



for Professionals

# RedBack Lasers CX3G

Multi line Green Beam Laser - CX3G

# Instruction Manual



[www.redbacklasers.com.au](http://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 3r laser <5mW at 522nm.  
Do NOT stare into laser beam or aim at another person.

Follow relevant Australian Standards

# CX3G™ INTRODUCTION

Congratulations on purchasing the CX3G™ multi line green beam laser level with plumb up/down, horizontal/vertical alignment and 90 degree square.

The CX3G™ is automatic levelling and features a secure pendulum lock to prevent accidental damage when not in use.

The CX3G™ features clear bright horizontal and 2x vertical green lines to produce a dual wall crosses as well as red down dot providing plumb down and green ceiling cross providing plumb up.

The CX3G™ is ideal for all types of indoor installation work whether its electricians transcribing points from floor to ceiling, air conditioning installers, windows and garage doors. In fact this Line laser can just about do anything indoors.

Other features of the CX3G™ is built onto a mini tripod base, with fine rotation control the CX3G™ can also mounting onto any tripod with survey thread. Power is provided by The latest Li-Ion rechargeable battery pack but, it can also use Std "AA" Size batteries. The CX3G™ comes with a Two Year Redback Warranty. (See page 12)

## CX3G™ Included Accessories

- CX3G™ Laser Unit
- Protective Carry Case
- Li-ion Battery Pack & Charger
- Holder for "AA" batteries
- Tripod Spacer Adapter & Washer
- Magnetised Green Target
- Glasses to Assist Viewing of Laser
- Instruction Manual



# CX3G™ DIAGRAMS



1. Vertical Line Output #1
2. Vertical Line Output #2
3. Horizontal Line Output
4. Fine Tune Rotation Knob
5. Leg Height Adjustment
6. Pendulum Lock & Power On/Off
7. Rough Level Bubble Vial
8. Control Panel
9. Battery Cover/Li-ion Pack

# CX3G™ OPERATING INSTRUCTIONS

## Battery Instructions

The CX3G operates on either its Li-ion rechargeable battery pack or 4 x standard "AA" batteries. The Li-ion pack can be charged either attached to the laser level or separately by inserting the charger plug into the charging socket in the battery pack. The Battery is fully charged when the light on charger turns from red to green.

To use standard Alkaline "AA" batteries insert the batteries into the "AA" battery holder in the directions indicated, then insert the battery holder into the battery compartment on the laser and tighten the screw



When the low power LED on the control panel flashes, the batteries need recharging (replacing if "AA" size). Note if you plan not to use the laser level for a while remove "AA" 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.

# CX3G™ OPERATING INSTRUCTIONS

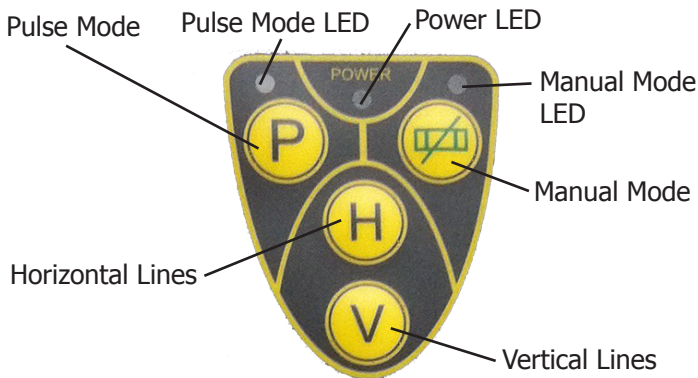
## Operation

The CX3G™ is turned on by rotating the pendulum lock knob anti-clockwise to the "ON" position at which point the pendulum will be "Unlocked" and ready to self level. The Power LED on the control panel will light.

If the lasers flash together with a loud beeping sound when the pendulum is unlocked then the CX3G™ is out of self levelling range. The laser housing needs to be set up more level on the ground or tripod until the beeping stops, the CX3G has a bubble vial on its top and adjustment on its built tripod legs to aid in this. To level on a full size tripod, adjust the tripod legs to bring the bubble vial into level. When the flashing and beeping stops the laser will be in self levelling range. NOTE the bubble vial does not need to be perfectly central for the laser to self level, its just a guide, the CX3G has 3 degrees of self levelling.



The pendulum lock helps protect the laser level when not in use, always store and transport your CX3G™ with the knob in the "OFF" position.



Once unlocked, pressing the "H" Horizontal Line button will toggle between horizontal line on and off, The "V" Vertical Line button, toggles between one line, two lines, second line only and off.

The CX3G has a manual mode, in other words it can display the laser lines and without first levelling. This is achieved by NOT Unlocking the pendulum (leaving knob in "Off" position") and pressing the Manual Mode button, the LED will flash warning that the laser is not levelling. Selecting the horizontal and vertical lines as required. Power off by pressing the Manual Mode button once more.

The CX3G™ can be manually rotated on its plumb axis by simply rotating the red housing of the laser. To accurately rotate it over a small arc use the Fine Tune Rotation knob, this is exceptionally handy when site squaring using the 90 degree angle between the two vertical lines.

The CX3G™ comes with a Tripod Spacer Adaptor with a standard 5/16" Survey tripod thread and large washer. These are handy when using the CX3G on a heavy duty domed or flat topped tripod, the washer goes on first to cover the hole and the spacer next to allow extra clearance for the CX3G in-built feet.

# CX3G™ OPERATING INSTRUCTIONS

## Using with Optional Electronic Green Line Receiver

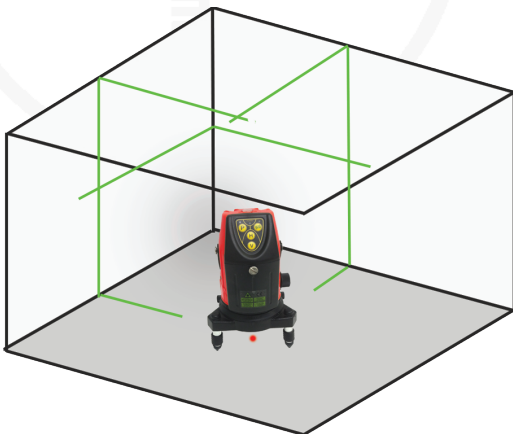
The CX3G™ can be used with an optional electronic Line receiver such as the RedBack LR200G. To use a receiver the CX3G needs to be switched into Pulse Mode by pressing the "P" pulse button, this makes lines visibly a little less bright but is required for the receiver to pick the lines up. (note: a green line receiver is required, red line or rotating receivers will not work) When lines are in Pulse mode the line indicator LED lights. A Receiver is required to successfully use the CX3G outside over a few meters



LR200G

## Modes of Operation

The CX3G™ can be used for just about any indoor applications weather you need to plumb up or down, level, align or square this laser can do it. The CX3G™ can even be useful outdoors when using an optional receiver with the lines in pulse mode.



# CX3G™ TECHNICAL SPECIFICATIONS

## Technical Specifications

Laser Wavelength	522-542nm <5mW
Laser Class	3r
Range Lines (light depending)	40m Radius Indoors
Range (with optional receiver)	50m Radius Outdoors/Indoors
Accuracy	±2mm/10m
Self Levelling Range	±3°
Vertical Line Fan Angle	160°
Horizontal Line Fan Angle	150°
Temperature Range	-10°C - +40°C
IP Dust Water Resistance	IP54
Power	Li-ion / 4 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](http://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.

## 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. (battery leakage is NOT covered by warranty)
- The CX3G™ 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](http://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 CX3G™ 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 "Unlock" position.*
- Q. *The Laser does not power up!***  
**A.** *Check the batteries 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 CX3G 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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