

# GMC<sup>®</sup>

GLOBAL MACHINERY COMPANY

**INSTRUCTION MANUAL**

# REDEYE<sup>®</sup>

***Deluxe Laser Line  
Generator***

***Electronic alignment made easy***



**2** YEAR  
REPLACEMENT  
WARRANTY

**30** DAY  
SATISFACTION  
GUARANTEE

• Melbourne • Perth • Auckland • Hong Kong • Shanghai  
• Taipei • New York • Verona • London • Paris

**LSLINE**  
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# Contents

<b>Warranty</b>	<b>2</b>
<b>Introduction</b>	<b>3</b>
<b>Environmental protection</b>	<b>3</b>
<b>Scope of product</b>	<b>3</b>
<b>Description of symbols</b>	<b>3</b>
<b>Safety rules for laser line generator</b>	<b>4</b>
<b>Additional safety rules for laser line generator</b>	<b>4</b>
<b>Know your product</b>	<b>6</b>
<b>Changing the laser line generator batteries</b>	<b>7</b>
<b>Operating the laser line generator</b>	<b>7</b>
<b>Selecting the mounting method</b>	<b>7</b>
<b>Projection of a vertical laser line on the floor</b>	<b>8</b>
<b>Projection of laser line when fixed on a wall</b>	<b>8</b>
<b>Maintenance</b>	<b>9</b>
<b>Troubleshooting</b>	<b>9</b>

## Full 2 Years Home Use Warranty

Whilst every effort is made to ensure your complete satisfaction with this tool, occasionally, due to the mass manufacturing techniques, a tool may not live up to our required level of performance and you may need the assistance of our service department.

This product is warranted for a 2-year period for home domestic use from the date of the original purchase. If found to be defective in materials or workmanship, the tool or the offending faulty component will be replaced free of charge with another of the same item. A small freight charge may apply.

The warranty replacement unit is only made available by returning the tool to the place of purchase with a confirmed register receipt. Proof of purchase is essential. We reserve the right to reject any claim where the purchase cannot be verified.

This warranty does not include damage or defects to the tool caused by or resulting from abuse, accidents, alterations or commercial or business use.

It also does not cover any bonus accessories unless the tool is a GMC Platinum Professional model.

Please ensure that you store your receipt in a safe place.

Conditions apply to the above warranty.

If you need direction of what constitutes a free of charge warranty claim, please review the guide given on the rear of the Receipt Holder. An indication is given as to the types of claim that are permissible, and those that are not.



## Dear Customer

If you require any help with your product, whether it is a Warranty claim, spare part or user information, please phone our Help Line for an immediate response. Phone 1300 880 001 in Australia or 0800 445 721 in New Zealand.

## Introduction

Your new GMC laser hand tool will more than satisfy your expectations. It has been manufactured under stringent GMC Quality Standards to meet superior performance criteria.

You will find your new tool easy and safe to operate, and, with proper care, it will give you many years of dependable service.

**Caution.** Carefully read through this entire Instruction Manual before using your new GMC laser hand tool. Take special care to heed the Cautions and Warnings.

Your GMC laser hand tool has many features that will make your job faster and easier. Safety, performance, and dependability have been given top priority in the development of this tool, making it easy to maintain and operate.

## Environmental protection



Recycle unwanted materials instead of disposing of them as waste. All tools, hoses and packaging should be sorted, taken to the local recycling centre and disposed of in an environmentally safe way.

## Description of symbols

The rating plate on your tool may show symbols. These represent important information about the product or instructions on its use.



Conforms to relevant standards for electromagnetic compatibility.



Do not stare into beam. Only turn laser beam on when tool is on work piece. Class 2 laser product.

## Specifications

Recommended Use:	Indoor
Length of laser line:	Up to 10m
Laser diode type:	Red laser diode 650nm
Laser class:	Class 2, maximum power output less than or equal to 1mW
Operation area:	Up to 10m distance and/or up to 10m length of visible laser line (with help of red laser enhancing glasses, indoor)
Laser fan beam angle:	100°
Power supply:	2 x AA – 1.5 volt batteries (not supplied)
Battery life:	40 hours of continuous use with alkaline batteries
Operation temperature:	-1°C to 40°C
Dimensions:	115mm x 54mm x 80mm
Weight:	Unit only (no batteries) 240g
	Base 90g
	Batteries 50g
Accuracy:	+/- 13mm at 10m

**CAUTION.** Laser radiation is emitted from the line generator.

## Safety rules for laser line generators

The laser line generator is Class 2 with maximum 1mW and 400nm – 650nm wavelengths. These lasers do not normally present an optical hazard, although staring at the beam may cause flash blindness.

**WARNING.** Do not stare directly at the laser beam.

A hazard may exist if you deliberately stare into the beam, please observe all safety rules as follows;

- The laser shall be used and maintained in accordance with the manufacturer's instructions.
- Never aim the beam at any person or an object other than the work piece.
- The laser beam shall not be deliberately aimed at personnel and shall be prevented from being directed towards the eye of a person for longer than 0.25s.
- Always ensure the laser beam is aimed at a sturdy work piece without reflective surfaces. i.e. wood or rough coated surfaces are acceptable. Bright shiny reflective sheet steel or the like is not suitable for laser use as the reflective surface could direct the beam back at the operator.
- Do not change the laser light assembly with a different type. Repairs must be carried out by the laser manufacturer or an authorized agent.

**CAUTION.** Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Please refer to the relevant Australian standards, AS 2397 and AS/NZS2211 for more information on Lasers.



## Additional safety rules for laser line generator

The laser line generator emits a laser fan beam, which acts like an invisible surface in the actual three dimensions space. When used indoors, it generates a visible laser line on the surfaces the laser fan beam crosses.

The liner is a Class 2 laser tool and is manufactured to Australian standards, AS 2397 and AS/NZS2211.

The two vials on the top of the laser line generator are for the laser fan beam alignment reference only. The unit is not a level and can not be used as a level. The laser line generator is not designed as a height measuring instrument and must not be used as such. It is designed to be referred to its projected line only.

**WARNING.** Read and understand all instructions. Failure to follow all instructions may result in hazardous radiation exposure, electric shock, fire and/or bodily injury.

- Do not remove or deface any labels. Removing labels increases the risk of exposure to laser radiation.
- Do not stare directly at the laser beam as serious eye injury could result.
- Do not project the laser beam directly into the eyes of others.
- Do not place the laser in a position which may cause anyone to stare into the laser beam intentionally or unintentionally.
- Do not use optical tools such as a telescope or transit to view the laser beam.
- Do not operate the laser line generator around children or allow children to operate the tool.
- Keep children and bystanders away while operating the laser line generator.
- Turn the laser line generator off when it is not in use. Leaving the laser on increases the risk of staring into the laser beam.
- Do not operate the laser line generator in explosive

atmospheres, such as in the presence of flammable liquids, gases, or dust.

- Do not push the pin push-button of the aluminium base unless you intend to fix the base on the dry wall or soft wood like material, it may result injury because of the sharp pins.
- To avoid injury, always make sure the push pins are fully retracted before handling or storing the laser line generator and keep the units and the base out of reach of children and other untrained persons.
- Position the laser line generator securely. Damage to the laser line generator or some injury could result if the unit falls.
- Use only accessories that recommended by the manufacturer for your model. Accessories that may be suitable for a specific laser line generator, may create a risk of injury when used on another laser line generator.
- Repairs and servicing can be only performed by

a qualified repair facility. Repairs performed by unqualified personnel could result in serious injury.

- Do not disassemble the laser line generator. Disassembling the unit will void all warranties on the product.
- Do not disassemble any part of the product except removing the batteries cap when replacing batteries.
- Do not modify the product. Modifying the product in any way may result in hazardous laser radiation exposure.
- Use of control or performance of procedures other than those specified in this manual may result in hazardous laser radiation exposure.
- Keep work area clean and well lit. Cluttered and dark areas invite accidents.

## Know your product

Before using the laser line generator, familiarise yourself with all the operating features and safety requirements.

### Laser line generator

1. Laser switch
2. Laser line rotating dial
3. Level vials
4. Battery cover
5. Magnetic base
6. Front locating groove
7. Rear locating groove

### Leveling base

8. Vertical adjustment knob
9. Horizontal adjustment knobs
10. Locating pin
11. Mounting thread

### Pin mounting base

12. Locating pin
13. Pin push buttons
14. Pin protective cover
15. Laser enhancing glasses



## Changing the laser line generator batteries

1. Ensure that the laser line generator is switched OFF by checking that the laser switch (1) has been pulled up.
2. Turn the battery cover (4) anticlockwise and remove the cap.
3. Remove and replace both AA batteries, taking care to insert the new batteries with the correct polarity.
4. Replace the battery cover (4) by turning it clockwise.

**CAUTION.** Remove the laser line generator batteries when the tool is to be stored without use for a few days or more. If left in position, the batteries might leak and damage the laser light assembly.

Damage due to leaking batteries is not covered under warranty.

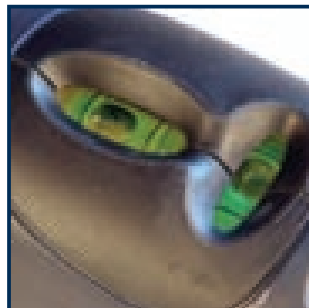
## Operating the laser line generator

The laser line generator has a number of different mounting methods. It is important to select the mounting method first as illustrated in the following options.

### Selecting the mounting method

#### Option 1: Flat surfaces – pin mounting base

1. Place the base of the unit onto the pin mounting base ensuring you align the front locating groove (6) with the locating pin (12).
2. Place this assembly on a flat surface and check the vials (3) to ensure that the surface is level. If the surface is not level, go to option 3.

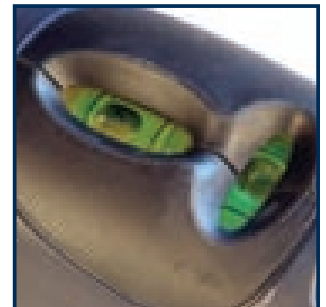


(3) to ensure that the surface is level. If the surface is not level, go to option 3.

3. If the floor is level, ensure the surface is made of soft material such as soft wood, then press both pin buttons (13) down into the flat surface and make sure it fixes firmly.

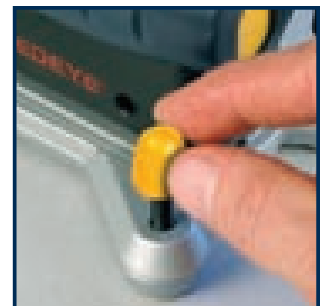
#### Option 2: Flat surfaces – no mounting base

1. Place the unit on the floor and check the vials (3) to ensure that the surface is level. If the floor is not level, go to option 3.

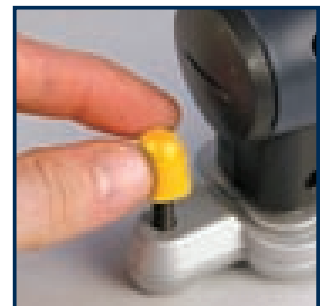


#### Option 3: Uneven surfaces – leveling base

1. Place the unit onto the leveling base ensuring you align the front locating groove (6) with the locating pin (10).



2. Check vials (3) to see if the unit assembly is level. If not, make appropriate adjustments to both the vertical adjusting knob (8) and the horizontal adjusting knob (9).



### Projection of laser lines on the floor

Once the mounting method has been selected you may commence with the projection of the laser line.

The laser line rotating dial (2) is designed to adjust the line from horizontal to vertical and all angles in between.

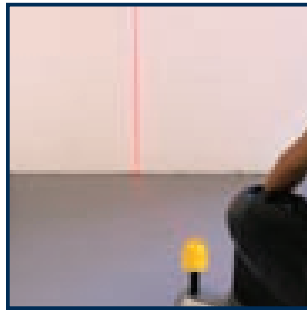
#### Switching it on

To switch the laser line generator ON, push down the laser switch (1) and the laser will then automatically appear.



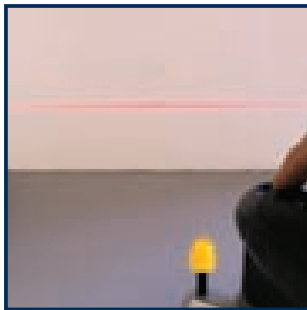
### Projection of vertical laser line

Switch ON the laser line generator and adjust the rotating dial (2) anticlockwise to achieve a vertical line.



### Projection of horizontal laser line

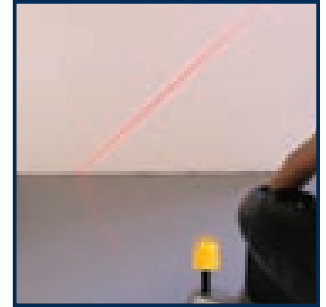
Switch ON the laser line generator and adjust the rotating dial (2) clockwise to achieve a horizontal line.



### Projection of inclined laser line on the opposite surfaces

Switch ON the laser line generator and adjust the rotating dial (2) to the required inclined angle on the opposite surface.

**NOTE.** Position the laser line generator a maximum of 10m from the wall surface. It is recommended to use red laser enhancing glasses (15) to improve the visibility of the laser line especially in a bright light environment.



### Projection of laser line when fixed on a wall

The laser line generator is built with a large laser fan angle (up to 100° of fan beam). When this is used in conjunction with the 90° rotating system dial (2), it offers wide range of line projections across main surfaces for different alignment applications.

1. Attach the laser line generator to the pin mounting base.
2. Position this mounting assembly onto the wall and check the vial (3) to ensure that the unit is in the general leveling position.
3. Press both the pin buttons (13) onto the dry wall and check to ensure the assembly has been securely attached.
4. Once the base has been secured you can still manoeuvre the laser line generator (if required) to achieve the correct horizontal level.





5. Switch ON the laser line generator.
6. Adjust the rotating dial (2) to achieve desired line projection.



## Maintenance

1. The laser line generator must be handled with care.
2. Avoid shock, vibrations and extreme heat.
3. Always store the tool indoor, switch to OFF position and put it in its protective case.
4. Avoid dust and liquid into the tool, use damp cloth and mild soap to clean the tool.
5. Keep the laser line generator dry and clean.
6. Check the batteries regularly to avoid deterioration.
7. No special maintenance operation is required to be carried except the change of batteries as per description given in this manual.

**Note:** This tool is not to be tampered with and should only be repaired by a qualified Service Technician with laser experience.

<b>Troubleshooting</b>		
<b>Problem</b>	<b>Possible cause</b>	<b>Solution</b>
Faint laser line projection	Weak batteries	Replace batteries
	Bright lighted room	Use the laser enhancing glasses
Laser line is not projected	Switch is not ON	Check that the switch has been pushed down
	Batteries are flat	Replace batteries
Laser line angle appears not to line up with a reference point	The rotating dial has not been positioned correctly	Adjust the rotating dial to the correct position
	Mounting surface is not on a flat plane	Check the vials. Use the leveling base and level the unit with the adjusting knobs

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## Carefully read the entire Instruction Manual before using this product.

**Before returning this product for a  
Warranty Claim or any other reason  
Please Call 1300 880 001 (Australia)  
or 0800 445 721 (New Zealand)**

**When you make your call, please have  
the following information at hand:**

- **GMC Product Type**
- **GMC Product Code**

A GMC Service Engineer will take your call and, in most cases, will be able to solve your problem over the phone.

You are welcome to use this phone-in service to make suggestions or give comments about any GMC product.

With continuing product development changes may have occurred which render the product received slightly different to that shown in this instruction manual. The manufacturer reserves the right to change specifications without notice. Note: Specifications may differ from country to country.



**The GMC 777 Helpline operates from 7am to 7pm, 7 days a week (EST). This allows you to contact GMC directly with any queries and technical questions you have regarding our products.**



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**Save this Manual for future reference.**