



for Professionals

RedBack Lasers 3DMAX

Auto Levelling 360 Line Laser - 3DMAX

Instruction Manual



For Models - RED3DMAX & GREEN3DMAX

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.



RED3DMAX CAUTION: Class 3r laser <5mW at 635nm.
GREEN3DMAX CAUTION: Class 3r laser <5mW at 522nm.

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

Follow relevant Australian Standards

3DMAX INTRODUCTION

Congratulations on purchasing one of the RedBack Pro Trade 3DMAX Auto Levelling 3x 360 line laser models. These instructions cover both the RED3DMAX (red beam) and GREEN3DMAX (green beam) models. Please note that some of the features described in this manual may be specific to just one of these models and will be indicated as so.

Both these models feature three full 360° lines, one horizontal and two vertical at 90 degrees to each other. The 3DMAX has an ultra bright red beam laser and the GREEN3DMAX has an ultra bright green beam laser.

The 3DMAX models are ideal for all manner of internal fit out and installation applications by providing a fast self levelling horizontal line around the whole room as well as 2 vertical lines again 360° coverage and at 90° to each other for alignment and squaring plus also providing plumb up and down crosses. In addition these models has pulse mode and so can be used outdoors with an optional line receiver such as the LLR705 or LLRMM30 by RedBack.

The 3DMAX's Comes with the BAT MAX Li-ion rechargeable battery and USB C charging cable.

The 3DMAX models feature manual mode for setting of a manual slant and comes with an elevating magnetic base which can also be mounted on an optional tripod such as the RedBack IET150.

3DMAX Kit Included Accessories

- a 3DMAX Laser Unit (either Red or Green)
- Protective Carry Case
- Rechargeable Li-ion Battery
- USB C Charging Cable
- Elevating Magnetic Base
- Instruction Manual

Note: RED3DMAX comes with Red Glasses & Target



3DMAX DIAGRAMS

RED3DMAX & GREEN3DMAX Laser Units

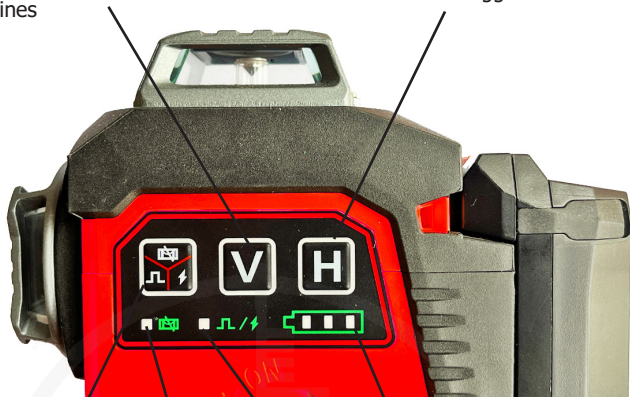


1. Laser Output Windows
2. Control Keypad
3. Power Switch
4. Battery Socket
5. 1/4" & 5/8" Female Screw Points

Keypad

Select Vertical Lines
Toggle Switch. Each
press cycles through the
Lines

Select Horizontal
Line Toggle Switch



Manual Mode,
Pulse Mode
and Flash Mode
Function Button

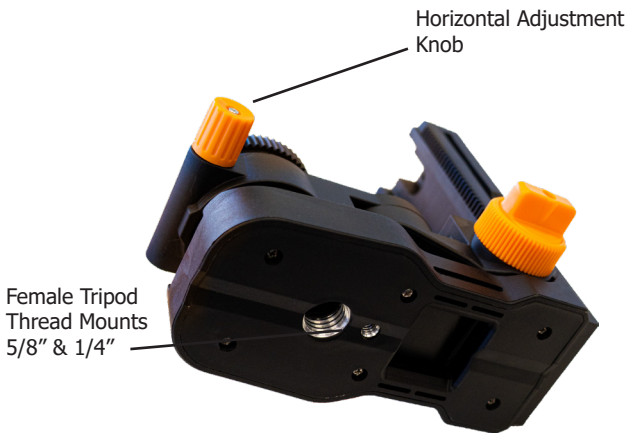
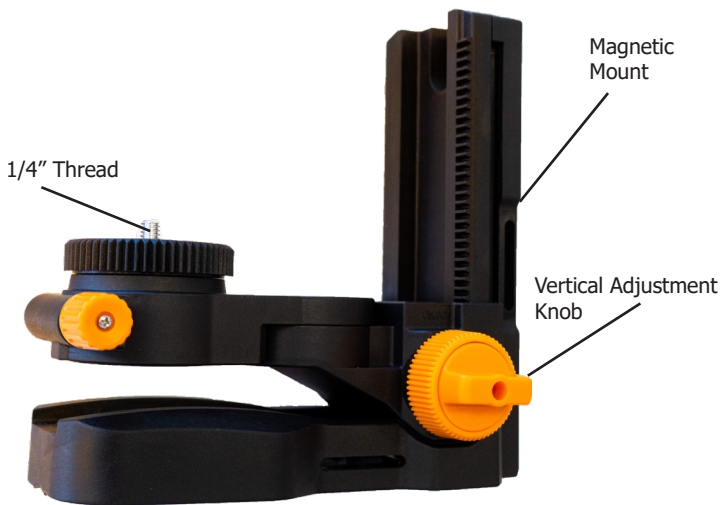
Manual
Mode LED

Pulse & Flash
Mode LED

Battery Indicator LED

3DMAX DIAGRAMS

Mounting Bracket



3DMAX OPERATING INSTRUCTIONS

Battery Instructions

The 3DMAX models come with the Li-ion BAT MAX rechargeable pack. For operation, slide the Li-Ion battery in the direction indicated and slide the holder into battery recess and close the battery compartment cover.

To use the rechargeable battery pack first remove standard pack if inserted by pressing the red push button and sliding upward. Then slide the BAT MAX battery pack onto the same position until you hear click.

To charge the BAT MAX battery pack simply insert the USB C charger cable into the USB C socket on the Li-ion battery pack itself. The battery can be charged either when mounted on the laser or when removed.

The LED on the BAT MAX will illuminate red when Charging and green when charged.

The Battery LED's on the laser keypad indicates how much charge the battery has with 3 Lights indicating fully charged.



Handy Hints

- *Prior to initial use, fully charge the rechargeable battery.*
- *If when you insert a battery pack the laser does not power up try re-loading the battery pack to make sure there is a good connection.*

3DMAX OPERATING INSTRUCTIONS cont.

Turning On the 3DMAX models

To power up, simply unlock the pendulum by moving it to the "ON" position, this will automatically self level the laser. If when you unlock the pendulum all laser flash and a beeping sound is emitted then the laser is out of self levelling range, place the laser on a more level surface for the device to self level.



Next select the lasers press either the "H" Horizontal button or "V" Vertical buttons. Each press of the Vertical button will toggle between the two lines or both at the same time. To power down the laser level simply re-lock the pendulum by switching it to the "OFF" Position.

Always transport the RedBack 3DMAX laser level with the pendulum in the locked "OFF" position to protect the device when not being used.



Manual Mode

Manual mode allows you to turn on one or more of the 360 degree lines with the pendulum in the locked position and so allows you to set up a laser line at an angle such as for installing balustrades. Manual mode is activated by pressing the mode left button when the pendulum is in the **locked "OFF" position**. The manual mode LED light will flash warning you that the laser is not self levelling. Note: further presses of the mode button will toggle through Pulse Mode for use with receivers and Flash Mode for added visibility a further press will turn off the laser and exit manual mode. When in manual mode you can turn on laser lines as previously indicated.

Further information on Pulse mode and receivers will be covered later. See page 10



360 Rotate Feature

A new feature with the 3D MAX models is the 360° Rotatable Vertical line covers. Rotating these covers allows you to move the shadowed area of the 360 laser line if it happens to occur in an inconvenient position. To use simply rotate the required housing in either direction until the shadow or gap in the line is no longer in the way.

3DMAX OPERATING INSTRUCTIONS cont.

Pulse Mode

Pulse mode allows the 3DMAX models to be used with an optional line receiver such as the RedBack LLR705 or LLR805mm and so allowing the laser to be used outside for general site levelling, patios, decking etc. If you purchased the GREEN3DMAX+ or RED3DMAX+ kits the LLR705 receiver is included

To enable pulse mode first unlock the pendulum to allow self levelling and to power up the laser then you press the left mode button once. The Pulse LED light will indicate when pulse mode is enabled. You may notice the laser line slightly dims when in pulse mode. NOTE: Pressing the mode button once more enters flashing mode, this will not work with the receiver but makes the line visibly stand out more if required. A further press of the mode button will turn off flash mode and return to full normal visible mode.






To enable pulse mode when the laser is in manual mode first press the left mode button when the pendulum is locked (OFF) then one more press of this mode button will enter Pulse Mode and another press Flash Mode. One more press and the laser powers down.



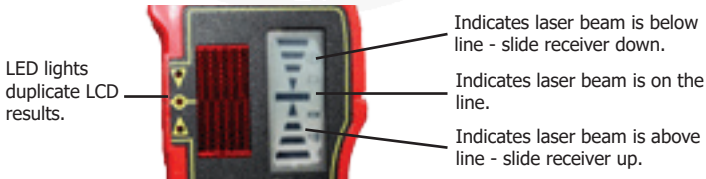
Laser Receiver LLR705 (OPTIONAL Accessory)

The RedBack LLR705 allows the laser beam to be picked up outside at up to 40m in any lighting conditions. Ideal for site levelling, decking, sheds, slabs, framing and much more. NOTE: laser must be in Pulse Mode for the receiver to pick it up, The receiver will not pick up the laser in Standard Mode or flash Mode.

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. For picking up horizontal lines hold the receiver as shown below, for picking up vertical lines place on its side.



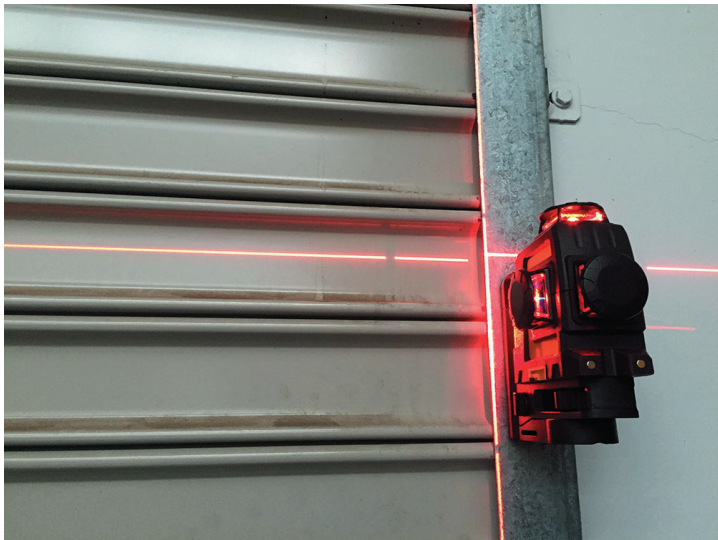
3DMAX OPERATING INSTRUCTIONS cont.

3DMAX Mounting Options

The 3DMAX models come with a magnetic mounting bracket and this mounting bracket features an elevating plate which allows the height of the horizontal laser line to be finely adjusted. The elevating plate also features a locking knob to prevent the lasers height changing once set.

The bracket and laser housing features a 5/8" survey thread which allows the 3DMAX to be mounted onto an indoor elevating tripod such as the RedBack Lasers IET150 or outdoor heavy duty tripod HDF94. The bracket and housing of the laser level also feature a 1/4" thread allowing it to be mounted onto a camera style tripod.

Finally the bracket features strong vertical magnets that allow mounting onto ferrous metals for installation applications.



Technical Specifications

RED3D MAX - Red Beam

Laser Wavelength	635nm Red
Laser Class	3r <5mW
Visible Range (light dependent)	Up To 35m
Range with Optional Receiver	Up to 60m radius (Full Sunlight)
Accuracy	±2mm/10m
Number 360° lines	3
Self Levelling Range	±3°
Temperature Range	-10°C - +40°C
IP Dust Water Resistance	IP55
Power	2x Li-Ion Rechargeable Battery
Low Power	Power LED Indicator

Range with Receiver as tested with RedBack LLR705 receiver, range may vary depending on type of line receiver used.

3D MAX TECHNICAL SPECIFICATIONS

Technical Specifications

GREEN3D MAX - Green Beam

Laser Wavelength	522nm Green
Laser Class	3r <5mW
Visible Range (light dependent)	Up To 35m
Range with Optional Receiver	Up to 40m radius (Full Sunlight)
Accuracy	±2mm/10m
Number 360° lines	3
Self Levelling Range	±3°
Temperature Range	-10°C - +40°C
IP Dust Water Resistance	IP55
Power	2 x Li-Ion Rechargeable Battery
Low Power	Power LED Indicator

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. Please see warranty conditions on page 16.

Care & Maintenance

- Keep laser and accessories stored in protective case.
- Make sure laser is stored dry, dry out before storage to prevent damage.
- The 3DMAX is a precision instrument and should not be subjected to excessive knocks, drops or vibrations.
- Self check calibration from time to time. See page 14
- For service contact Redback Lasers. www.redbacklasers.com.au



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 Unit2 20 Tarkin Court, 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 3DMAX models 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. LLR705 receivers 2 Year warranty, Ni-Mh Battery/Charger 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, 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.