock position to turn on the laser lines. Move the Power/Pendulum Lock/ Unlock Switch (1) to the locked position to turn off the laser lines.



PENDULUM SLIDER SWITCH & SELF-LEVELING

The laser assemblies are mounted on a pendulum so that the instrument can self-level. Set the Power/Pendulum Lock/Unlock Switch (1) must be in the unlocked position for the instrument to self-level. If the instrument is tilted by >4° from the horizontal plane, the pendulum will not be capable of self-leveling; the active laser beams will flash to indicate that the instrument is not level and cannot self-level. The instrument must be repositioned on a more level surface for the self-leveling pendulum to function appropriately.

NOTE: *Following use, the Power/Pendulum Lock/Unlock Switch (1) must be placed in the Locked position prior to storage.*

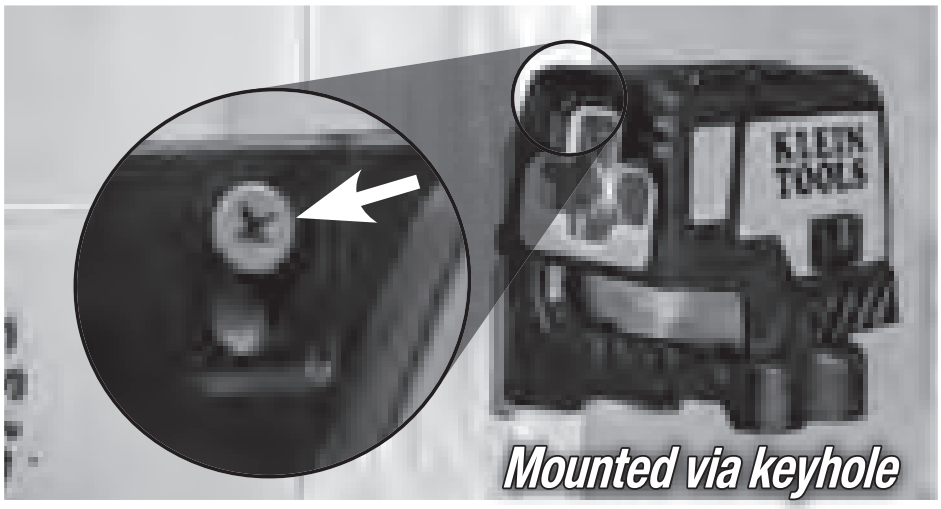
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OPERATING INSTRUCTIONS

MAGNETIC MOUNTING BRACKET (10)

The instrument can be attached to a magnetic mounting bracket via the 1/4-20 Tripod Mount (9). The bracket may be magnetically attached to any ferromagnetic structure such as steel studs, ducts, structural beams, and steel doors. The bracket also features a keyhole (12) for mounting the instrument using a screw or nail to non-magnetic structures. Once mounted to a structure via the mounting bracket the instrument can be rotated on the bracket through 360° to direct the laser beams.

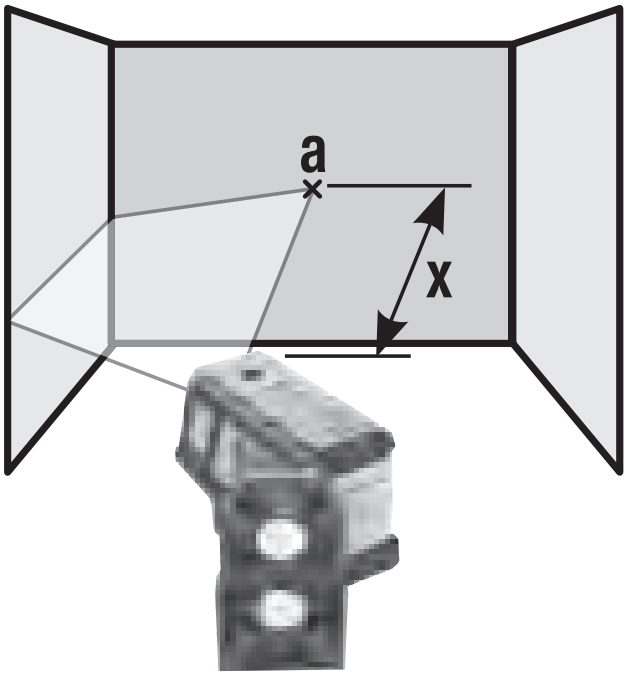


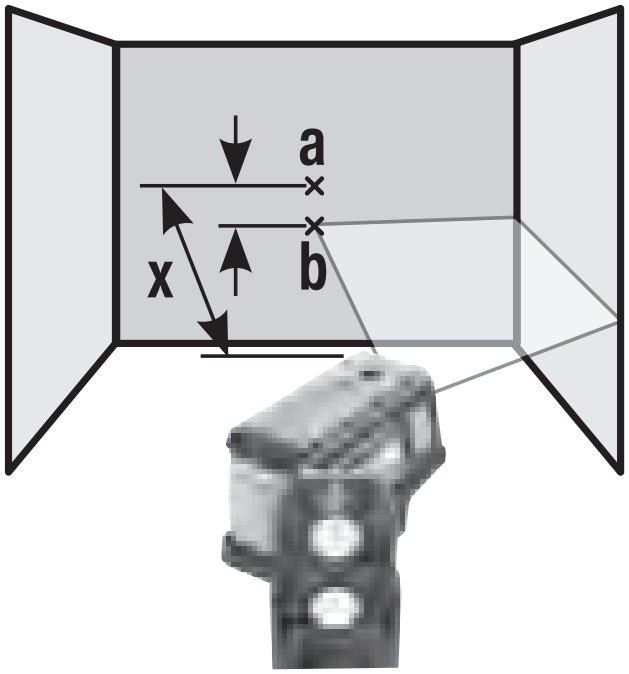


VERIFYING ACCURACY OF LASER LINES

HORIZONTAL BEAM LEFT/RIGHT TILT

Position the instrument on the floor **x** distance from front of the device to the vertical wall as shown. Rotate the instrument on the bracket to the left so that the right side of the beam is projected on the wall directly across from the instrument, mark the vertical location on the wall (**a**). Rotate the instrument to the right and repeat marking the vertical location of the left side of the beam (**b**). The maximum distance (delta) between **a** and **b** is shown in the table below.





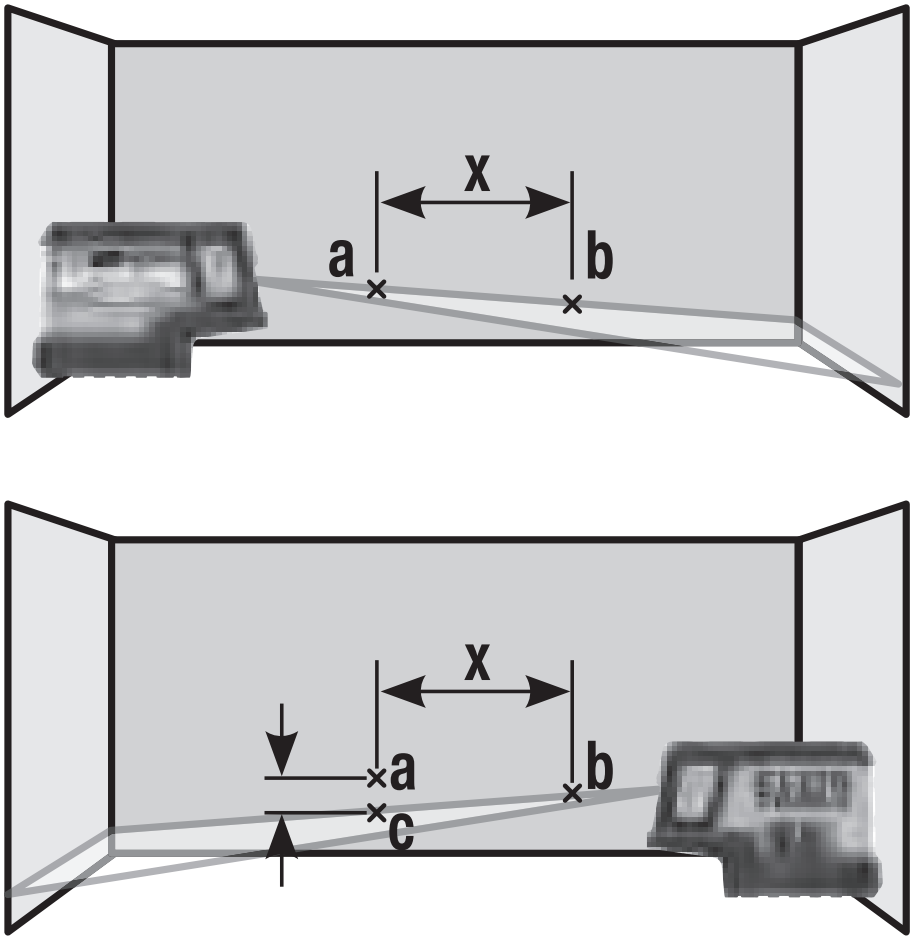
HORIZONTAL BEAM LEFT/RIGHT TILT	
Distance From Wall (x)	**Delta**
15' (4.6 m)	~3/32" (2.7mm)
30' (9.1 m)	~7/32" (5.5mm)

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VERIFYING ACCURACY OF LASER LINES

HORIZONTAL BEAM OUT-OF-PLANE TILT

Position the instrument parallel to a wall and project a beam along the wall, from left to right as shown. Mark two locations (**a**, **b**) along the beam separated by distance **x**. Position the laser at the other side of the wall and project the beam back through mark **b**, from right to left as shown, and mark position **c**. The maximum distance (delta) between **a** and **c** is shown in the table below.



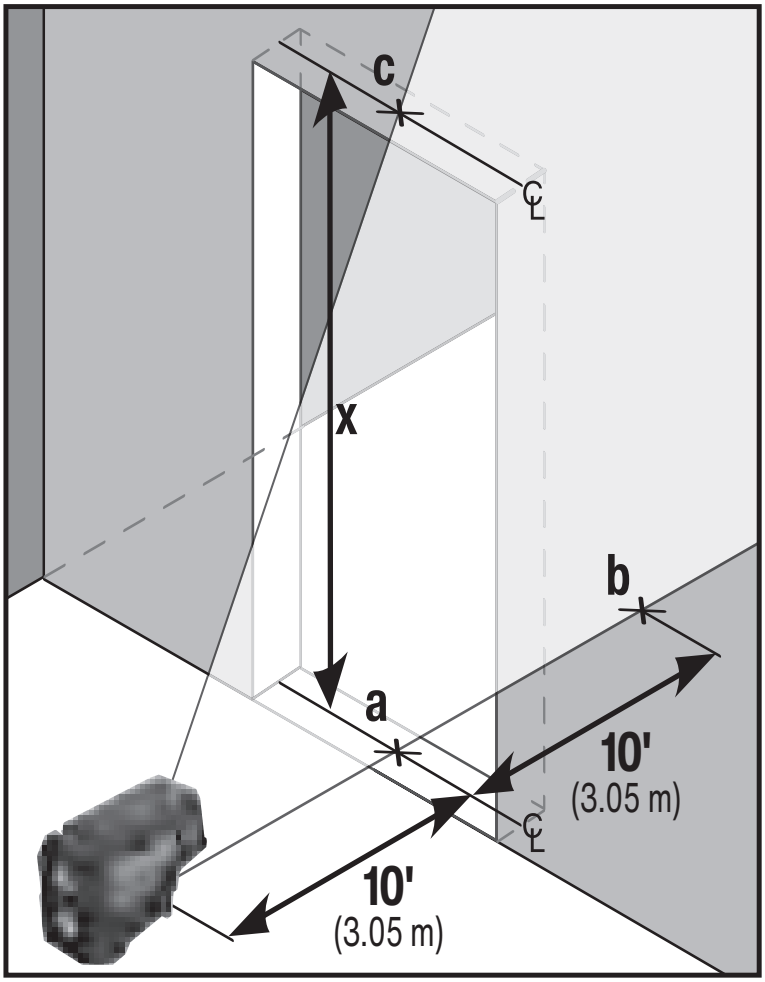
HORIZONTAL BEAM OUT OF PLANE TILT	
Distance From Wall (x)	**Delta**
10' (3.1 m)	~1/8" (3.1 mm)
25' (7.6 m)	~5/16" (7.6 mm)

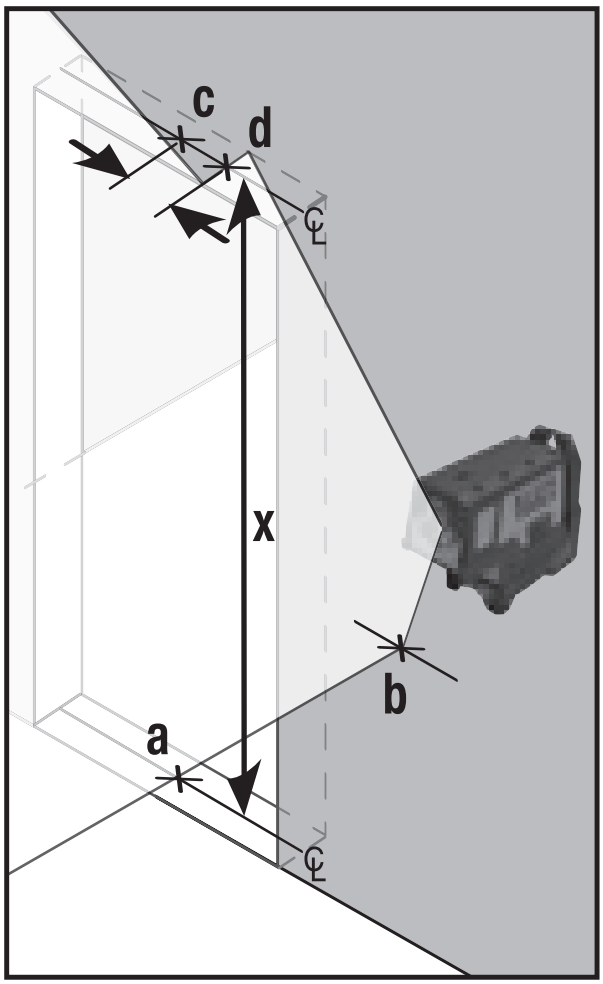
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VERIFYING ACCURACY OF LASER LINES

VERTICAL BEAM TILT

Position the instrument on the floor 10' (3.05 m) away from the center of a door opening. Project the vertical beam through the doorway, marking points **a** and **c** in the center of the door opening. Mark point **b** on the floor 10' (3.05 m) past the doorway. Move the device behind point **b** and project the vertical laser line through points **b** and **a**. Measure the distance between point **c** and the laser line (point **d**). For the vertical height of the doorway, distance **x,** the maximum distance (delta) between **c** and **d** is shown in the table below.





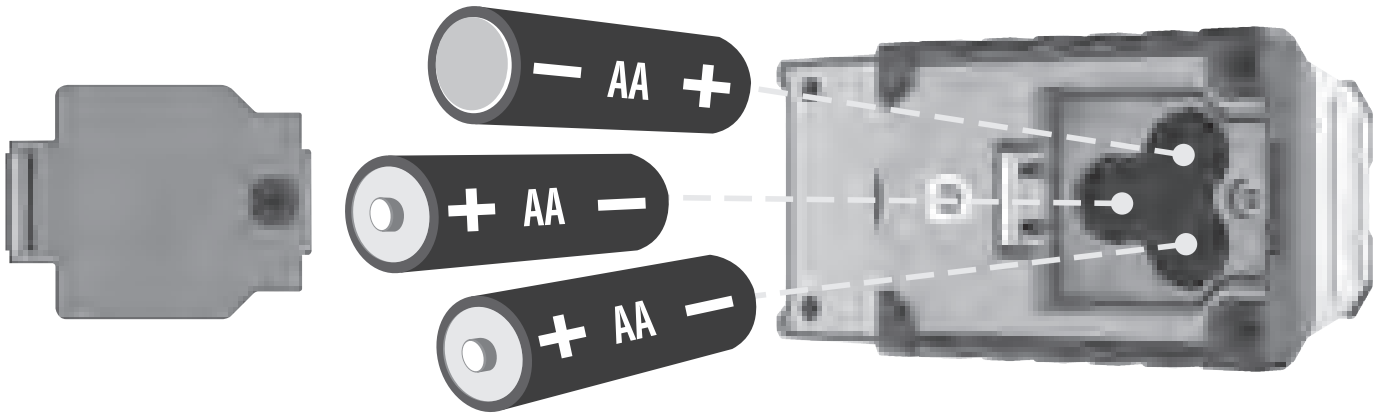
VERTICAL BEAM TILT	
Door Height (x)	Delta
8' (2.5 m)	~3/32" (2.5 mm)
14' (4 m)	~5/32" (4 mm)

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BATTERY REPLACEMENT

When the laser lines flash 3 times within 1.5 seconds followed by 30 seconds of solid laser lines, the batteries must be replaced.

1. Loosen the Battery Door Screw (7) and Battery Compartment Door (6).
2. Remove and recycle two spent AA batteries.
3. Install new batteries (note proper polarity).
4. Close Battery Compartment Door and secure with Battery Door Screw. Do not over-tighten.



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CLEANING

Be sure laser level is turned off and wipe with a clean, dry lint-free cloth.
Do not use abrasive cleaners or solvents.

STORAGE

Remove the batteries when the instrument is not in use for a prolonged period of time. Do not expose to high temperatures or humidity. After a period of storage in extreme conditions exceeding the limits mentioned in the General Specifications section, allow the laser level to return to normal operating conditions before using.

FCC AND IC COMPLIANCE

Canada ICES-003 (B) / NMB-003 (B)

DISPOSAL / RECYCLE



Do not place equipment and its accessories in the trash. Items must be properly disposed of in accordance with local regulations. Please see **www.epa.gov/recycle** for additional information.

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