

名称	快速指南	料号	
迈测型号		尺寸	展开 490x285mm 成品 70x142.5mm
客户型号	无	版本	
材质及工艺	105g 铜板纸, 正反面黑白印刷		
设计		日期	



**OWNER'S OPERATING MANUAL  
LASER DISTANCE MEASURER  
MODEL LDM-72B**

**SPECIFICATIONS**

Max. measuring range	0.2-70m
Measuring accuracy	±(2.0 mm +5x10 <sup>-4</sup> D)
Tilt measurement accuracy	±0.3°
Screen display	2 inch touch display
Measuring reference	Front/Tripod/Rear
Measuring units	m/m/m/ft+in
Memory	30 values
Auto power switch off	After 180s
Laser type	IP65
Protection class	Class 2
Operating temperature	0°C-40°C
Storage temperature	-10°C-40°C
Battery type	3 x 1.2V (NI-MH rechargeable battery)
Product size	115 x 49 x 26mm

**THANK YOU FOR BUYING A RYOBI LASER DISTANCE MEASURER**

Your new laser measurer has been engineered and manufactured to Ryobi's high standard of dependability, ease of operation and operator safety. Properly cared for, it will give you years of rugged, trouble free performance. If you use your laser measurer properly and only for what it is intended, you will enjoy years of safe, reliable service.

**CAUTION:** Carefully read through this entire owner's manual, paying close attention to the general safety rules and rules for safe operation, before using.

**KEEP THIS MANUAL FOR FUTURE REFERENCE**

**IMPORTANT SAFETY INSTRUCTIONS**

The purpose of safety rules is to attract your attention to possible dangers. The safety symbols and the explanations with them, require your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. The instruction or warnings they give are not substitutes for proper accident prevention measures.

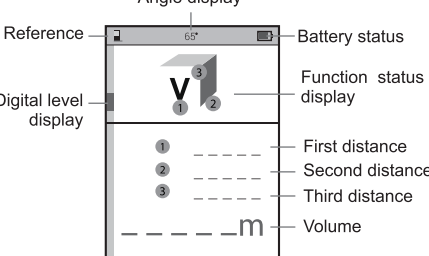
**SAFETY ALERT SYMBOL**  
Indicates danger, caution or warning. May be used in conjunction with other symbols or pictures.

Failure to obey a safety warning can result in serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.

Do not attempt to operate this tool until you have read thoroughly and completely understood the safety rules, etc. contained in this manual. Failure to comply can result in accidents involving fire, electric shock or serious personal injury. Save this Owners Operating Manual and review it frequently for continual safe operation and for instructing others who may use this tool.

**INTENDED USE**  
Your Ryobi laser distance measurer has been designed for domestic use only. It may be used for measuring distances, lengths and heights. The laser distance measurer can be used indoors and outdoors.

**MEASURING INTERFACE**



**OPERATION**

**NOTE BEFORE STARTING**  
The latest measuring line and distance are displayed in Red, measure data marked in gray and the summary line displayed in green.

**SINGLE DISTANCE MEASUREMENTS**  
Long press [ON] to switch on the instrument. The screen will automatically display single distance measurement mode.

Press [V] after aiming at the target to trigger the distance measurement. The measured value is displayed immediately in the summary line.

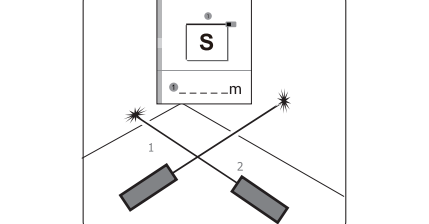
**CONTINUOUS MEASUREMENTS**  
The continuous measurement allows the user to measure the maximum or minimum distance from a fixed measuring point.

Long press [MIN] and slowly sweep the laser back and forth and up and down over the desired target. Press [V] again when you have finished. The maximum and minimum distance values are indicated in the display as well as the last measured value marked in green. This function will be stopped automatically after 5 minutes of inactivity.



**AREA MEASUREMENT**  
Slide your finger to the right of the screen to access the measurement mode menu. Scroll up and down and select the icon [A] for area measurement.

The icon on screen will show a red line indicating that the length measurement should be taken. Press [V] to get the length distance and then press [V] again to get the width distance. The area is calculated and displayed in the summary line.



**VOLUME MEASUREMENT**  
Slide your finger to the right of the screen to access the measurement mode menu. Scroll up and down and select the icon [V] for volume measurement.

**WARNING!** To reduce the risk of injury, the user must read and understand the operator's manual.

**SAFETY INSTRUCTIONS**  
**WARNING! LASER RADIATION. AVOID DIRECT EYE EXPOSURE.**

DO NOT stare into the laser source.  
Never aim light at another person or object other than the workpiece.

The laser light can damage your eyes.  
Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Do not direct the laser beam at persons or animals and do not stare into the laser beam yourself.

This laser complies with class 2 according to IEC 60825-1:2014. Do not replace the laser diode with a different type. If damaged, have the laser repaired by an authorized repair agent.

Do not use the laser for any purpose other than projecting laser lines.

**SPECIFIC SAFETY INSTRUCTIONS**  
**WARNING!** Working safely with the laser measurer is possible only when the operating and safety information are read completely and the instructions contained therein are strictly followed. Never make warning labels on the product unrecognizable.

Never aim the beam at a workplace with a reflective surface. Bright shiny reflective sheet steel or similar reflective surfaces are not recommended for laser use. Reflective surfaces could direct the beam back toward the operator.

Take care to recognize the accuracy and range of the device. Measurement may not be accurate if used beyond the rated range of the device.

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

The use of optical instruments with this product will increase eye hazards.

Have the laser measurer repaired only through a qualified specialist using original spare parts. This ensures that the safety of the laser measurer is maintained.

Do not allow children to use the laser measurer without supervision. They could unintentionally blind other persons.

Do not point the laser beam at persons or animals and do not look into the laser beam yourself, not even from a large distance.

Do not use laser viewing glasses as safety goggles. Laser viewing glasses are used for improved visualization of the laser beam, but they do not protect against laser radiation.

**SAFE OPERATING PROCEDURES**  
Use of controls or adjustments or performance of procedures other than those specified in this manual, may result in hazardous radiation exposure.

The use of optical instruments with this product will increase eye hazard.

**ALWAYS:** Make sure that any bystanders in the vicinity of use are made aware of the dangers of looking directly into the laser measurer.

DO NOT remove or deface any warning or caution labels. Removing labels increases the risk of exposure to laser radiation.

DO NOT stare directly at the laser beam or project the laser beam directly into the eyes of others. Serious eye injury could result.

DO NOT place the laser measurer in a position that may cause anyone to stare into the laser beam intentionally or unintentionally. Serious eye injury could result.

DO NOT use any optical tools such as, but not limited to, telescopes or transits to view the laser beam. Serious eye injury could result.

**ALWAYS** remove the batteries when cleaning the laser light aperture to laser lens.

DO NOT operate the laser measurer around children or allow children to operate the laser measurer. Serious eye injury could result.

**ALWAYS** turn the laser measurer "OFF" when not in use. Leaving the laser measurer "ON" increases the risk of someone inadvertently staring into the laser beam.

DO NOT operate the laser measurer in combustible areas such as in the presence of flammable liquids, gases or dust.

**ALWAYS** position the laser measurer securely. Damage to the laser measurer and/or serious injury to the user could result if the laser measurer falls.

**ALWAYS** use only the accessories that are recommended by the manufacturer of your laser measurer. Use of accessories that have been designed for use with other laser measurer could result in serious injury.

DO NOT leave laser measurer "on" unattended in any operation mode.

**ALWAYS** repair and servicing must be performed by a qualified repair facility. Repairs performed by unqualified personnel could result in serious injury.

DO NOT use this laser measurer for any purpose other than those outlined in this manual. This could result in serious injury.

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

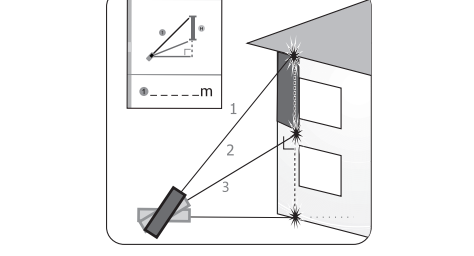
**IMPORTANT NOTE**  
During daylight or if the target has poor reflection properties, please use a target plate.

In favorable conditions (good target surface properties, room temperature), the device can reach up to rated measuring range.

In unfavorable conditions, such as intense sunshine, poorly reflecting target surface (black surface) or high temperature variations, the deviation over 10m of distance may increase.

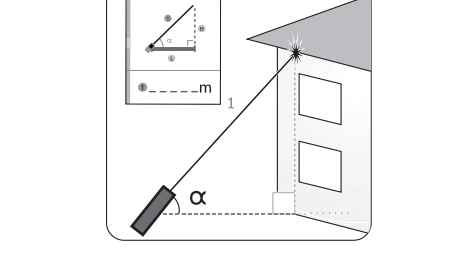
In favorable conditions (good target surface properties, room temperature), the device can reach up to rated measuring range.

Change to the horizontal direction of the object from the fixed measuring point and press [V] to get the distance of the 3rd line. The result is calculated and displayed in the summary line.



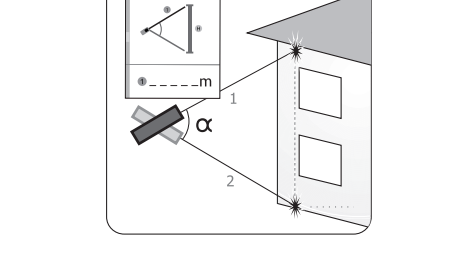
**AUTO LEVEL MEASUREMENT**  
Slide your finger to the right of the screen to access the measurement mode menu. Scroll up and down and select the icon [L] for auto level measurement.

Following the red line shown on the icon displayed press [V] to get the distance of the hypotenuse, vertical or horizontal lines. The result is calculated and displayed in the summary line.



**AUTO HEIGHT MEASUREMENT**  
Slide your finger to the right of the screen to access the measurement mode menu. Scroll up and down and select the icon [H] for auto height measurement.

Following the red line shown on the icon displayed press [V] to get the distance of the 1st line, press [V] to get the 2nd line. The vertical height is displayed in the summary line.



**POINT TO POINT (P2P) MEASUREMENT**  
Slide your finger to the right of the screen to access the measurement mode menu. Scroll up and down and select the icon [P] for P2P measurement.

Follow the instructions on screen "Self calibrate, do not move it". Make sure you hold the device completely still and wait for the calibration to finish.

Following the red line shown on the icon displayed press [V] to get the distance of the 1st laser point, move the device from the fixed measuring point, press [V] again to get the distance to the 2nd laser point. The distance between the two laser points is displayed in the summary line.

The icon on screen will show a red line indicating that the 1st line measurement should be taken. Press [V] to get the distance of the 1st line, move to the 2nd target point from the fixed measuring point and press [V] again to get the distance of the 2nd line.

**ELECTRICAL SAFETY WARNINGS**  
**WARNING!** Batteries can explode or leak, and can cause injury or fire. To reduce this risk:

**ALWAYS** follow all instructions and warnings on all of them at the same time with new batteries of the same brand and type.

DO NOT short any battery terminals.

DO NOT charge alkaline batteries.

DO NOT mix old and new batteries. Replace all of them at the same time with new batteries of the same brand and type.

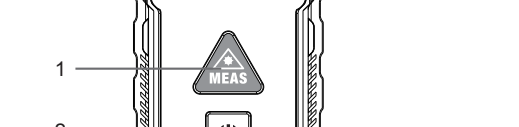
DO NOT mix battery chemistries.

DISPOSE of batteries per local code.

DO NOT dispose of batteries in fire.

KEEP batteries out of reach of children.

REMOVE batteries if the device will not be used for several months.



Replace the cover and slide upwards to seal in place.

This product uses rechargeable NI-MH batteries. Please use the provided USB cable while charging. A computer can also be used to charge the unit via the USB cable but this will take more time.

**WARNING!** When using dry batteries, DO NOT use the USB port to charge. DO NOT mix rechargeable batteries with dry batteries at the same time to avoid accidents. Any damage caused by improper use of charging dry batteries is not covered by the warranty. RYOBI will not be responsible for it.

While charging, the device may heat up. This is normal and will not affect the product performance and lifespan.

Please unplug the charger and remove the batteries when not in use.

**BATTERY REPLACEMENT**  
If the instrument does not switch on or the battery symbol has no bars, replace the batteries as previously stated above.

**BATTERY DISPOSAL**  
You, as the end user, are legally bound to return all used batteries, disposal in the household garbage is prohibited! You can hand over your used batteries / accumulators at collection points in your community or wherever batteries / accumulators are sold. Follow the valid legal stipulations in respect of the disposal of the device at the end of its lifetime.

**BATTERY SAFETY REMINDERS**  
Please dispose of batteries responsibly, always observe local, state, and federal regulators with regard to battery disposal.

Never dispose of batteries in a fire. Batteries may explode or leak.

Never mix battery types. Always install new batteries of the same type.

**261** Outside of the range of measurement. Select the measurement distance within the range of measurement.

**500** Hardware error. Switch the device On/Off several times. If the code still appears contact your distributor.

**RECYCLING AND DISPOSAL**

**GENERAL MAINTENANCE**  
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.

Recycle rather than dispose of unwanted material in landfill whenever possible. The machine must be delivered in rigid packaging to avoid damage during transportation. The packaging and the machine itself are manufactured from recyclable materials and should be disposed of accordingly.

Only dispose of electrical/electronic/battery terms in separate collection schemes, which cater for the recovery and recycling of materials contained within. Your cooperation is vital to ensure the success of these schemes and for the protection of the environment.

Recycle packaging where facilities exist.

This symbol is known as the Crossed out Wheeled Bin Symbol. When this symbol is marked on a product or battery, it means that it should not be disposed of with your general household waste. Some chemicals contained within electrical/electronic products or batteries can be harmful to health.

**SERVICE**

Now that you have purchased your tool, should a need ever exist of repair or service, simply contact your nearest Ryobi Authorized Service Centre or other qualified service organisation. Be sure to provide all pertinent facts when you call or visit.

**SYMBOLS**

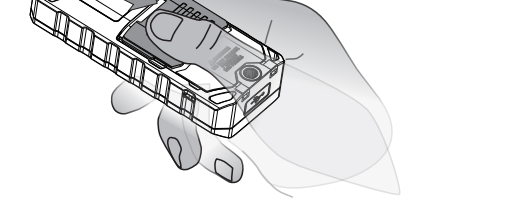
Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the product better and safer.

**TROUBLESHOOTING**

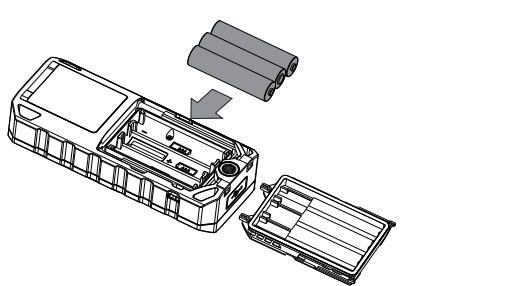
CODE	CAUSE & CORRECTIVE ACTION
204	Calculation error. Repeat the procedures in "OPERATION".
208	Excessive current. Please contact your distributor.
220	Battery low. Replace batteries.
253	Temperature too low. Warm up the device.
255	Received signal is too weak or measurement time is too long. Use a target plate or a good reflective surface.
256	Received signal is too strong. The target is too reflective. Use a target plate or do not aim at a strong light object.

**INSTALLING THE BATTERIES**

Press and slide the cover towards the rear of the battery to open the battery door.



Insert 3, 1.2V AAA batteries according to the direction icons on the inside of the battery compartment. The TPE sealing ring has been adopted to prevent water and dust.



Replace the cover and slide upwards to seal in place.

This product uses rechargeable NI-MH batteries. Please use the provided USB cable while charging. A computer can also be used to charge the unit via the USB cable but this will take more time.

**WARNING!** When using dry batteries, DO NOT use the USB port to charge. DO NOT mix rechargeable batteries with dry batteries at the same time to avoid accidents. Any damage caused by improper use of charging dry batteries is not covered by the warranty. RYOBI will not be responsible for it.

While charging, the device may heat up. This is normal and will not affect the product performance and lifespan.

Please unplug the charger and remove the batteries when not in use.

**BATTERY REPLACEMENT**  
If the instrument does not switch on or the battery symbol has no bars, replace the batteries as previously stated above.

**BATTERY DISPOSAL**  
You, as the end user, are legally bound to return all used batteries, disposal in the household garbage is prohibited! You can hand over your used batteries / accumulators at collection points in your community or wherever batteries / accumulators are sold. Follow the valid legal stipulations in respect of the disposal of the device at the end of its lifetime.

**BATTERY SAFETY REMINDERS**  
Please dispose of batteries responsibly, always observe local, state, and federal regulators with regard to battery disposal.

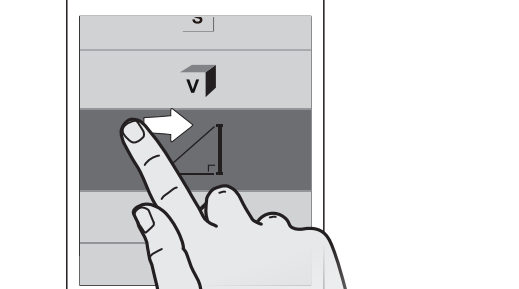
Never dispose of batteries in a fire. Batteries may explode or leak.

Never mix battery types. Always install new batteries of the same type.

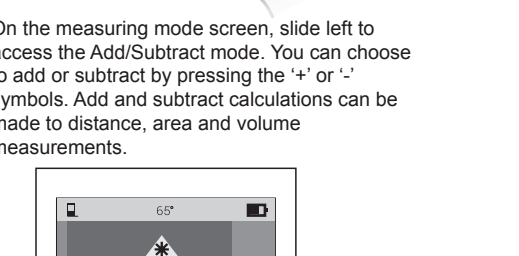
**TOUCHSCREEN OPERATIONS**

Long press [ON] to switch on the instrument. The screen will automatically display measurement mode.

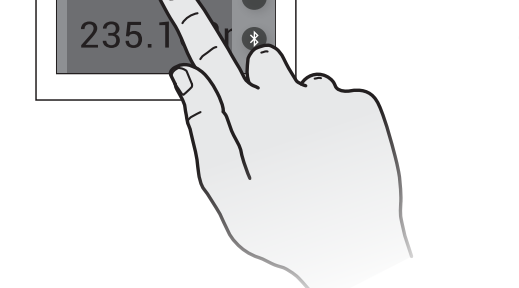
Slide your finger to the right of the screen to access the measurement mode menu. Scroll up and down to select the desired measuring mode.



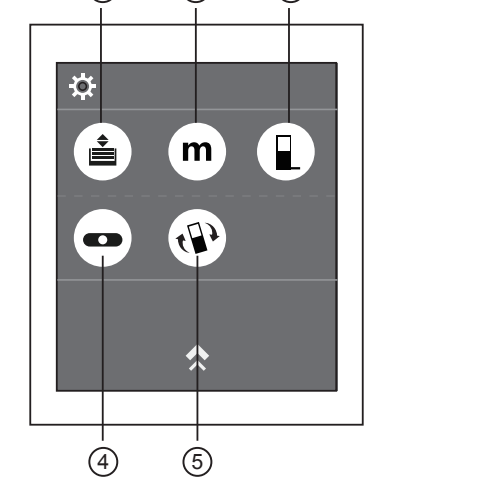
On the measuring mode screen, slide left to access the Add/Subtract mode. You can choose to add or subtract by pressing the "+" or "-" symbols. Add and subtract calculations can be made to distance, area and volume measurements.



On the measuring mode screen, slide down to access the setup menu. Slide up to retract it again.



**SETUP MENU**



**1. Memory**  
Press to recall memory values. Press [V] or slide the screen left or right to view history values.

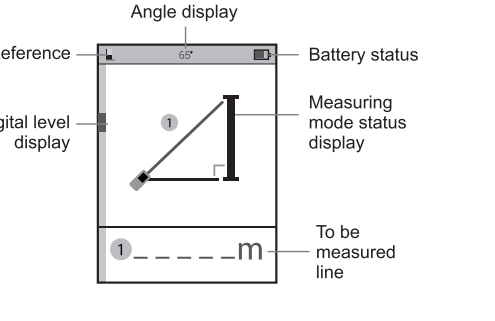
**2. Measuring Unit**  
Press to change the measuring units (m/ft/in/ft+in).

**3. Measuring Reference**  
Press to change the reference (Front/Tripod/Rear). Rear is the default reference.

**4. Digital Level**  
Press to activate digital level. The electronic tilt sensor makes it easier to achieve horizontal alignment with the real-time measuring angle.

**5. Screen Rotation**  
Press to activate screen orientation setting. The screen will automatically switch to Landscape display when the device placed horizontally.

**MEASURING INTERFACE**



**RYOBI POWER EQUIPMENT WARRANTY**

Subject to the warranty conditions below, this RYOBI tool (hereinafter called "the Product"), is warranted by Ryobi (herein called "the Company") to be free from defects in material or workmanship for a period of 24 months from the date of original purchase covering both parts and labour. Under the terms of this warranty, the repair or replacement of any part shall be the opinion of the Company or its authorised agent. Should service become necessary during the warranty period, the owner should contact the authorised Ryobi retailer from whom the product was purchased, or the nearest Company branch office. In order to obtain warranty service, the owner must include the Sales Docket and Warranty Certificate to confirm date of purchase. This Product is sold by the dealer or agent as principal and the dealer has no authority from the Company to give any additional warranty or guarantee on the Company's behalf except as herein contained or herein referred to.

**Warranty Conditions**  
This warranty only applies provided that the Product has been used in accordance with the manufacturer's recommendations under normal use and reasonable care (in the opinion of the Company) and such warranty does not cover consumable components, damage, malfunction or failure resulting from misuse, neglect, abuse, or used for a purpose for which it was not designed, or is not suited and no repairs, alterations or modifications have been attempted by other than an Authorised Service Agent. This guarantee will not apply if the tool is damaged by accident or if repairs arise from normal wear and tear. Accessories such as bits, blades, sanding discs, cutting lines, etc., are excluded from this guarantee. Normal consumable parts, such as carbon brushes, bearings, chucks, cord assembly's, spark plugs, recoil pulleys and bump head assembly's are specifically excluded from this guarantee. The Company accepts no additional liability pursuant to this warranty for the costs of traveling or transportation of the Product or parts to and from the service dealer or agent - which costs are not included in the warranty. Nothing herein shall have the effect of excluding, restricting or modifying any conditions, warranty, right or liability imposed, to the extent only that such exclusion, restriction or modification would render any term herein void.

**STEVENS & CO (Pty) Ltd**  
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email: stevens@ryobi.co.za

**THIS WARRANTY FORM SHOULD BE RETAINED BY THE CUSTOMER AT ALL TIMES.**  
For your record and to assist in establishing date of purchase (necessary for in-warranty service), please keep your purchase docket and this form, completed with the following particulars.

PURCHASED FROM:.....  
ADDRESS OF DEALER:.....  
DATE:..... MODEL NO..... SERIAL NO.....

Present this form with your Purchase Docket when Warranty Service is required.

