



for Professionals

RedBack Lasers 8L360

Multi line 360° Laser Level - 8L360

Instruction Manual



www.redbacklasers.com.au

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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

8L360™ INTRODUCTION

Congratulations on purchasing the 8L360™ multi line 360° laser level with continuous 360° horizontal and vertical lines plus plumb up/down and 90° squaring.

The 8L360™ is automatic levelling and features a secure pendulum lock to prevent accidental damage when not in use.

The 8L360™ features clear bright laser lines to produce a 3x wall crosses as well as ceiling and floor crosses providing plumb up and down.

The 8L360™ is ideal for all types of indoor installation work whether its electricians transcribing points from floor to ceiling, air conditioning installers, windows and tilers. In fact this Line laser can just about do anything indoors. Purchase the optional electronic receiver LLR705 and work outdoors up to 40m in full sun.

Other features of the 8L360™ include a sturdy magnetic base with elevation control, Tripod mounting options, heavy duty construction with rubberised casing and LI-ion Power or Std "AA" Size battery operation. The 8L360™ also boasts an industry leading Two Year Redback Warranty. (See page 12)

8L360™ Included Accessories

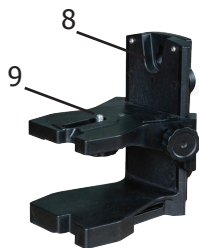
- 8L360™ Laser Unit
- Protective Carry Case
- Li-ion Battery & Charger
- "AA" Battery Holder
- Magnetic Elevating Base
- Magnetised Target
- Protective Carry Case
- Instruction Manual



8L360™ DIAGRAMS



1. Control Panel
2. Rubberised Casing
3. Laser Line Outputs
4. Magnetic/Wall Mount
5. Pendulum Lock & Power On/Off
6. Mount Elevation Locking Knob
7. 5/8" Survey Tripod Thread



8L360™ OPERATING INSTRUCTIONS

Battery Instructions

The 8L360 operates on either 3x "AA" Alkaline batteries or a Li-ion rechargeable battery pack, first remove the magnetic base from laser to expose underside, locate the battery compartment and pull the latch to open it. Insert either the charged Li-ion battery pack or the "AA" battery holder into the battery compartment in the direction indicated.

The Li-ion battery pack is charged outside of the battery compartment (allowing you to charge the battery whilst still using the 8L360 with "AA" batteries). To charge plug in the mains charger into the battery pack, when the light on the mains charger turns green the Li-ion battery pack is fully charged.



Installing "AA" Alkaline batteries into the battery holder.



Charging the Li-ion battery pack.



Note: Insert in direction of arrow on battery/holder.

When the power LED on the control panel flashes, the batteries need replacing. Note if you plan not to use the laser level for a while remove batteries to prevent any possible damage caused by leaking batteries. Important: never mix new and old batteries or batteries of different type e.g. Alkaline and Super heavy duty.

8L360™ OPERATING INSTRUCTIONS

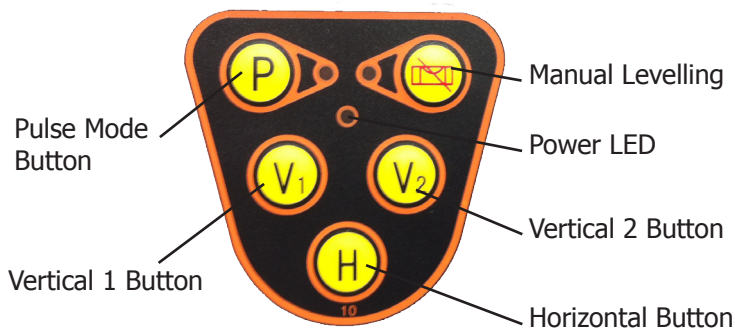
Operation

The 8L360™ is turned on by rotating the pendulum lock lever anti-clockwise to the "ON" position, the pendulum will now be un-locked and ready to self level.

If all the laser lines flash together with a loud beeping sound then the 8L360™ is out of self levelling range and the laser housing needs to be set up more level on the ground or tripod until the beeping stops, the 8L360 is now in self levelling range.



The pendulum lock helps protect the laser level when not in use, always store your 8L360™ with the lever in the "OFF" position.



Once the pendulum is unlocked in the "ON" position the laser lines can be turned on by pressing the appropriate buttons on the control panel. By pressing the Horizontal Button (H) all horizontal laser lines will light providing a 360 degree horizontal line all around the room. By pressing the Vertical 1 button (V1) a vertical line will be drawn in front of the 8L360 laser. Pressing the Vertical 2 button (V2) a full 360 degree line will be drawn at 90 degrees to V1 covering the walls floor and ceiling. Note that by having both V1 and V2 on at the same time will provide a floor cross at plumb to a ceiling cross.

The 8L360 has a manual mode, in other words it can display the laser lines without first levelling (ideal for such applications as stair hand rails etc where you want a line drawn at an angle rather than level). This is achieved by pressing the Manual Levelling button with the pendulum in the locked "OFF" position, then by pressing the H, V1 or V2 buttons. To turn off manual mode press the Manual Levelling button once more.

Magnetic Elevating Base Operation

The 8L360™ can be used either on its own or attached to the magnetic base, the "Base Locking Screw" secures the magnetic base onto the 8L360™.

The magnetic base can be mounted on any horizontal or vertical steel surface, it can also be mounted onto a standard survey style indoor tripod with 5/8" 11tpi thread or camera tripod.

The height of the laser can be changed when on the mount by unlocking the Elevation knob and sliding the laser up or down on the mount.

8L360™ OPERATING INSTRUCTIONS

Using with Optional Electronic Line Receiver

The 8L360™ can be used with an optional electronic Line receiver such as the RedBack LLR705 or LR200. To use a receiver the 8L360 needs to be switched into Pulse Mode by pressing the pulse button (P), this makes lines visibly a little less bright but is required for the receiver to pick the lines up. First select the lines you require turned on (H, V1 or V2) then press the Pulse (P) button.



LLR705

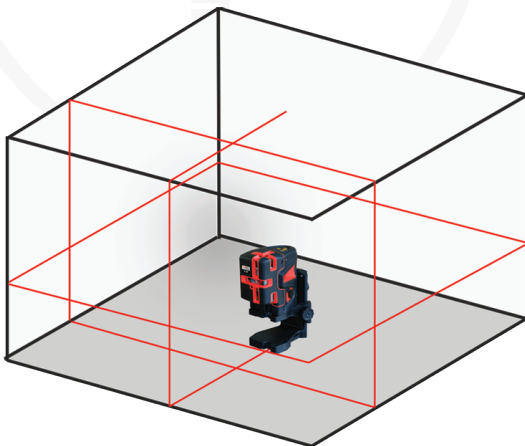


LR200

Line Range with Receiver 40m

Modes of Operation

The 8L360™ can be used for just about any indoor applications whether you need to plumb up or down, level, align or square this laser can do it. The 8L360™ can even be used outdoors with the optional electronic receiver.



8L360™ TECHNICAL SPECIFICATIONS

Technical Specifications

Laser Wavelength	635nm <1mW
Laser Class	II
Range Visible (light depending)	20m Radius Indoors
Range with Optional Receiver	40m Radius Indoors/Outdoors
Accuracy	±2mm/10m
Self Levelling Range	±4°
Vertical Lines Fan Angles	360° and 235°
Horizontal Line Fan Angle	360°
Temperature Range	-10°C - +40°C
IP Dust Water Resistance	IP54
Power	Li-ion Pack or 3 x "AA" Alkaline
Low Power	Power LED Flash

Calibration & Self Check

All Redback Lasers have been checked for calibration and certified by one of our technicians here in Australia prior to despatch and should under normal conditions not go out of calibration. A calibration certified sticker with the date and name of technician is located on the laser itself. It is worth checking calibration from time to time particularly after any known knocks or drops. An easy way to continually check calibration is to always double check you work with the laser located in a different position or use an alternate vertical line. Various other methods for checking calibration can be found at www.redbacklasers.com.au/downloads or the laser can be returned to our service department for checking and re-calibration. We at Redback Lasers provide a once off free calibration and check within the duration of the warranty period see page 12 for details.

8L360™ TROUBLE SHOOTING

Care & Maintenance

- Keep laser and accessories stored in protective case.
- Make sure laser is stored dry, dry out before storage to prevent damage.
- Remove batteries when not used for an extended period of time to prevent leakage.
- The 8L360™ is a precision instrument and should not be subjected to excessive knocks, drops or vibrations.
- Self check calibration from time to time. See page 9
- For service contact Redback Lasers. www.redbacklasers.com.au

Trouble Shooting - FAQ

- Q.** ***I hear a continuous beeping when turned on!***
- A.** *This is the out of level alarm indicating that the 8L360™ is outside of self levelling range, re level the laser housing and try again.*
- Q.** ***The Laser does not power up!***
- A.** *Check the pendulum lock has been unlocked, rotated into the "ON" position.*
- Q.** ***The Laser does not power up!***
- A.** *Check the batteries are charged and connected correctly and replace standard "AA" size Alkaline batteries if necessary.*

Notes

REDBACK LASERS WARRANTY

Duration of warranty is fixed and automatic, when we advertise 2 years on a particular model, its two years. No drop down to a lesser time if you forget to register, registration is NOT required just proof of purchase showing date.

Although the duration of our warranties are for a particular period it does not mean we will charge you for a genuine warranty failure a month or two outside that warranty period, we believe in a fair go.

Even though a product shows signs of accidental damage, scratches and the like, we will not automatically fail the warranty claim, if the fault is NOT caused by a drop or misuse and is a genuine warranty failure then we will cover it.

Calibration is not covered by warranty much the same as the wheel balance on your car is not covered by warranty, we do however offer a one off free re-calibration service during the period of warranty, conditions and details below.

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" refers to CMI Industries Pty Ltd (ABN 29 102 713 922) of 18b Tarkin Crt, Bell Park, Victoria 3215 ph 1800 769 858

"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 brands of RedBack Lasers, Level1Laser and CMI Lasers.

"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 the 8L360 is Two Years. 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, CMI does however offer a free re-calibration service (once within the period of the warranty) you are liable for the cost to send the product to us then we will recalibrate and return the product to you free of charge. Note this offer is invalid if the product shows signs of misuse or accidental damage that has caused it to go out of calibration.

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

RedBack Lasers™ distributed by CMI Industries Pty Ltd
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