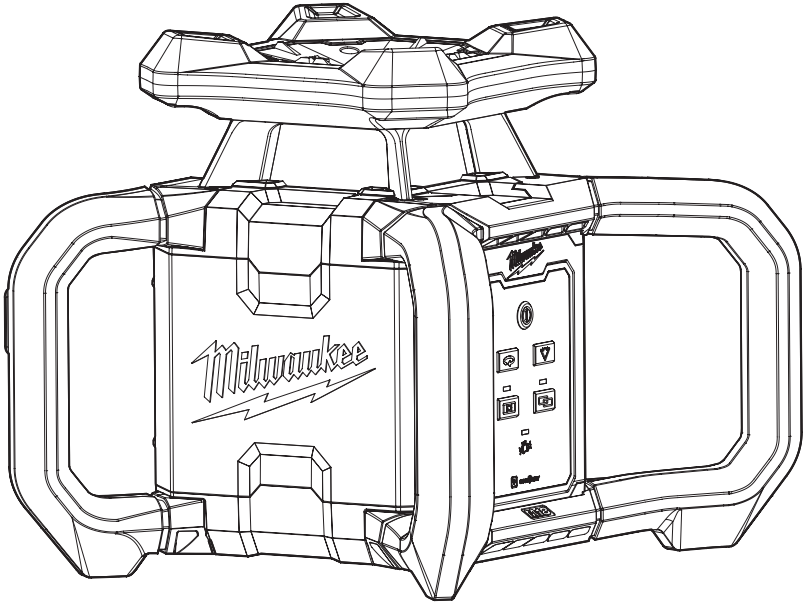
OPERATOR'S MANUAL
MANUEL de L'UTILISATEUR
MANUAL del OPERADOR



Cat. No. / No de cat.
3702-20

M18™ GREEN INTERIOR ROTARY LASER LEVEL
NIVEAU LASER ROTATIF INTÉRIEUR VERT DE M18™
NIVEL DE LÁSER GIRATORIO INTERIOR VERDE M18™

WARNING **To reduce the risk of injury, user must read and understand operator's manual.**
AVERTISSEMENT **Afin de réduire le risque de blessures, l'utilisateur doit lire et bien comprendre le manuel.**
ADVERTENCIA **Para reducir el riesgo de lesiones, el usuario debe leer y entender el manual.**

GENERAL POWER TOOL SAFETY WARNINGS

⚠WARNING Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury. **Save all warnings and instructions for future reference.**

- **Save these instructions -** This operator's manual contains important safety and operating instructions.

LASER SAFETY

⚠WARNING The device produces visible laser beams, which are emitted from the tool.

- **This device complies with 21 CFR 1040.10 and 1040.11 except for conformance with IEC 60825-1 Ed. 3., as described in Laser Notice No. 56, dated May 8, 2019.**
- **Laser light - Do not stare into beam or view directly with optical instruments. Do not point laser light at others.** Laser light can cause eye damage.

WORK AREA SAFETY

- **Ensure adequate safeguards at the work site (e.g. surveying site when measuring on roads, construction sites, etc.).**
- **Avoid dangerous environments.** Avoid extended exposure to rain, snow, damp or wet locations. Do not use in the presence of explosive atmospheres (gaseous fumes, dust or flammable materials).

PERSONAL SAFETY

- **Do not allow persons unfamiliar with the tool, these safety instructions, and the tool's operator's manual to operate the tool.** This tool can be dangerous in the hands of untrained users.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the tool in unexpected situations.

BATTERY TOOL USE AND CARE

- **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
- **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.
- **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.
- **Do not use a battery pack or tool that is damaged or modified.** Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.
- **Do not expose a battery pack or tool to fire or excessive temperature.** Exposure to fire or temperature above 265°F (130°C) may cause explosion.
- **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.** Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.
- **Store your battery and tool** in a cool, dry place. Do not store battery where temperatures may exceed 120°F (50°C) such as in direct sunlight, a vehicle or metal building during the summer.

SPECIFIC SAFETY RULES FOR ROTARY LASER LEVELS

- **The device conforms to the most stringent requirements of the relevant Electromagnetic Compatibility (EMC) Standards and Regulations.** Yet, the possibility of causing interference in other devices cannot be totally excluded.
- **⚠CAUTION Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.**
- **Be sure to power off instrument after use.** When instrument will not be used for a long period, place it in storage after removing batteries.
- **Watch out for erroneous results if the tool is defective or if it has been dropped, misused or modified.**
- **Do not dispose of tool or batteries together with household waste material!** Tool and batteries that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.
- **Chemical Burn Hazard. Keep coin cell battery away from children.**
- **If using with a lanyard, do not exceed maximum capacity marked on the lanyard label.** Always determine the weight of the product, with all accessories, when selecting the appropriate lanyard system. Exceeding maximum capacity may result in serious injury. See specifications for tool and battery weight.
- **For best results, use only with energy absorbing lanyards. Ropes, straps or chains may break and cause failure. Do not use with lanyards at full tension.**
- **⚠WARNING To reduce the risk of injury, when working in dusty situations, wear appropriate respiratory protection or use an OSHA compliant dust extraction solution.**
- **Always use common sense and be cautious when using tools.** It is not possible to anticipate every situation that could result in a dangerous outcome. Do not use this tool if you do not understand these operating instructions or you feel the work is beyond your capability; contact Milwaukee Tool or a trained professional for additional information or training.
- **Maintain labels and nameplates.** These carry important information. If unreadable or missing, contact MILWAUKEE for a free replacement.

Federal Communications Commission

⚠WARNING Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Consult the dealer or an experienced radio/TV technician for help.

SYMBOLOGY

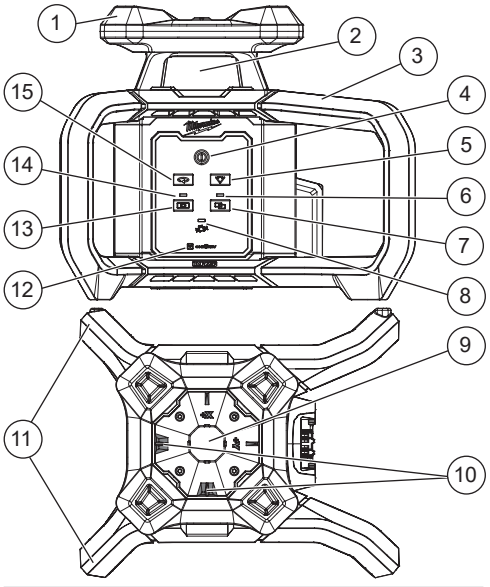
V	Volts
⎓	Direct Current
	LASER RADIATION DO NOT STARE INTO BEAM CLASS 2 LASER PRODUCT
	Read Operator's Manual
	Power Button
	RPM Button
	Sweep Button
	Leveling Button
	Pairing Button
	Bump Alarm LED
	Y-Axis Indicator
	Coin Cell Polarity Indicator

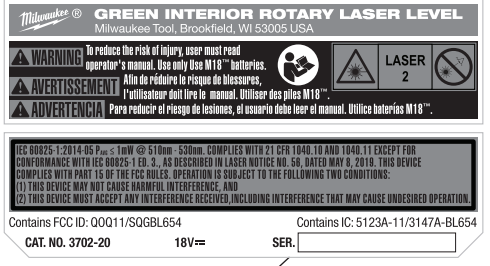
SPECIFICATIONS

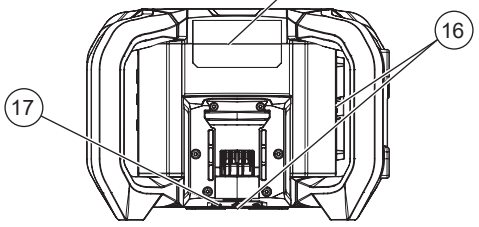
Cat. No.	**3702-20**
Volts	18 DC
Battery Type	M18™
Charger Type	M18™
Module/FCC ID	BGM11S/QOQ11 BL654/SQGBL654
Coin Cell Battery Type	CR2023
Laser	Class 2
Max Power	P_{AVG} ≤ 1 mW
Wavelength	510 - 530 nm
Beam Divergence	<1.5 mrad
Rotational Speed	300, 600, 1200 RPM
Sweep Angles	0°, 10°, 45°, 90°
Single Slope Axis Range	±6° (min)
Leveling Range	12° in X and Y Axis
Working Range	1000' (Diameter) (With Remote/Receiver)
Horizontal Plane Accuracy	±1/16" at 100' (0° tilt)
Vertical Plane Accuracy	±1/8" at 100' (0° tilt)
Plumb Point Accuracy	±1/8" at 100' (0° tilt)
Altitude	<6560'
Pollution Degree	2°
Typical Leveling Time	<12 (Seconds)
Travel Startup Time @ 8°	<40 (Seconds)
Mounting Insert	5/8"-11
Ingress Protection (Tool Only)	IP66
Drop	1.5 m
Tip Rating	2 m
Bare Tool Weight	8 lbs
Weight	9 lbs (With M18 XC™ 3.0 battery pack)
Maximum Relative Humidity (RH)	80% for up to 88°F
Decreasing Linearly Relative Humidity (RH)	50% at 104°F
Recommended Ambient	
Storage Temperature	-13°F to 140°F
Operating Temperature	0°F to 122°F
Recommended Compatible Remote/Receiver Cat. No.	**3712**

NOTE: Accuracies and leveling times are measured on a level surface at ambient temperatures. Use of the tool in extreme conditions may negatively impact these specs.

FUNCTIONAL DESCRIPTION







1. Protective foam top bumper
2. Laser aperture window
3. Protective foam handles
4. ON/OFF button
5. Sweep button
6. Pair indicator LED
7. Pair button
8. Bump alarm indicator LED
9. Plumb dot aperture window
10. X/Y Iron sights
11. Short lanyard attachment handles
12. ONE-KEY™ indicator LED
13. Leveling mode button
14. Leveling mode indicator LED
15. Leveling mode button
16. 5/8"-11 mounting insert (2)
17. ONE-KEY™ coin cell compartment

ASSEMBLY

⚠WARNING Recharge only with the charger specified for the battery. For specific charging instructions, read the operator's manual supplied with your charger and battery.

Removing/Inserting the Battery

To **remove** the battery, push in the release buttons and pull the battery pack away from the tool.

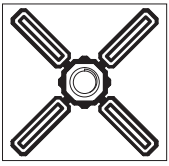
⚠WARNING Always remove the battery pack any time the tool is not in use.

To **insert** the battery, slide the pack into the body of the tool. Make sure it latches securely into place.

⚠WARNING Only use accessories specifically recommended for this tool. Others may be hazardous.

To reduce the risk of injury or damage, securely mount/attach the laser before starting an operation. Injury/damage may occur if the laser falls.

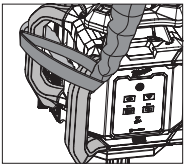
Mounting the Rotary Laser



The rotary laser can be mounted to a tripod or Rotary Laser Wall Mount:

- If working overhead, ensure the laser is secure before operating and attached to a MILWAUKEE 35 lbs rated lanyard.
- Ensure the laser and accessories are on a stable surface.
- Use one of the 5/8"-11 threaded inserts to mount on a tripod or Rotary Laser Wall Mount.

Lanyard Attachments



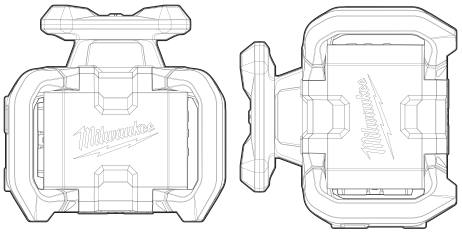
Use MILWAUKEE Lanyards to help reduce the risks associated with dropped tools. Complies with ANSI/ISEA 121:2018.

1. Follow instructions provided with tool lanyard.
2. When using the lanyard, user must attach both short handles together properly, as shown above, before operation.

   WARNING! To reduce the risk of serious injury or death, use only lanyards rated for the weight of the tool.

Laser Orientation

The rotary laser can operate in horizontal and vertical plane orientations. When in Auto-Leveling Mode, the laser will adjust to create a level or plumb plane, respectively. When placed in vertical orientation, the laser will default to a plumb point mode for setup. To project a vertical line, press the Rotational Speed button until desired RPM is achieved. **NOTE:** The laser will only work in one specific vertical orientation, with the keypad facing up and parallel to the working surface. Other orientations will result in a leveling error.



Horizontal Orientation | Vertical Orientation

ONE-KEY™

To learn more about the ONE-KEY™ functionality for this tool, go to milwaukeetool.com/One-Key. To download the ONE-KEY™ app, visit the App Store® or Google Play™ from your smart device.

ONE-KEY™ Indicator	
Solid Blue	Wireless mode is active and ready to be configured via the ONE-KEY™ app.
Blinking Blue	Tool is actively communicating with the ONE-KEY™ app.
Blinking Red	Tool is in security lockout and can be unlocked by the owner via the ONE-KEY™ app.

OPERATION

⚠WARNING To reduce the risk of injury or temporary effects on vision, do not look directly into the laser when it is on.

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

NOTICE **Perform the Accuracy Field Check procedure immediately upon unboxing of each new laser and before exposure to jobsite conditions. See "Accuracy Field Check" for information.** Should any deviation from listed product accuracy be found, please contact an authorized MILWAUKEE service center. Failure to do so could result in rejection of warranty claim.

Turning the Rotary Laser ON/OFF

- To turn the laser **ON**, press the power button. Once the button is pressed, an audible tone will sound.
- When powered on, the laser will begin the leveling sequence. Once level and ready for use, the Leveling Mode Indicator LED will become solid green. The laser will attempt to re-pair with its last paired remote/receiver. If successful, an audible tone will play, and the pairing LED will illuminate solid white. If unsuccessful, the pairing LED will flash, and the sound will play multiple times to indicate a failure to pair.
- To turn the laser **OFF**, press the power button. The laser diode will turn off, the head will stop rotating, and all LEDs on the laser will turn off.

Pairing the Remote/Receiver with the Rotary Laser

It is recommended to use the corresponding remote/receiver stated in the "specifications" section.

1. Ensure both the laser and remote/receiver are completely turned off.
2. To turn **ON** the remote/receiver, press the power button.
3. To turn **ON** the laser, press the power button.
4. Ensure auto-leveling is complete before pairing the remote/receiver to the laser. The Leveling LED will be solid green and the laser head will start to rotate
5. To **PAIR** the remote/receiver with the laser, select the pairing icon in the main menu of the remote/receiver, then press and hold the pairing button on the laser. The Pair Indicator LED will flash white while the tool searches for the remote/receiver. When the device connection is successful, an audible tone will sound, and the Pair Indicator LED will remain solid white.

NOTE: Only 1 laser and 1 remote/receiver can be paired at a time to the laser. If the connection fails after 30 seconds, the Pair Indicator LED will stop flashing, and the tool will beep multiple times to indicate a failure. The operation will need to be repeated.

Operating Modes

Rotational Mode

For best performance when using the remote/receiver, use 600 RPM. Different RPMs can be selected by pressing the Rotational Speed Button on the laser (1200, 300, and 600).

Sweep Mode

When using sweep mode, the laser beam oscillates within a limited range. The visibility of the laser beam is enhanced compared to rotational mode. Different sweep angles can be selected by pressing the Sweep button on the laser (0°,10°, 45°, and 90°).

Plumb Point Mode

The laser will default to Plumb Point Mode when placed in the vertical orientation. Use the plumb dot projected on the working surface to orient and set up the lasers before entering the Rotational or Sweep Mode.

Auto-Leveling Mode

When the laser initially turns on, the laser will automatically start to self-level. The Leveling Mode Indicator LED will begin flashing green.

- During the leveling process, the Bump Alarm will not be active. When the laser is leveled, the Leveling Mode Indicator LED will be solid green and the laser head will start to rotate. The laser will be ready for use.
- If the leveling process fails either by the one-minute timer or out of leveling range, the Leveling Mode Indicator LED flashes red, the laser diode turns off and stops rotating, and an audible tone will sound. **NOTE:** If the laser fails to level, ensure the laser is on a stable surface. This error occurs when the working surface causes the laser to be outside the leveling range. After, try pressing the Leveling Mode Button or power cycling the laser to trigger a relevel. If the problem persists, please contact an authorized MILWAUKEE service facility for support.

Complete Manual Mode

The laser will default to Auto-Leveling Mode. Complete Manual Mode can be used to deactivate Auto-Leveling and allow the user to manually position the laser plane. Ensure the laser has self-leveled (Leveling Mode Indicator LED is solid green).

1. Press the Leveling Mode button.
2. The Leveling Mode Indicator LED will turn solid red and remains on (the laser will no longer attempt to Auto-Level).
3. To turn **OFF**, press the Leveling Mode button again. The Leveling Mode Indicator LED will flash green and become solid once the level is achieved. Entering/exiting Complete Manual Mode will re-initialize the Bump Alarm to allow for further setup.

Manual Slope Mode

The laser plane can be manually sloped using a paired remote/receiver. When in Manual Slope Mode, the Leveling Mode Indicator LED will illuminate yellow. The laser will auto-level in one axis while sloping in the other.

- Start the operation using the remote/receiver. See the remote/receiver manual.
- To Exit Manual Mode from the laser, press the Leveling Mode button. The laser will enter Auto-Leveling Mode and begin to self-level. The Leveling Mode Indicator LED will turn solid green when leveling is achieved.

Bump Alarm

Due to the laser's high leveling accuracy, the laser is very sensitive to knocks, vibrations, and changes in position. The Bump Alarm will be triggered if the laser is moved from its initial location.

- The Bump Alarm will only be off while the laser establishes a new position.
- Once the Leveling Mode is established, the Leveling Mode Indicator LED becomes solid (green, yellow, or red), and the Bump Alarm Indicator LED will begin to flash white. During this time, disturbances will not trigger an alarm but will restart the initialization timer. After 30 seconds with no adjustments or inputs, the Bump Alarm Indicator LED will become solid white and the Bump Alarm will be active. Any bumps above the sensitivity limits will trigger the alarm. The laser diode will turn off, the head will stop rotating, the Bump Alarm Indicator LED will flash white, and the Leveling Mode Indicator LED will flash red. The laser will play an audible alarm. **NOTE:** The laser will default to High Sensitivity. Set up the laser on a flat and stable surface to avoid interruptions in operation. If the Bump Alarm becomes overly sensitive for environmental conditions, the setting can be viewed and changed using a paired remote/receiver.

Clearing the Bump Alarm (Option 1):

- Press the Leveling Mode button, and the laser will run Auto-Leveling sequence. Additional setup may be needed if the laser was moved from its previous position.

Clearing the Bump Alarm (Option 2):

- If the user suspects the laser has not been significantly disturbed, press the Rotational Speed button to clear the warning or clear with the OK button on paired remote/receiver and the laser head will start spinning in its current position. Inspect the laser plane to determine if it has been moved to determine if re-set up is needed.

NOTE: The laser will recall previous settings that were applied.

Sleep Mode

To conserve battery, the laser can be put into Sleep Mode from a paired remote/receiver. In this mode, the laser head will stop spinning, the laser diode and the Leveling Mode Indicator LED will turn off. The Pairing Indicator LED and Bump Alarm Indicator LED will continue to display the current setting.

1. To turn **ON** Sleep Mode, select the Sleep icon from the main menu on the remote/receiver.
2. Press the OK button to send the laser to "sleep" mode.
3. To turn **OFF** Sleep Mode, press any button on the laser or follow instructions to "wake" on a paired remote/receiver. The laser will function with the same settings and modes as when it entered Sleep Mode.

Temperature Alarm

The laser monitors temperatures when the tool is active or in Sleep Mode. If the minimum or maximum operating temperature limits are exceeded, the Leveling Mode Indicator LED will flash, alternating between red>green>red; in this pattern, laser diode will turn off, and the head will stop rotating. The laser will automatically turn off after 5 minutes of this alarm.

Clearing the Temperature Alarm:
- Wait for the temperature to return to the normal operating range stated in the "Specifications" section.
- When the tool reaches normal operating temperature, the tool will start the self-leveling process.

NOTE: The internal temperature of the tool may be several degrees warmer than the ambient temperature. Allow 2 hours for the tool to reacclimate to the new temperature before restarting.

Troubleshooting

- **Startup Failure -** If the Leveling Mode Indicator LED flashes in an amber color immediately after the laser is turned on, this is a result of a system error. Return the tool to an authorized MILWAUKEE service center.
- **Leveling Error -** The Leveling Indicator LED will flash red, and the alarm will sound. Ensure that the laser is on a level surface and the job site is clear of obstacles, any pressing of the buttons on the rotary laser may trigger the bump alarm or releveling may occur. If setting up in vertical orientation, check if it's in the correct orientation. The laser will only work in one orientation, with the keypad facing up and parallel to the ground. Try pressing the Leveling Mode Button to initiate Auto-Leveling. Try power cycling the laser to clear the setting. If this fails, return the laser to an authorized MILWAUKEE service center.
- **Bump Alarm Too Sensitive -** Ensure the laser is on a level and stable surface. Try changing to a less sensitive setting using a paired remote/receiver. Clear the Bump Alarm by using one of the options from "Clearing the Bump Alarm" section. If this fails, return the laser to an authorized MILWAUKEE service center.
- **Temperature Alarm -** If the red/green Leveling Mode Indicator LED is flashing, ensure the laser is within the operating temperature range. Note that the internal temperature of the tool may be 5 - 10° warmer than the ambient temperature. If stored in excessive heat or cold, allow at least 2 hours to acclimate to ambient temperature before turning on the tool.
- **ONE-KEY™ Lock Out -** The laser will turn on briefly but shut down after ~15 seconds. The ONE-KEY™ Indicator LED will be flashing red. This is an indicator that the laser is locked out. Use the ONE-KEY™ app to connect and unlock the tool.

Pairing Failure:
- Ensure the remote/receiver is powered on, within the distance range and in Pairing Mode.
- Avoid artificial overhead lighting on the remote/receiver sensor.
- Avoid the laser projecting a beam onto the remote/receiver sensor during pairing.
- Avoid transmitting devices
- Place the laser on a stable surface during pairing to prevent interruption from bump alarms. For best results, pair in the horizontal orientation.

NOTE: If all the recommended troubleshooting fails, power cycle the laser with the Power button. Try removing/re-inserting the battery to restart the tool. If the problem persists, return the laser to an authorized MILWAUKEE service center.

ACCURACY FIELD CHECK

NOTICE **Perform the Accuracy Field Check procedure immediately upon unboxing of each new laser and before exposure to jobsite conditions. See "Accuracy Field Check" for information.** Should any deviation from listed product accuracy be found, please contact an authorized MILWAUKEE service center. Failure to do so could result in rejection of warranty claim.

Influences on Accuracy

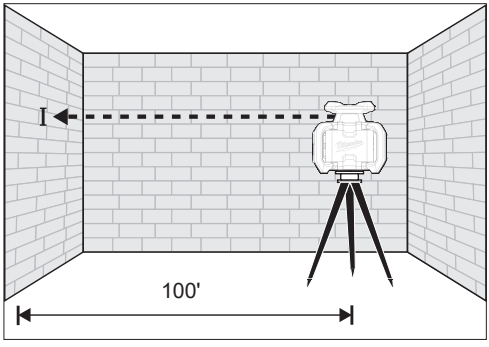
Ambient temperature changes can impact laser accuracies. For accurate and repeatable results, the following procedure should be done with the laser off the ground and placed in the center of the working area. Abusive treatment of the laser, such as excessive impacts from drops, can also lead to changes in product accuracy. Therefore, it is recommended to perform the "Field Check" procedure after any drops or before completing any critical jobs.

NOTE: Accuracies and leveling times are measured at ambient temperatures (68°F). Use of the tool at extreme temperatures (even within the operating temperature range) may negatively impact these specifications.

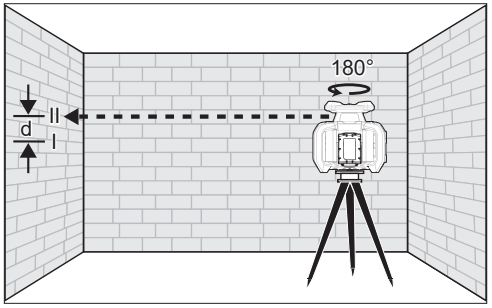
Leveling Accuracy for Horizontal Orientation

A tripod for this operation is suggested. Use a distance of 100' between the center of the laser and a wall. Ensure the area is clear of objects before doing this operation. This procedure must be performed twice to check the plane accuracy for both the X and Y axes.

1. Mount the laser on a tripod.
2. Turn **ON** the laser by pressing the power button, and wait for the self-leveling sequence to finish. The Leveling LED Indicator will be solid green.
3. Mark the center of the beam on the wall point I. If the laser is not visible, use a compatible remote/receiver to find the plane and mark the center point.



4. Rotate the laser 180°, and wait for the self-leveling to finish. Mark the center of the beam on the wall (point II). Ensure point II is as vertical as possible above or below point I.
5. Measure the vertical distance, (d) between points "I" and "II". This is the actual height deviation of the laser in the axis checked over 200'. The maximum deviation allowed should be 1/8" at 200' (or 1/16" at 100').

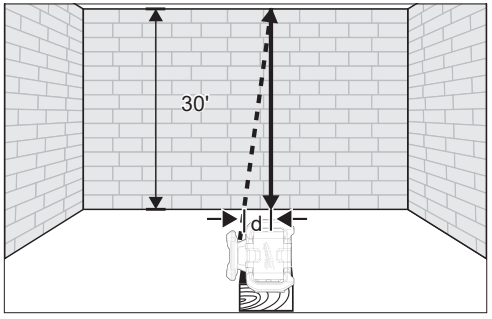


6. Repeat the steps above in other axis.

Leveling Accuracy for Vertical Orientation

Ensure the area is clear of obstructions before doing this operation. Attach a Plumb Bob to the ceiling near a wall. The Plumb Bob should be a minimum of 30' in length.

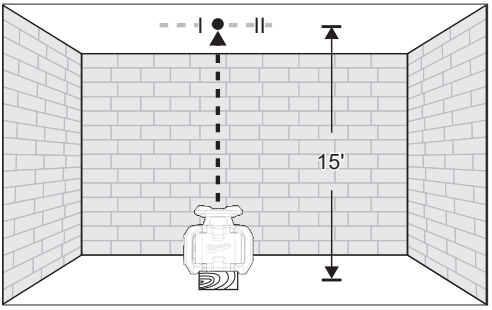
1. Ensure the work area is on a flat, clean surface.
2. Place the laser in the correct vertical orientation with the keypad facing up and parallel to the ground. If possible, elevate off the ground. Be sure the setup is stable before proceeding to the next step.
3. Turn **ON** the laser by pressing the power button, and wait for the self-leveling sequence to finish. The Leveling LED Indicator will be solid green.
4. Press the Rotational Speed button to start the laser head rotation. Manually turn the tool to align the laser, so it crosses the Plumb Bob line at least 30' above the ground.
5. Measure the distance between the Plumb Bob string and the laser at the base of the wall. This distance represents the laser's actual deviation from plumb. The maximum deviation allowed should be 3/64" over 30' (or 1/8" at 100').



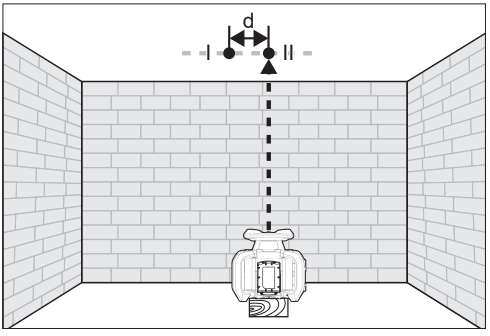
Plumb Dot Accuracy

A free measuring distance of approximately 15' between the floor and ceiling on a firm surface is required. It's suggested to elevate the tool off the ground for this operation.

1. Place the tool within 1' of the floor.
2. Turn **ON** the tool by pressing the power button.



3. Mark the center of the plumb point on the ceiling (point I).
4. Rotate the tool 180° being as careful as possible to keep the center of the laser in the exact same location.
5. Mark the center of the top plumb point on the ceiling (point II).



6. The distance between (points I and II) on the ceiling is the deviation (d) of the tool. This distance should not exceed 3/64" (max.) at 30'. For the measuring distance of 2 x 15' = 30', the maximum allowable deviation (d) is: 30' x ±3/64" ÷ 30' = ±3/64".

NOTE: If any of the above accuracies are out of spec, return the laser to nearest authorized MILWAUKEE service center for recalibration.

MAINTENANCE

⚠WARNING To reduce the risk of injury, always unplug the charger and remove the battery pack from the charger or tool before performing any maintenance. Never disassemble the battery pack, charger, or tool, except as provided in these instructions. Contact a MILWAUKEE service facility for all other repairs.

Maintain Rotary Laser

Maintain tools. If damaged, have the tool repaired by an authorized MILWAUKEE service center before use. Accidents may be caused by poorly maintained tools.

ONE-KEY™

⚠WARNING Chemical Burn Hazard. This device contains a lithium button/coin cell battery. A new or used battery can cause severe internal burns and lead to death in as little as 2 hours if swallowed or enters the body. Always secure the battery cover. If it does not close securely, stop using the device, remove the batteries, and keep it away from children. If you think batteries may have been swallowed or entered the body, seek immediate medical attention.

Internal Coin Cell Battery

An internal coin cell battery is used to facilitate full ONE-KEY™ functionality.

To replace the coin cell battery:

1. **WARNING!** Remove tool's battery to avoid starting the tool.
2. Loosen the screw(s) and open the coin cell battery door.
3. Remove the old coin cell battery, keep it away from children, and dispose of it properly.
4. Insert the new coin cell battery (3V CR2032), with the positive side facing up.
5. Close the battery door and tighten the screw(s) securely.

⚠WARNING To reduce the risk of personal injury and damage, never immerse your tool in liquid or allow a liquid to flow inside them.

Cleaning

Clean dust and debris from any vents. Keep tool clean, dry and free of oil or grease. Use only mild soap and a damp cloth to clean, since certain cleaning agents and solvents are harmful to plastics and other insulated parts. Some of these include gasoline, turpentine, lacquer thinner, paint thinner, chlorinated cleaning solvents, ammonia and household detergents containing ammonia. Never use flammable or combustible solvents around tools.

Cleaning the Aperture Windows

Blow off any loose particles with clean compressed air. Carefully wipe the surface with a cotton swab moistened with water.

Calibration and Repairs

For Calibration or Repair, return the tool, battery pack, and charger to nearest authorized MILWAUKEE service center.

ACCESSORIES

⚠WARNING Use tools only with specifically designated accessories. Use of any other accessories may create risk of injury.

WIRELESS COMMUNICATION

For products provided with wireless communication features, including ONE-KEY™:

Pursuant to part 15.21 of the FCC Rules, do not modify this product. Modification could void your authority to operate the product. This device complies with part 15 of the FCC Rules and ISED-Canada's license exempt RSS standards. Operation is subject to the following two conditions: 1) This device may not cause harmful interference, and 2) This device must accept any interference received, including interference that may cause undesired operation.

SERVICE - UNITED STATES

1-800-SAWDUST (1.800.729.3878)

Monday-Friday, 7:00 AM - 6:30 PM CST

or visit **www.milwaukeetool.com**

Contact Corporate After Sales Service Technical Support with technical, service/repair, or warranty questions.

Email: metproductsupport@milwaukeetool.com

Become a Heavy Duty Club Member at www.milwaukeetool.com to receive important notifications regarding your tool purchases.

SERVICE - CANADA

Milwaukee Tool (Canada) Ltd

1.877.948.2360

Monday-Friday, 7:00 AM - 4:30 PM CST

or visit www.milwaukeetool.ca

LIMITED WARRANTY USA & CANADA

This MILWAUKEE power tool* is warranted to the original purchaser from an authorized MILWAUKEE distributor only to be free from defects in material and workmanship. Subject to certain exceptions, MILWAUKEE will repair or replace any part on this power tool which, after examination, is determined by MILWAUKEE to be defective in material or workmanship for a period of five (5) years after the date of purchase unless otherwise noted. Return of the power tool to a MILWAUKEE factory Service Center location or MILWAUKEE Authorized Service Station, freight prepaid and insured, is required. A copy of the proof of purchase should be included with the return product. This warranty does not apply to damage that MILWAUKEE determines to be from repairs made or attempted by anyone other than MILWAUKEE authorized personnel, misuse, alterations, abuse, normal wear and tear, lack of maintenance, or accidents.

Normal Wear: Many power tools need periodic parts replacement and service to achieve best performance. This warranty does not cover repair when normal use has exhausted the life of a part including, but not limited to, chucks, brushes, cords, saw shoes, blade clamps, o-rings, seals, bumpers, driver blades, pistons, strikers, lifters, and bumper cover washers.

*This warranty does not cover battery packs or all power tools. Refer to the separate and distinct warranties available for those products.

The warranty period for the LED in the LED Work Light (49-24-0171) and the LED Upgrade Bulb (49-81-0090) is the lifetime of the product subject to the limitations above. If during normal use the LED or LED Upgrade Bulb fails, the part will be replaced free of charge.

Warranty Registration is not necessary to obtain the applicable warranty on a MILWAUKEE power tool product. The manufacturing date of the product will be used to determine the warranty period if no proof of purchase is provided at the time warranty service is requested.

ACCEPTANCE OF THE EXCLUSIVE REPAIR AND REPLACEMENT REMEDIES DESCRIBED HEREIN IS A CONDITION OF THE CONTRACT FOR THE PURCHASE OF EVERY MILWAUKEE PRODUCT. IF YOU DO NOT AGREE TO THIS CONDITION, YOU SHOULD NOT PURCHASE THE PRODUCT. IN NO EVENT SHALL MILWAUKEE BE LIABLE FOR ANY INCIDENTAL, SPECIAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES, OR FOR ANY COSTS, ATTORNEY FEES, EXPENSES, LOSSES OR DELAYS ALLEGED TO BE AS A CONSEQUENCE OF ANY DAMAGE TO, FAILURE OF, OR DEFECT IN ANY PRODUCT INCLUDING, BUT NOT LIMITED TO, ANY CLAIMS FOR LOSS OF PROFITS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS WARRANTIES, WRITTEN OR ORAL. TO THE EXTENT PERMITTED BY LAW, MILWAUKEE DISCLAIMS ANY IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE; TO THE EXTENT SUCH DISCLAIMER IS NOT PERMITTED BY LAW, SUCH IMPLIED WARRANTIES ARE LIMITED TO THE DURATION OF THE APPLICABLE EXPRESS WARRANTY AS DESCRIBED ABOVE. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU, THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

This warranty applies to product sold in the U.S.A. and Canada only. Please consult the 'Service Center Search' in the Parts & Service section of MILWAUKEE's website www.milwaukeetool.com or call 1.800. SAWDUST (1.800.729.3878) to locate your nearest service facility for warranty and non-warranty service on a MILWAUKEE power tool.