



for Professionals

RedBack Lasers

XLG44

Electronic Levelling Multi Line Laser

Instruction Manual



www.redbacklasers.com.au

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CAUTION: Class 3r laser <5mW at 522nm

Do NOT stare into laser beam or aim at another person.

Follow relevant Australian Standards

XLG44 Included Accessories

- XLG44 Laser Unit
- Protective Carry Case
- Rechargeable Li-ion Batteries
- Charger
- "AA" battery Holder
- Magnetised Target
- Glasses to Assist Viewing of Laser
- Instruction Manual

XLG44+ Included Accessories

- As the XLG44 plus
- LLR705 Receiver & Staff Clamp

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.

XLG44



XLG44+



XLG44™ INTRODUCTION

Congratulations on purchasing the XLG44. An Electronic self levelling Ultra Bright builders multi-line laser level.

This models is ideal for all manner of internal fit out and installation applications. The XLG44 can be purchased in a number of versions with extra options.

The XLG44+ includes an outdoor receiver making general outdoor levelling a breeze.

The XLG44AT includes the AT1 auto tracking base and receiver, making site square a snap.

The XLG44+MM includes a millimetre display receiver. The XLG44XXL includes both the Millimetre receiver and the Auto Tracking Base.

Other features of the XLG44 include rechargeable Li-ion and Std "AA" Size battery operation. Integrated Highly visible dots in the lines. Warranty of the laser is Two Years. (See page 12)

XLG44AT Included Accessories

- As the XLG44 plus
- Auto Track Motorised Base
- Tracking Receiver



XLG44AT

XLG44+MM Included Accessories

- As the XLG44 plus
- LLRMM30 Millimetre Receiver with Laser Distance Measure & Staff Clamp



XLG44+MM

XLG44XXL Included Accessories

- As the XLG44AT plus
- LLRMM30 Millimetre Receiver with Laser Distance Measure & Staff Clamp



XLG44XXL

XLG44 DIAGRAMS

XLG44 Laser Unit



1. Rubberised Casing
2. Control panel & Display
3. Laser Output
4. Fine Rotation Knob
5. Rough Level Vial
6. Charging Socket/LED
7. Levelling Feet

Keypad

Horizontal
(each press toggles through each of the 4 horizontal lines)

Display showing activated lines

Vertical
(each press toggles through each of the 4 vertical lines)



Pulse / Dim Mode
(each press toggles through; Pulse for OPTIONAL receiver, Dim for dull conditions and back to normal visible mode)

Display also indicates Battery power and Pulse/Dim Mode

Power Button

Optional Receivers - LLR705 or LLRMM30



LLRMM30 See Separate Instruction Book

XLG44 OPERATING INSTRUCTIONS

Battery Instructions & Powering Up

To operate first place either the Li-ion battery or "AA" battery holder complete with "AA" batteries into the battery compartment and lightly tighten the screw.

Place the XLG44 laser on a surface and roughly level the unit using the adjustment feet and bubble vial. This gets the laser into electronic self levelling range, you **do not** need to have the bubble perfectly central for the laser to accurately self level.

Power up the laser by pressing the Red Power button the LED display will light up indicating battery level and any laser lines that were previously selected. You will hear an electronic motor sound as the laser levels and the front vertical will light up indicating self levelling. Once levelled the front vertical will power down (if not selected) and the selected lines will illuminate.

Select your desired Horizontal and Vertical Lines using the "H" and "V" toggle buttons. Each press will increase the number of lines, the next press after all four are selected will return to 0 lines for either the Horizontal or Vertical axis.

The Display indicates which lines have been selected. Note the red plumb dot down automatically powers on when one or more vertical lines have been selected.

If you rotate the laser or move it when powered up the laser will need to re-level and the selected lines flash momentarily while the laser quickly re-levels.

Handy Hints

- *Prior to initial use, charge the rechargeable batteries for at least 4 hours.*
- *Remember the XLG44 can operate using standard "AA" batteries when rechargeable pack is out of charge, or charging outside of the laser.*
- *When using the standard "AA" batteries remove from laser if not being used for some time to prevent leakage.*

Selecting Modes (Pulse/Dim)

The "M" Mode button toggles through Pulse Mode, Dim Mode and back to Normal Mode.

Pulse mode allows you to use an OPTIONAL line receiver such as the LLR705 receiver or LLRMM30 Receiver for use outdoors up to a range of 40m in all light conditions. Ideal for Decking, Stumps etc when the ambient light is too bright to visibly see the lines. When pulse mode is active the letter "P" will show in the display. Note: the LLR705 is included in the XLG44+ package and the LLRMM30 is included in the XLG44+MM and XLG44XXL packages.

Dim mode diminishes the intensity of the beam making it more comfortable to use in low light conditions and saving battery power. When this mode is active the letter "D" with a line through it will show on the display.

Laser Lines with Embedded Dots

One of the outstanding features of the RedBack XLG44 apart from its ultra bright Laser Lines is its even brighter integrated laser dots.

Each of the Vertical and Horizontal lines has an embedded dot which corresponds with the laser lines. These dots are more visible when trying to use the XLG44 visibly outdoors.

When you cannot see the lines or dots outside that's where using a laser receiver comes in handy.

Tripods & Charging

The XLG44 can be mounted on an indoor tripod with survey thread such as the IET150. Note that the adjustment feet will not help to level the laser, you will need to use the tripod legs.

The Li-ion battery can be charged either when attached to the laser or when detached using the charger supplied, Do not use any other charger or power adaptor.

XLG44AT/XXL OPERATING INSTRUCTIONS

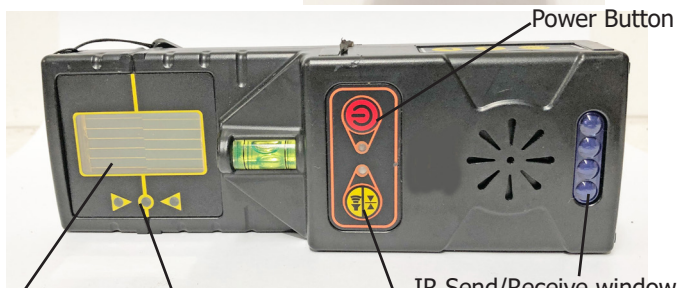
Using the Auto Track base for Site Layout

- If you have purchased the XLG44AT or XLG44XXL you will also receive the AT1 Auto Tracking Base and Tracking Receiver. The following are the instructions for this.

Laser Mounting Thread
(supplied with 5/8" and 1/4")

Power Button

powered by 4x "AA" batteries



Laser Sensors

LED Level Indicator

Level Sensitivity (short press and Green LED) / Sound on/off (long press)

IR Send/Receive window

Power Button

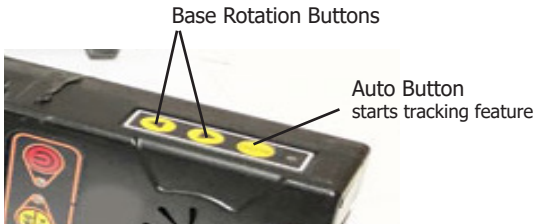
Auto Track INSTRUCTIONS

First insert batteries in both the motorised base and receiver. Next determine which thread fits the laser you are using and screw it into the base of the laser. The laser can now be mounted onto the motorised base and the locking nut tightened.

The motorised base is powered up by pressing the power button on one of its corners and the red LED should indicate it is powered up. Next power up the required vertical laser lines on your laser as per the instructions for your laser. Also put your laser into outdoor pulse mode.

Next power up the tracking receiver by pressing the red power button on the receiver. The receiver will now operate like a standard line receiver picking up both the horizontal line when up right and vertical lines when the receiver is placed on its side. For vertical auto alignment whilst using the rotating base the receiver needs to be on its side.

To activate the tracking feature on the receiver press the "AUTO" button on the side of the receiver the LED next to it should light up. If the LED does not illuminate when you press it then make sure that the tracking control panel is upright and try again. To start the tracking feature press either of the arrow buttons and the rotation base will begin to rotate.



As one of the vertical laser lines on your laser level passes the receiver's sensor the receiver will begin beeping and the rotation base will either slowdown, stop or change rotation direction. Over a number of seconds the base will align up with the receiver and lock on, this will be indicated by the receiver having a solid tone followed by a double beep before returning to the solid tone again. Once locked on, the receiver can be picked up and moved around your site for alignment or squaring. Note to be able to square your laser you will require at least two vertical lines at 90 degrees to each other.

INSTRUCTIONS






The receiver comes with a staff clamp for horizontal use for levelling which is used in conjunction with a levelling staff much the same way as using a rotating laser with a rotating receiver. The receiver also features a button for turning off the sound this is toggle with a long press of that button (2 second hold). This same button when pressed with a short press toggles through fine and coarse sensitivity on level, this is indicated by a green LED.

Specifications. The range for communication between the receiver and motorised base is up to 15m depending on environmental conditions. Note both the laser pickup and infra red communication need line of site to the base/laser level. Warranty is Two Years.

LLR705 Receiver (Supplied with the XLG44+)

The RedBack LLR705 is an OPTIONAL receiver for the 360R & 360G models. It allows the laser beam to be picked up outside at up to 80m 306R and 30m 306G in any lighting conditions. Ideal for decking, sheds, slabs, framing and much more.

The receiver can be used hand held or together with the staff clamp with a staff. The LLR705 has a 1mm level zone for maximum accuracy.

- A press of the Power button  on the receiver will turn on and off the receiver.
- Pressing the Speaker button  toggles speaker on and off. Note the sound is different for above, below and on level.
- Pressing the Near/Far button  enables the receiver to best work within 5m for Near and over 5m for Far. Note default mode when first powered up is Near (under 5m) Mode as indicated on the LCD display by a symbol of two triangles and a line between . If you are using the receiver beyond 5m switch to far mode indicated by a line symbol .

The LLR705 has 3 LED light displays which indicate laser is above, below and on level and a large LCD display which has a progressive display indicating when the laser gets closer to the level mark. If the receiver is left turned on without a laser being received it will auto power down after 10 minutes.

Note: Instructions for the LLRMM30 are separate (XLG44+MM/XXL)

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ARL509™ SPECIFICATIONS

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 XLG44 is a precision instrument and should not be subjected to excessive knocks, drops or vibrations.
- Self check calibration from time to time.
- For service contact Redback Lasers. www.redbacklasers.com.au

Technical Specifications

Laser Wavelength	522nm <5mW Green
Laser Class	3r
Visible Range	Up to 40m
Range with Receiver	50m
Accuracy	±2mm/20m
Self Levelling Range	±3.5°
Temperature Range	-10°C - +45°C
IP Dust Water Resistance	IP54
Power	4 x "AA" Alkaline or Li-ion pack
Low Power	Power LED Flash
Levelling	Electronic
Carry Case	Hard plastic clam shell

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.

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 Thompson Rd, 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 XLG44 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. Ni-Mh Battery & Charger if supplied have 1 Year Warranty.

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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