

LT20 Crossline Laser User Guide



www.trimble.com/spectra



Introduction

Thank you for choosing the Spectra Precision LT20 from the Trimble family of Laser Tools. This easy-to-use cross line laser tool will allow you to accurately align horizontal and vertical projects. Before using the LT20, read this operator's manual carefully. Included is information about operation, safety and maintenance. Ensure that the operating instructions are with the laser distance meter when it is given to other persons.

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

Trimble / Spectra Precision Division
8261 State Route 235
Dayton, Ohio 45424 USA
Phone: +1 (937) 203-4419
+1 (800) 527-3771
Fax: +1 (937) 482-0030
Internet: www.spectra-productivity.com

Features

Included with the LT20: Laser Tool, bracket, strap for bracket, operator manual, pouch, target, batteries.



Batteries - Installation

1. Open the battery compartment at the bottom of the unit.
2. Remove the batteries from the packaging and insert them according to the image.

NOTE When installing batteries note the positive (+) and negative (-) markings on the housings

3. Close the battery compartment cover.

Battery disposal - Some areas have regulations regarding the disposal of batteries. Be sure to dispose of discharged batteries properly.

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



General Operation

Power ON/OFF



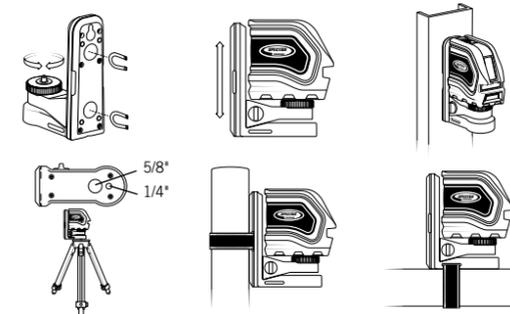
Cycle through Power button:

- 1st Horizontal On
- 2nd Vertical On
- 3rd Horizontal and Vertical On
- 4th Off

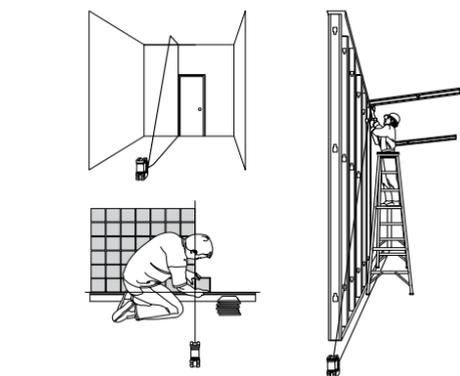
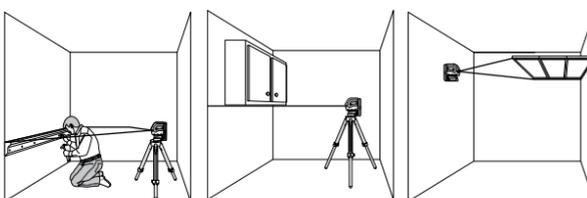
Green LED indicates significant batter life remaining

Red LED indicates the battery is low

Mounting bracket includes these functions.



Applications



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Specifications

| | |
|-------------------------|----------------------------------------------|
| Accuracy | ±3mm @ 10m (1/8" @ 30 ft) |
| Visual distance | 30m (100 ft) |
| Laser | |
| - power | 2 x 15mw |
| - class | class 2 |
| - wavelength | 635nm |
| - fan angle | Horizontal 130° / Vertical 150° |
| - line thickness | 2.5 ± 0.5 mm @ 5 m (0.1 in ±0.02 in @ 15 ft) |
| Power Supply | |
| - batteries | 3 x AA |
| - battery life | 15h-20h |
| - battery indicator | Green LED OK, Red LED low power |
| Out of Level Indication | Laser beam flashes 3 times every 5 seconds |
| Self Leveling range | ± 4° all direction |
| Environmental | |
| - IP | IP54 |
| - Operating Temperature | -10° to 45° (14 °F to 113 °F) |
| - Storage temp | -20° to 70° (-4 °F to 158 °F) |
| Drop Specification | 1m (3 ft) |
| Size (l x w x h) | 110 x 58 x 104 (4.3 x 2.3 x 4.1") |
| Weight | 0.35 kg (0.8 lb) |

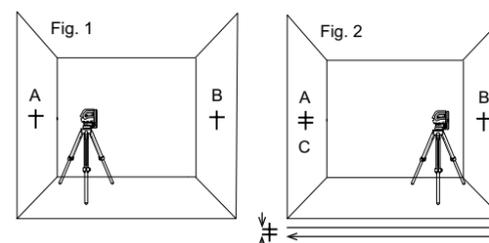
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Calibration Check

It is recommended to occasionally check the calibration of the LT20.

Horizontal calibration check

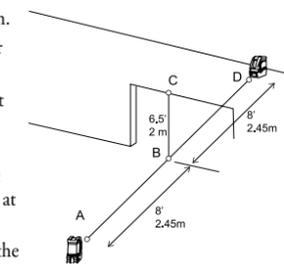
- Find a room with a minimum 5m (16') width
- Turn on both horizontal and vertical lines
- Place LT20 near one of the walls (Fig.1)
- Mark horizontal line on near wall A
- Rotate the LT20 and mark horizontal wall B.
- Move tripod to location near the other wall (Fig 2)
- Align LT20 so that horizontal line is aligned directly on point B
- Rotate the LT20 and mark the horizontal line above/below on on Point A. Call this C.
- The difference between A and C is the accuracy of 2x the distance between the walls
- Example. Distance between the walls is 5m (16') and distance between A and C is 3mm (1/8"), then accuracy is 3mm at 10m (1.8" at 32 ft).



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Vertical Calibration check

- Find a door jamb about 2m / 6.5' high.
- Mark point A at 2.45m / 8' from door jamb
- Turn on LT20 vertical line and place it at point A toward the door jamb.
- Use the vertical line to mark point B under the door jamb, mark point C at the top of the door jamb and point D at 2.45m / 8' beyond the door jamb.
- Move the LT20 to point D and align the vertical line with points A, B and D.
- Mark the point where the vertical line is on top of the door jamb near point C.
- If the line is within 1mm / 1/32", the vertical line is in tolerance.



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General Care, Storage and Safety

General safety rules

- Check the condition of the tool before use.
- The user must check the accuracy of the tool after it has been dropped or subjected to other mechanical stresses.
- Although the tool is designed for the tough conditions of jobsite use, as with other measuring instruments it should be treated with care.

Cleaning and drying

1. Blow dust off the windows.
2. Use only a clean, soft cloth for cleaning. If necessary, moisten the cloth slightly with pure alcohol or a little water.

NOTE Do not use any other liquids as these may damage the plastic components.

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Storage

The temperature limits for storage of your equipment must be observed, especially in winter / summer.

Remove the tool from its pouch if it has become wet. The tool, its carrying case and accessories should be cleaned and dried (at maximum 40°C). Repack the equipment only once it is completely dry. Check the accuracy of the equipment before it is used after a long period of storage or transportation.

Transport

Use the original packaging or packaging of equivalent quality for transporting or shipping your equipment.

CAUTION

Always remove the batteries before shipping the tool.

Laser Safety

Use of this product by people other than those trained on this product may result in exposure to hazardous laser light.

- Do not remove warning labels from the unit.
- The LT20 is a Class 2M (635 nm) laser product .
- Never look into the laser beam or direct it to the eyes of other people.
- Always operate the unit in a way that prevents the beam from getting into people's eyes.



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Warranty

Trimble warrants the LT20 to be free of defects in material and workmanship for a period of 3 years. For the first 2 years, Trimble or its authorized Dealer or Service Center will repair or replace, at its option, any defective part, or the entire product, for which notice has been given during the warranty period. For the 3rd year, an exchange fee may apply. 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. Any evidence of negligent or abnormal use, or any attempt to repair equipment by other than factory-authorized personnel or Trimble certified or recommended parts, automatically voids the warranty. 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. Customers should send products to the nearest authorized Factory, Dealer or 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.

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Service Request

To locate your local dealer or authorized Trimble Service Center outside the U.S.A. for service, accessories, or spare parts, please visit our websites: www.trimble.co/spectra and www.spectra-productivity.com.

Declarations

We declare, on our sole responsibility, that this product complies with the following directives and standards:

EN 50081-1, EN 61000-6-2, 2004/108/EC.

Type: LT20

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 Mento Worldwide Logistics
Meerheide 45
5521 DZ Eersel, NL