

Revision 2022.1.0



RLX-M20R

Red Beam Rotary Laser Level Package

INSTRUCTION MANUAL

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SAFFTY

Read the following safety instructions before attempting to operate this tool

Keep these instructions in a safe place or store in the carry case for future reference.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE.



Read and understand all instructions.

- Use the tool only with the specifically designated batteries
- Store the tool out of reach of children and other untrained persons. Laser tools are dangerous in the hands of untrained users
- Use only accessories that are recommended for your model.
- Tool service must be performed only by qualified repair personnel. Repairs, service or maintenance performed by unqualified personnel will void the warranty. Only approved and authorised service technicians can carry out warranty repairs.
- Do not use optical tools such as a telescope or transit to view the laser beam. Serious eye injury could result.
- Do not place the tool in a position which may cause anyone to intentionally or unintentionally stare into the laser beam. Serious eye injury could result.
- Do not position the tool near a reflective surface which may reflect the laser beam toward anyone's eyes. Serious eye injury could result.
- Do not use optical tools to view the laser beam.

- · Do not set up the tool at a position where the laser beam can cross any person at head height.
- Do not let children come in contact with the tool.
- Turn the tool off when it is not in use. Leaving the tool on increases the risk of staring into the laser beam.
- Do not operate the tool around children or allow children to operate the laser. Serious eye injury may result.
- Position the tool securely on a level surface. Damage to the tool or serious injury could result if the tool falls.
- Do not remove or deface warning labels.
- If the text on the warning label is not in your native language, cover it with the appropriate label supplied before commencing operation of the laser.



WARNING!

Do Not Disassemble The Laser.

There are no user serviceable parts inside. Disassembling the tool will void all warranties on the product. Do not modify the product in any way. Modifying the tool may result in hazardous laser radiation exposure.



CAUTION!

Class 2 Laser Product

- Never look into the laser beam directly and intentionally.
- Do not use optical tools to view the laser beam.
- Do not set up the tool at a position where the laser beam can cross any person at head height.
- Do not let children come in contact with the laser.



CAUTION LASER RADIATION! DO NOT STARE INTO THE BEAM! CLASS 2 LASER, OUTPUT <1mW EN 60825-1:2014











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ITEM CHECKLIST

The following items are included with your laser level.

- 1. RLX-MR20 laser level (including lithium-ion battery pack)
- 2 DTX-RH40 detector
- 3. Staff clamp
- 4. Mount (attached to laser level)
- 5. Laser target
- 6. Laser glasses

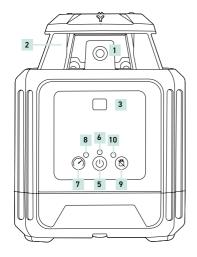
- 7. Mini heavy duty tripod
- 8. 3m 'E' pattern staff
- 9. Indoor charger
- 10. 9V alkaline battery (for use with the DTX-RH40 detector)
- 11. Soft carry pouch
- 12. Hard carry case

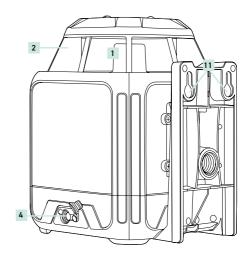
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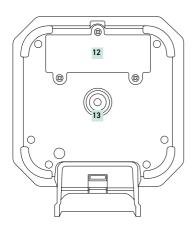
LASER LEVEL OVERVIEW

- 1 Rotating laser port
- 2 Protective lighthouse
- 3 Control panel
- 4 Rechargeable battery charging port
- 5 Power button
- 6 Power indicator
- 7 Speed control button

- 8 Speed control indicator
- 9 Tilt (disturbance) alarm button
- 10 Tilt (disturbance) alarm indicator
- 11 Screw fixing point
- 12 Battery door
- 13 5/8" -11 thread for horizontal operation on a tripod







USING THE LASER LEVEL

POWER SUPPLY

- The laser level is supplied with 2x lithium-ion batteries as its power source. The batteries are supplied inside the laser level by default.
- The batteries are supplied only partially charged. Charge the batteries before use.
- The power indicator light will flash when the battery is low. The laser level should be re-charged as soon as possible.
- Battery pack capacity decreases at low temperatures; a depleted pack may not function when cold.

Indoor charger

- · The indoor charger is for indoor use only.
- Do not store in locations where moisture can be present or where the chargers could be exposed to extreme temperatures.
- If a charger becomes damaged, stop using immediately and seek a replacement.



WARNING! Only use the supplied charger.
Using an incorrect charger will void the warranty.

Charging the batteries

- Insert the charging cable into the charging port on the side of the laser level (Fig.1).
- · Insert the power adaptor into the power outlet.
- Progress will be shown by the power indicator display on the battery as below:



Red (constant): Battery is charging



Green (constant): Battery is charged

Charging time is approximately 5 hours for depleted batteries.

Inserting & removing the batteries

- Remove the 3 screws on the battery door with a screwdriver and remove the batteries.
- Insert the battery pack according to polarity. Replace the battery door and secure via the 3 screws.



WARNING! Only use the supplied batteries.

HORIZONTAL MEASUREMENT SETUP

Level surface set up

- Select a place as close and practical to the work site as possible, and ensure that the location is clear of traffic.
- · Place the laser level onto a reasonably level surface.
- The laser level can also be set-up via the supplied mount or on the supplied tripod (see page 6).



OPERATION

Powering on

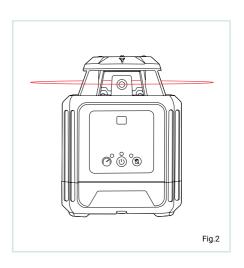
- Press the power button and the laser level will power on and begin automatically self-levelling. When this levelling process is complete, the penta prism inside the lighthouse will start rotating (Fig. 2).
- If the laser level is outside the self levelling range the laser level will not level causing the laser beam to flash continuously. If this occurs, reposition the laser level onto a level surface until the laser level can level off.



In bright outdoor conditions, visible distance will be significantly reduced. For outdoor use, it is recommended to use the included detector.

Powering off

 Press the power button once and the laser level will power off.



USING THE LASER LEVEL (continued)

Speed control

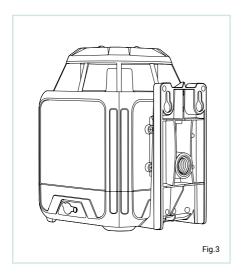
 Press the speed control button to cycle through the following rotational speeds: 0, 60, 120, 300, 600rpm

Tilt alarm

- Once the laser level has been levelled off the tilt alarm can be enabled by pressing the tilt alarm button. The tilt alarm indicator light will flash continuously whilst active.
- If the laser level is disturbed while the alarm is active the laser level will stop rotating and will need to be powered off and on again to reset to a level position.

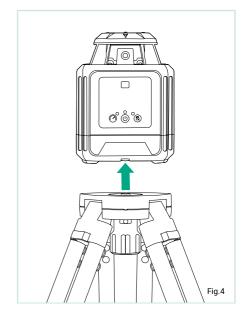
USING THE MOUNT

- The mount is attached to the laser level by default (Fig.3).
- The mount can be used to mount to walls or fence posts where a tripod cannot be used.
- Fix two screws into a secure surface and hook the mount over the screws, ensuring that the mount has a strong hold before releasing your hands.
- 1 Although the included mount is equipped with a 5/8"-11 thread, the RLX-MR20 laser level is not equipped for vertical operation.



USING THE TRIPOD

- Extend the tripod legs to the required height and ensure the legs are spread wide enough so that the tripod platform is stable. Secure the legs in place.
- Place the laser level onto the tripod and mount via the male thread (5/8"-11) into the base until firm (Fig.4). Do not over tighten as this may cause damage to the laser level or tripod.



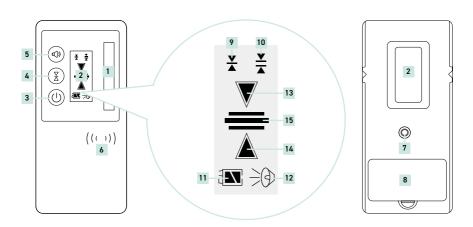
USING THE DETECTOR

In bright outdoor conditions, visible distance will be significantly reduced. For outdoor use, it is recommended to use the included detector.

DETECTOR OVERVIEW

- 1 Laser sensor
- 2 LCD display screen
- 3 Power on / off
- 4 Detection mode
- 5 Speaker on / off
- 6 Speaker
- 7 Staff clamp thread
- 8 Battery compartment

- 9 Detection mode: fine
- 10 Detection mode: course
- 11 Battery level indicator
- 12 Speaker indicator
- 13 Arrow indicator (down)
- 14 Arrow indicator (up)
- 15 Centre alignment



POWER SUPPLY

 The detector is supplied with one 9v alkaline battery as its power source.

Removing & inserting the alkaline battery

- · Remove the battery cover door and the battery.
- Insert the battery according to polarity and replace the battery door.

SET-UP

Mounting the staff clamp

- Insert the staff clamp screw into the staff clamp thread.
- Rotate the nut until the clamp is secured in place.
- The clamp can be used to attach the detector to a staff or other reference point.

OPERATION

Powering on / off

- Switch the detector on by pressing the power button. The LCD screen will turn on and the speaker will emit a small tone to indicate the instrument is operating.
- The LCD screen will display the battery level, detection mode, alignment indicator and speaker function..
- Press and hold the power button for three seconds to turn the detector off.

Changing detection mode

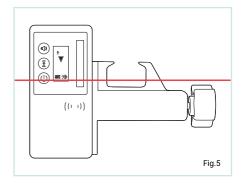
 The detection mode can be changed between coarse and fine mode. Press the detection mode button to cycle through the detection modes.

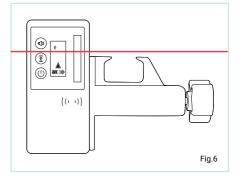
Speaker function

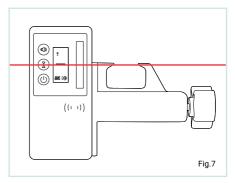
 Press the speaker button to turn the speaker off. Press again to turn the speaker on and cycle between the speaker volumes.

Operation with the rotary laser level

- · Hold the detector upright.
- Move the detector up or down according to the direction arrows on the LCD screen (Fig.5 & Fig.6).
- When the level position has been located, the speaker will emit a constant beep and show the centre alignment line on the LCD screen (Fig.7).







CARE & MAINTENANCE

- This is a precision measuring tool and should always be handled with care and transported within the carry case provided.
- 2. Always turn the laser level off when transporting the laser level or moving around the job site.
- 3. Whenever possible, store the laser level in a dry, shady location
- When the laser level is not in use or is being stored, it is highly recommended to remove the battery pack.
- Calibration of the laser level is recommended: every six months, if ongoing accurate levelling is required, or an impact has occurred.
- The operator should check the accuracy of the tool before precision levelling is attempted. Failure to do so may result in inaccurate measurements.
- 7. Clean the laser level with a dry, soft cloth after use in dusty, damp or wet conditions before storing.
- 8. Smudges and fingerprints may be removed with a damp tissue or a soft, lint-free cloth.

WARRANTY

All Goblin Tools measurement tools are carefully checked and tested to our precise quality assurance standards.

We offer a warranty in accordance with the following conditions:

- Our warranty provides the correction of deficiencies to the tool once verified by an authorised service centre that the deficiencies were caused by a manufacturing fault within the warranty period.
- The standard warranty period is 4 years from the date of purchase. The warranty period can be extended to 8 years upon registration of the tool within 30 days of purchase.
- 3. The warranty does not cover:
 - Calibrations and components that are subject to wear and tear
 - b) Defects in the tool caused by non-compliance with the operation instructions, improper use, abnormal environmental conditions, inappropriate operating conditions or insufficient maintenance.
 - Defects caused by using accessories or spare parts other than approved parts.
 - d) Services or repairs carried out by non-authorised persons.
- Defects recognised by an authorised service centre as being covered by the warranty shall be corrected either by repair or replacement of the tool.
- The warranty claim must be lodged within the warranty period. This requires the complete tool with the original sales receipt containing the purchase date and place of purchase. Partial or disassembled tools cannot be submitted for a warranty claim.
- Services provided under warranty do not lengthen or renew the warranty of the tool.

The above guarantees apply to tools that are purchased in the countries and regions specified online at www.goblintradetools.com

4 YEAR STANDARD WARRANTY PERIOD

- The warranty period for your tool is 4 years from the date of purchase.
- The warranty period for batteries, battery packs and chargers is 1 year from the date of purchase.
- Calibrations are not covered under warranty as they are deemed wear and tear.
- All products have a standard warranty period, you do not have to register your products to obtain the standard warranty period.
- 5. To claim under this warranty, the date of purchase of the tool must be documented by an invoice/receipt.

8 YEAR EXTENDED WARRANTY PERIOD

- 1. The extended warranty is available on selected tools only.
- You may extend the warranty period for your tool (laser level, optical level or laser distance measurer) to 8 years from the date of purchase. Accessories are excluded from the warranty extension and remain at the 4 year warranty period.
- 3. The warranty period for batteries, battery packs and chargers is 1 year from the date of purchase.
- Calibrations are not covered under warranty as they are deemed wear and tear.
- 5. To obtain the extended warranty, the registration process must be completed within 30 days from the date of nurchase
- Failure to register your product online and/or submission of a valid invoice/receipt will void the warranty extension.
- Please ensure ALL information submitted/uploaded is correct

Extended warranty is ONLY available via online registration, offline (mailing in of warranty registration) will not be accepted.

Visit www.goblintradetools.com to register.

TROUBLE SHOOTING

Error	Cause & Solution
Laser level does not turn on	 The battery pack may require charging or need to be replaced due to age and / or a high number of charging cycles. Check the battery compartment for signs of damage and ensure that the compartment is clean and that the battery terminals are not bent.
Laser level does not remain on for long periods of use.	 The battery pack may require charging or need to be replaced due to age and / or a high number of charging cycles. Check the battery compartment for signs of damage and ensure that the compartment is clean and that the battery terminals are not bent.
Laser level does not level off	 The laser level may be outside its self levelling range and may require an adjustment before self-levelling can commence. The laser level may have impact damage.
Battery pack will not charge or is not lasting long in use	 The battery pack may require charging or need to be replaced due to age and / or a high number of charging cycles. Check the battery compartment for signs of damage and ensure that the compartment is clean and that the battery terminals are not bent.
Detector does not detect the laser beam	 Check the batteries on the detector. They may be low and need replacing. Check the laser level and ensure the laser level is producing a beam. Check the line of sight and ensure there is no interference. Check that the laser level and detector are within the operating range.

CUSTOMER SUPPORT

To assist you with any queries or technical questions please contact customer support.

United Kingdom: 0808 189 1152

All other countries / regions:

Visit www.goblintradetools.com for more information

Registered Business Address: 98 Middlewich Road, Northwich, Cheshire, CW9 7DA United Kingdom

RESPONSIBLE DISPOSAL

Please do not throw any electrical equipment (including those marked with the crossed out wheeled bin symbol) in your bin.

This device complies with all necessary standards for the free movement of goods within the EU. This product is an electric device and must be collected separately for disposal according to the European Directive on waste electrical and electronic equipment.

SPECIFICATIONS

Specifications	RLX-MR20
Product code	RLXMR20PK
Warranty	8 Years*
Accuracy	±2mm at 30m (±1/10in / 0.06in at 98ft)
Operating range (diameter)	400m (1312ft) with detector
Levelling range	±8% / ±5°
Laser class	2 Red
Battery life	40 hours+
Battery type	7.4V 4000mAh Li-ion battery pack
Vertical lines	N/A
Horizontal lines	1
IP rating	55
Weight (g)	1386 (including battery)
Dimensions (mm)	1300 x 1250 x 1700

^{*}With online registration (4 years without registration). Please refer to page 9 for details.

Whilst every attempt is made to ensure the accuracy of all information within this instruction manual, Spot-on Laser & Tool Company UK Ltd reserves the right to correct errors or omissions at any time.

