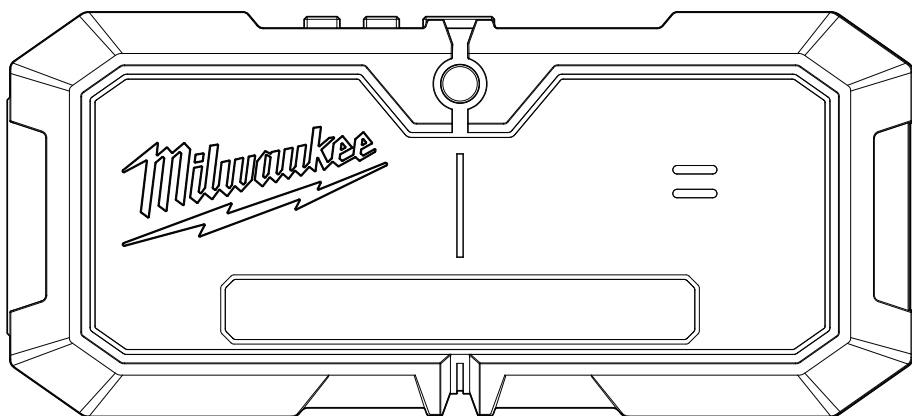





OPERATOR'S MANUAL



Cat. No.
14203642

M12™ AUTO ALIGN 3 PLANE LASER DETECTOR

WARNING

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

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

- **This tool is designed to be powered by two AA batteries properly inserted into the tool.** Do not attempt to use with any other voltage or power supply.
- **Do not leave batteries within the reach of children.**
- **Do not mix new and used batteries. Do not mix brands (or types within brands) of batteries.**
- **Do not mix rechargeable and non-rechargeable batteries.**
- **Install batteries according to polarity (+/-) diagrams.**
- **Properly dispose of used batteries immediately.**
- **Do not incinerate or dismantle batteries.**
- **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.

SPECIFIC SAFETY RULES FOR LASER DETECTORS

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

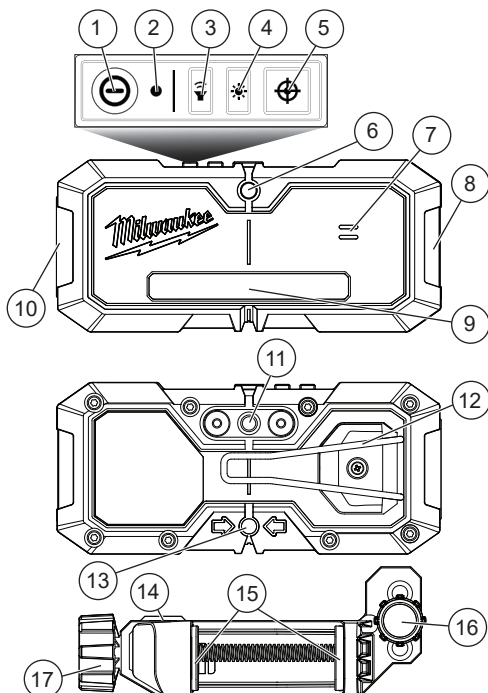
- **Be sure to power off instrument after use.** When instrument will not be used for a long period, place it in storage after removing batteries.
- **Make sure that the magnetic surface is free from materials that could prevent the magnets from attaching.**
- **Make sure that all magnets make contact with the magnetic surface.**
- **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.
- **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 a **MILWAUKEE®** service facility for a replacement.

ADDITIONAL BATTERY SAFETY RULES

⚠WARNING To reduce the risk of fire, personal injury, and product damage due to a short circuit, never immerse your tool, battery pack or charger in fluid or allow a fluid to flow inside them. Corrosive or conductive fluids, such as seawater, certain industrial chemicals, and bleach or bleach-containing products, etc., can cause a short circuit.

⚠WARNING Do not charge non-rechargeable batteries.

FUNCTIONAL DESCRIPTION



- | | |
|----------------------------|----------------------------------|
| 1. Power button | 11. Clamp connection location |
| 2. Power indicator LED | 12. Removable clip |
| 3. Volume button | 13. Back alignment indicator LED |
| 4. Brightness button | 14. Surface vial |
| 5. Centre find button | 15. Clamp jaws |
| 6. Alignment indicator LED | 16. Clamp attachment knob |
| 7. Speaker | 17. Clamping knob |
| 8. Battery door | |
| 9. Sensor | |
| 10. Magnets | |

SYMBOLLOGY



Safety alert



Volts



Direct Current



Magnets



Read Operator's Manual



Regulatory Compliance Mark (RCM). This product meets applicable regulatory requirements.

SPECIFICATIONS

Cat. No.	14203642
Recommended Compatible Laser Cat. No.	M12 AA3PL
Volts	3 V (2xAA) LR6/15A
Reception Angle	± 45°
Wavelength Compatibility	510-530 nm
Detection Range	up to 50 m
Receiving Area	± 3"
Volume	≤100 dBA
Altitude	< 2,000 m
Pollution Degree	2
Ingress Protection	IP54
Drop Rating	2 m
Auto Shut-off	15 min (No buttons pressed or laser detection)
Run Time	20 hrs
Bare tool weight	287 g
Clamp Weight	180 g
Clamp Width	63.5 mm (2-1/2")
Maximum Relative Humidity (RH)	80% for up to 31°C
Decreasing Linearly Relative Humidity (RH)	50% at 40°C
Recommended Ambient Storage Temperature	-25°C to 60°C
Operating Temperature	-20°C to 50°C

NOTE: Distance, laser power, and other environmental factors such as temperature, precipitation, or ambient light conditions may negatively impact product accuracy and range.

ASSEMBLY

Attaching the Clamp

The clamp is an optional piece that can be attached to the detector. The clamp can be used with materials up to 63.5 mm (2-1/2") thick.

- To **attach** the clamp to the detector, align the attachment posts on the clamp with the clamp connection location on the back of the detector.
- Align the screw on the back, and turn the knob clockwise to tighten into place.
- Attach the clamp to the workpiece by turning the clamping knob anticlockwise to open the clamping jaws. To tighten the clamp to the workpiece, turn the clamping knob clockwise. Ensure the clamp is snug before operation.
- To **remove** the clamp from the workpiece, turn the clamping knob anticlockwise until the clamp jaws release from the workpiece. To remove the clamp from the detector, turn the clamping attachment knob anticlockwise and remove the clamp from the back of the detector.

Changing the Batteries

Only use alkaline batteries. **Do not use zinc-carbon batteries.** If the detector will not be used for a long time, remove the batteries to protect against corrosion.

To **change** the batteries:

- To **open** the battery door, un-clip the battery door.
- Remove the old AA batteries, and dispose of them properly.
- Insert two AA batteries according to the +/- polarity marked in the compartment.
- To **close** the battery door, clip the door back into place.

OPERATION

WARNING Always use personal protective equipment.

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 new detector and before exposure to jobsite conditions. See "Accuracy Field Check" for information. Should any deviation from listed product accuracy be found, please contact an authorised *MILWAUKEE*® service centre. Failure to do so could result in rejection of warranty claim.

Turning the Detector On/Off

- To turn on, press the power button until the detector beeps and lights up.
- To turn off, press the power button for more than 1 second.

NOTE: The laser and detector are independent of one another. A power button press on the detector will power off the detector, but the laser will remain on.

Pairing the Laser with the detector

The laser and detector are paired when shipped together. If for some reason the laser and detector become unpaired, see steps below on re-pairing.

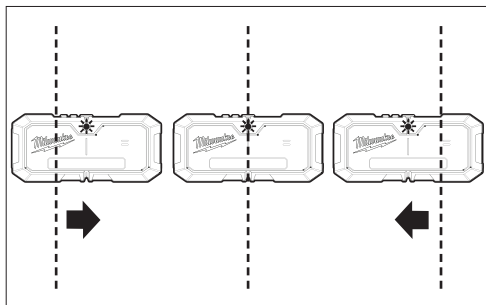
- Press and hold the power button on the detector until pairing status LED starts flashing, then release the button.
 - On the right side of the coin cell battery compartment, press and hold the pairing button on the laser until the LED starts flashing, then release.
- NOTE:** If pairing fails, try pressing the pairing button on the detector and on the laser again.

NOTE: To switch detectors, repeat the pairing process above.

Laser Alignment LED Indicators

The alignment LED indicators help determine the location of the laser line being detected on the detector's sensor.

- Left of centre: LED will flash red.
- Centre of detector: LED will be solid green.
- Right of centre: LED will flash blue.



Adjusting the Volume

The volume is set to high as the factory default. Once setting is changed, when the detector is turned off and back on again, the detector will recall the last saved setting.

- Press the volume button to toggle between high, low, and off.

Adjusting the Brightness

The brightness is set to normal mode as the factory default.

- Press the brightness button to cycle through standard, boosted, and off modes.

Using the Centre Find Button on Laser/Detector

1. Turn the power dial to the unlocked and on position. Turn on the Detector by pressing the power button.
2. With the front and side vertical planes on, align the point at which the laser lines cross with the mark on the work surface with the laser pointing generally in the direction of the intended target (within $\pm 5^\circ$). Then align the marking groove on the Detector with the mark at the intended target with the sensor window facing perpendicular to the laser level.
3. Press the centre find button on the laser or Detector, the laser will start searching from left to right.

NOTE: During the search procedure, the LED on the laser and Detector will flash green and an audio tone from the Detector, unless the audio is muted.

4. Once the laser finds centre of the Detector and locks in, the light will turn solid green, and a tone will sound.

NOTE: A single press of the centre find button will pause the process. A second quick press of the button, within 1 second, will cause the laser to reverse directions.

ACCURACY FIELD CHECK

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

Influences on Accuracy

Sunlight or other extreme lighting conditions can adversely impact accuracy. For best results, use indoors or avoid direct sunlight. Abusive treatment of the laser level detector, such as excessive impacts from drops, can lead to deviations in product accuracy.

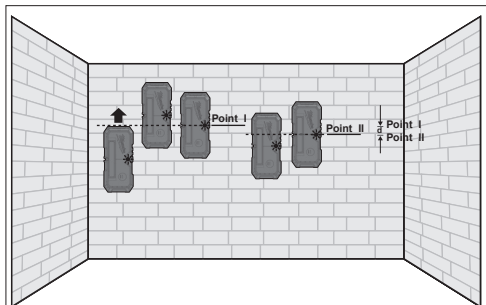
Therefore, it is recommended to conduct the "Accuracy Field Check" procedure after any impact or before completing any critical jobs.

For best results, use with *MILWAUKEE*® Lasers.

Horizontal Leveling Accuracy

1. Set up compatible laser 10 m from flat wall. Turn on lasers horizontal beam.
2. Ensure the laser source is self leveled and perpendicular to wall.
3. Place detector flat on wall directly in front of the laser source and slightly below the projected laser line.

4. Keeping the detector bottom parallel with the ground, raise detector until red LED flash.
5. Lower detector until centre line appears.
6. Mark a line on the wall – Point I.
7. Continue to lower detector until blue LED flash.
8. Raise detector until center line appears.
9. Mark a line on the wall – Point II.
10. Measure the distance between Point I and Point II – divide by 2. The measure result shown should not exceed 1.5 mm.



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 centre for ALL repairs.

Maintain Laser Detector

Maintain tools. If damaged, have the tool repaired by an authorised **MILWAUKEE®** service centre before use. Accidents may be caused by poorly maintained tools.

Cleaning

Clean dust and debris from vents. Keep handles 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 petrol, turpentine, lacquer thinner, paint thinner, chlorinated cleaning solvents, ammonia and household detergents containing ammonia. Never use flammable or combustible solvents around tools.

Cleaning the Sensor Window

Always wear eye protection. Carefully wipe the surface with a cotton swab moistened with water.

Repairs

For repairs, return the tool, battery pack and charger to the nearest authorised service centre.

ACCESSORIES

⚠WARNING Use only recommended accessories. Others may be hazardous.

For a complete listing of accessories, go online to milwaukeeetool.com.au / milwaukeeetool.co.nz or contact an authorised distributor.

WARRANTY - AUSTRALIA and NEW ZEALAND

Please refer to Australian and New Zealand warranty supplied with tool. This warranty applies only to product sold by authorised dealers in Australia and New Zealand.

SERVICE - AUSTRALIA and NEW ZEALAND

MILWAUKEE® prides itself in producing a premium quality product that is Nothing But Heavy Duty™. Your satisfaction with our products is very important to us! If you encounter any problems with the operation of this tool, please contact your authorised **MILWAUKEE®** dealer.

For a list of **MILWAUKEE®** dealers, guarantee or service agents please contact **MILWAUKEE®** Customer Service or visit our website.

(Australia Toll Free Telephone Number 1300 645 928)

(New Zealand Toll Free Telephone Number 0800 645 928)

or visit milwaukeetool.com.au/milwaukeetool.co.nz.

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