

M503

Rotating Laser Level



Level 1TM
Lasers

Model: M503

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For Guides on how to use on site visit.
www.level1lasers.com.au/m503.html

User Safety

- Laser output sign lies near the output aperture.
- Do not stare directly into laser beam.
- Do not disassemble the instrument or attempt to perform any internal servicing. Repairs and service should be performed only authorised service centres of Redback Lasers.
- This instrument complies with the safety Classification standards of laser radiation.



CAUTION: Class II laser <1mW at 635nm.
Do NOT stare into laser beam or aim at another person.

Follow relevant Australian Standards

M503 Basic

- M503 Laser Unit
- Standard "AA" Batteries
- Instruction Manual



M50322 Included Accessories

- M503 Laser Unit
- Protective Carry Case
- Standard "AA" Batteries
- LR700 Electronic Receiver & Clamp
- Elevating Tripod
- Instruction Manual



M503 Laser Unit



- 1. Wall/ Tripod Bracket
- 2. Dot Laser Output
- 3. Rotating Laser Output
- 4. Levelling Vials (see page 4)
- 5. Power & Rotation Speeds
- 6. Adjustment Wheels
- 7. Battery Cover
- 8. Tripod 5/8"-11tpi Mount (side)
- 9. Tripod 5/8"-11tpi Mount (bottom)



M503 OPERATING INSTRUCTIONS

Battery Instructions

The M503 operates on 4 x standard Alkaline "AA" batteries, first remove the battery compartment cover by undoing the black locking knob. Insert batteries into the battery compartment as indicated, make sure the polarities are correct before replacing the cover.



Levelling and Turning on Laser (Horizontal Operation)

Screw the bottom base of the M503 laser onto the ground, a tripod (included in M50322 kit) or wall mounted then level the laser by first turning the levelling wheel for the "X" while looking at the "X" vial above it, once the bubble is central in the vial adjust the "Y" axis in the same manner using the "Y" vial levelling wheel, continue adjusting both axis until both top vials show the bubble exactly central (NOTE: the more accurate you are at setting the vials the more accurate the level will be). Once level, power up by rotating the black power button knob, the head will rotate and laser emit.



M503 OPERATING INSTRUCTIONS

Setting Rotation Speed

The M503 has variable rotation speeds, the speed is adjusted by the power knob. The more the knob is rotated anti clock wise the faster the laser head will rotate. A faster rotation is generally more suitable when using the LR700 receiver (included in the M50322 kit) and often a slow speed is good when wanting to see the laser visibly indoors. Note as battery power reduces rotation speed may slow down and the rotating head may require to be manually rotated to start powered rotation. It is also good practice to turn the M503 on and rotate to full speed then reduce down to the speed you desire.

Power and
Rotation Speed



Power Light

Vertical operation

The M503 can be operated on its side to produce a vertical rotating beam. To use the M503 in vertical mode place laser on its wall/tripod bracket with battery compartment facing down either on the ground or attached to a tripod. The bubble vial facing up is the "Z" axis vial and the levelling wheel next to it levels this vial, when the bubble is exactly central in this vial then the M503 is level. The rotating beam is drawing a vertical line and the plumb dot beam is now a level beam.

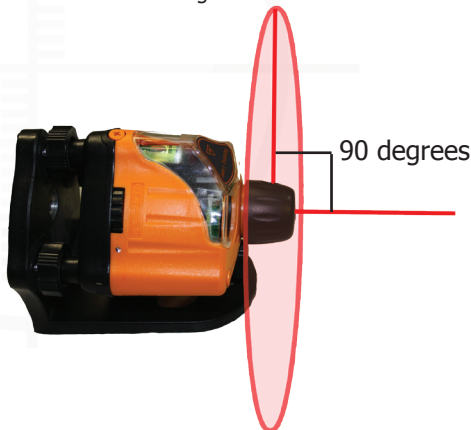
Vial and Levelling
Wheel "Z" Axis



M503 OPERATING INSTRUCTIONS

Vertical Operation Site Layout

The M530 can be used for site squaring by aligning the dot laser beam along one axis of the 90 degree square and then using the receiver to pick up the rotating beam which is at 90 degrees to the dot laser beam.



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www.level1lasers.com.au/m503.html

Laser Wavelength	635nm <1mW
Laser Class	II
Range with LR700 Receiver	240m diameter
Accuracy	±3mm/10m
Rotation Speed	Variable
Tripod Threads	5/8" 11tpi
IP Dust Water Resistance	IP32
Workin Temperature	-10°C to +35°C (in shade)
Power	4 x "AA" Alkaline
Low Power	Power LED Flash
Weight	0.65Kg

M503 OPERATING INSTRUCTIONS

LR700 Receiver operation (included in the M50322 kit)

The LR700 is an electronic laser receiver/detector and comes with a staff clamp bracket which allows you to attach the receiver to a stake or staff.



Power up by pressing the power button, hold the receiver so the reception window is facing the rotating laser (upright for horizontal and on its side for vertical rotation). When the reception window is level with the rotating beam the LED indication lights and Sound will alert you, When the laser beam is absolutely level with the receiver the central green LED is illuminated the red LED's above and below indicate when the laser beam is just above or below the central line on the receiver.

The Bubble vial will help you hold the receiver and staff vertical when taking readings. The line on the staff clamp lines up with the level mark on the receiver. Note that the receiver only works on the rotating beam and not the dot, and that high speed rotation tends to work better than medium or slow.

12 Month WARRANTY - LEVEL 1 LASERS

CMI Industries Pty Ltd provides consumers with a warranty to our products, this is in addition to requirements of any relevant legislation such as the Competition and Consumer Act 2010. Definitions: "CMI", "We" or "Our" "Level1Lasers" refers to CMI Industries Pty Ltd (ABN 29 102 713 922) of 18b Tarkin Court, Bell Park, Victoria 3215 ph (03) 5240 3999

"You" or "Consumer" refers to the initial purchaser of the product.

"Product" refers to goods manufactured by or for CMI Industries Pty Ltd under the brand of Level1Lasers.

"Material" refers to material or component used in the construction and manufacture of the product.

"Workmanship" refers to handling, assembly and manufacturing processes done by or for CMI Industries Pty Ltd in order to manufacture the products.

"Warranty Period" For Level1Laser Products is **12 Months**. Warranty period is from original purchase date, no extension is made in the event of warranty replacement products supplied or time spent being repaired.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

CMI warrants that our products will be free from defects in material and workmanship for the warranty period.

CMI promises to repair or replace, free of charge, the product or part of product if found to be faulty due to defective workmanship or materials within the duration of the warranty as long as the following terms and conditions are met;

- Product must not have been misused or abused, must not have incurred accidental damage or had un-authorised repair or tampering that has caused or contributed to its fault or failure.
- You must contact CMI by phone, mail or email immediately when a fault or defect has become apparent and within the warranty period.
- Product must be returned to store of purchase or directly to CMI, we will cover cost of postage only when sent by our reply paid Australia Post service (Australian Main land and Tasmania only) details will be provided upon phone, post or email communications with us.
- CMI will cover cost of freight back of repaired or replaced product to original purchase store or you directly (depending on how it was sent Australian Main Land and Tasmania only).
- CMI will determine whether to repair or replace the product or part of product on a case by case basis.
- Further exclusions in this warranty include damage or defect caused by use of non-original accessories or parts, damage in transportation, normal wear and tear, damage through moisture, damage due to electric surge, failure due to neglect or damaged caused by adjustments not outlined in CMI's instructions.

Subject to the requirements of all applicable Australian Acts or legislation and to the extent permitted by law, CMI accepts no liability (whether expressed or implied) of any nature whatsoever for any loss of earnings, hiring of replacement equipment, Inaccurate work carried out by the consumer or agent, damage or injury arising as a result of any fault in the product. It is the consumers responsibility to maintain good working practices and regularly test their tools for accuracy and serviceability.

Calibration of the product is not covered by warranty subject to the requirement of all applicable Australian Acts or legislation and to the extent permitted by law,

A CMI product returned that fails to fall within the terms and conditions of this warranty will be quoted for repair.