RD600



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LASER DETECTOR SAFETY WARNINGS

⚠ CAUTION
Do not modify the device. Modifications can cause injuries and malfunctions.

Only authorised and trained personnel are allowed to repair the device. Only use genuine spare parts from Milwaukee. This ensures continuous device safety.

Avoid direct eye exposure. The laser beam can cause severe eye damage and/or blindness.. Caution! The laser emitting product may be behind you. Be careful when facing the product. Make sure that the laser beam does not hit your eyes when you turn around.

Noise emission
The a-rated sound pressure level of the acoustic signal is >80 db (A) at a distance of one meter.

Do not hold the laser detector close to your ear in order to prevent hearing damage! Only use the acoustic signal if the visual perception is insufficient. If possible, use the volume level "Low".

Keep the laser detector away from children.

Do not use the laser detector in explosive atmospheres or near flammable liquids, gases or dust. The device may produce sparks that can ignite vapours or dust.

Please remove the battery if the device is not in use for a prolonged period of time.

Use only genuine Milwaukee accessories. When using non-recommended accessories, you may receive incorrect measuring values.

SAFETY INSTRUCTIONS BATTERY

This tool is designed to be powered by 2 AA battery properly inserted into the instrument. Do not attempt to use with any other voltage or power supply.

Do not leave batteries within the reach of children.

Properly dispose of used batteries immediately.

Battery acid may leak from damaged batteries under extreme load or extreme temperatures. In case of contact with battery acid wash it off immediately with soap and water. In case of eye contact rinse thoroughly for at least 10 minutes and immediately seek medical attention.

This appliance is not intended for use by persons (including children) with limited physical, sensory or mental capabilities or insufficient experience and/or knowledge unless they are supervised by a person who is responsible for their safety or have been instructed by them in the safe use of the tool.Children should be supervised in order to ensure that they do not play with the tool.

SPECIFIED CONDITIONS OF USE

This device detects laser beams from rotating lasers emitting red laser light.

Do not use this product in any other way as stated for normal use.

TECHNICAL DATA

Type	Detector
Battery voltage	3 V
Batteries	2 x 1.5 V LR6 (AA)
Detection range*	4.5 – 300 m
Reception angle	≥70°
Wavelength compatibility	620 - 690 nm
Measuring Accuracy	
ultrafine	1,0 mm (± 0,5 mm) @ 30 m
fine	2,0 mm (± 1 mm) @ 30 m
medium	4,0 mm (± 2 mm) @ 30 m
course	6,0 mm (± 3 mm) @ 30 m
ultra course	10,0 mm (± 5 mm) @ 30 m
Receiving area	± 60 mm
Center indication (from top)	90 mm
Auto shut off	15 min
Operating time, approx.	40 h
Operating temperature	-20 – 50°C
Storage temperature	-25 – 60°C
Max.altitude	2000 m
Max.relative humidity	80%
Weight according to EPTA-Procedure	0,410 kg
Dimensions (length x width x height)	35 mm x 85 mm x 185 mm
Protection rating	IP67

* The working range may be reduced by unfavourable environmental conditions and depend on the laser quality.

** Dependent on the distance between the laser detector and the laser.

⚠ WARNING Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.
Save all warnings and instructions for future reference.

MAINTENANCE

Cleaning

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

Cleaning the Sensor Window

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

Repairs

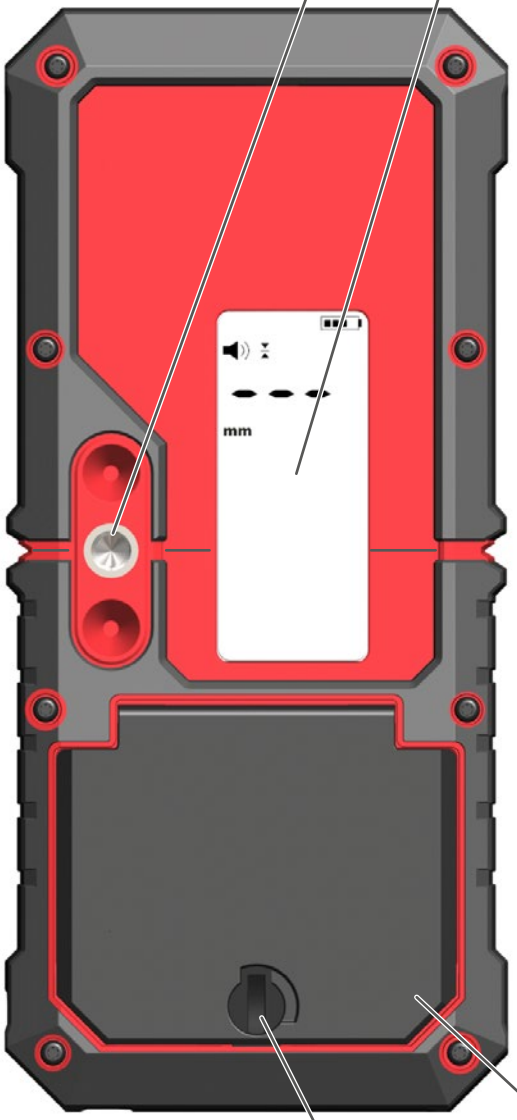
This tool has limited serviceable parts. Do not open housing or disassemble tool. For repairs, return the tool, to the nearest authorized service center.

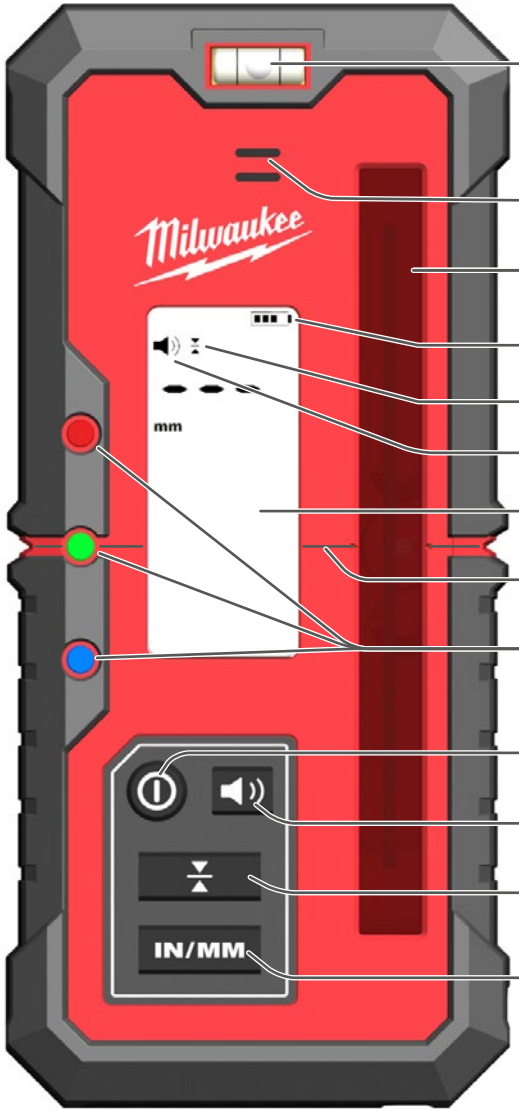
Use only Milwaukee accessories and spare parts. Should components need to be replaced which have not been described, please contact one of our Milwaukee service agents (see our list of guarantee/service addresses).

If needed, an exploded view of the tool can be ordered. Please state the machine type printed as well as the six-digit No. on the label and order the drawing at your local service agents or directly at: Techtronic Industries GmbH, Max-Eyth-Straße 10, 71364 Winnenden, Germany.

SYMBOLS

	Please read the instructions carefully before operating the tool.
	CAUTION! WARNING! DANGER!
	Do not dispose of waste batteries, waste electrical and electronic equipment as unsorted municipal waste. Waste batteries and waste electrical and electronic equipment must be collected separately. Waste batteries, waste accumulators and light sources have to be removed from equipment. Check with your local authority or retailer for recycling advice and collection point. According to local regulations retailers may have an obligation to take back waste batteries and Waste electrical and electronic equipment free of charge. Your contribution to re-use and recycling of waste batteries and waste electrical and electronic equipment helps to reduce the demand of raw materials. Waste batteries, in particular containing lithium and waste Electrical and electronic equipment contain valuable, recyclable materials, which can adversely impact the environment and the human health, if not disposed of in an environmentally compatible manner. Delete personal data from waste equipment, if any.
	European Conformity Mark
	UK Conformity Mark
	Ukraine Conformity Mark
	EurAsian Conformity Mark





Clamp connection feature: mount the wall clamp here

Back LCD screen

Bubble level: for leveling the detektor in vertical position

Speaker

Sensor: determines the laser beam position

Fuel gauge

Accuracy

Tone

Front LCD screen

Center line: align the laserbeam to this line

Laser locator indicator LED: indicates the laserbeam position

Power button: press to turn on / press and hold to turn off

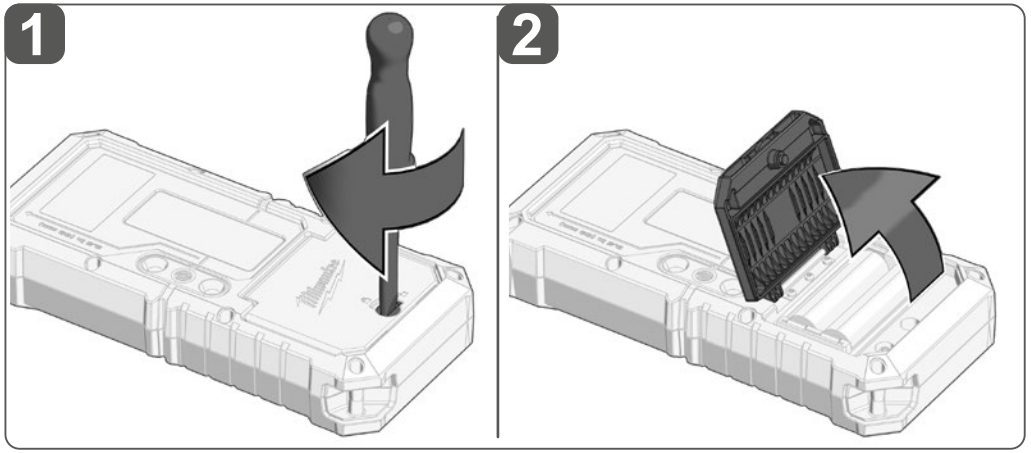
Volume of beep

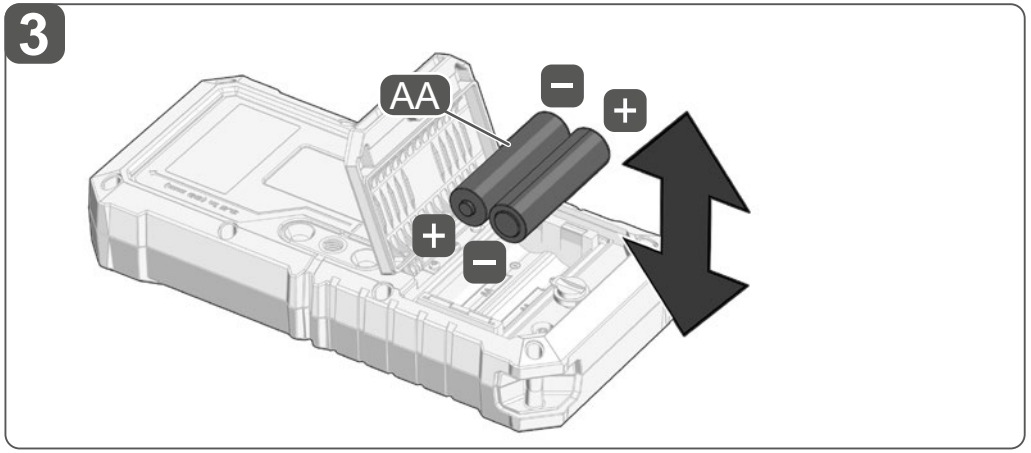
Accuracy

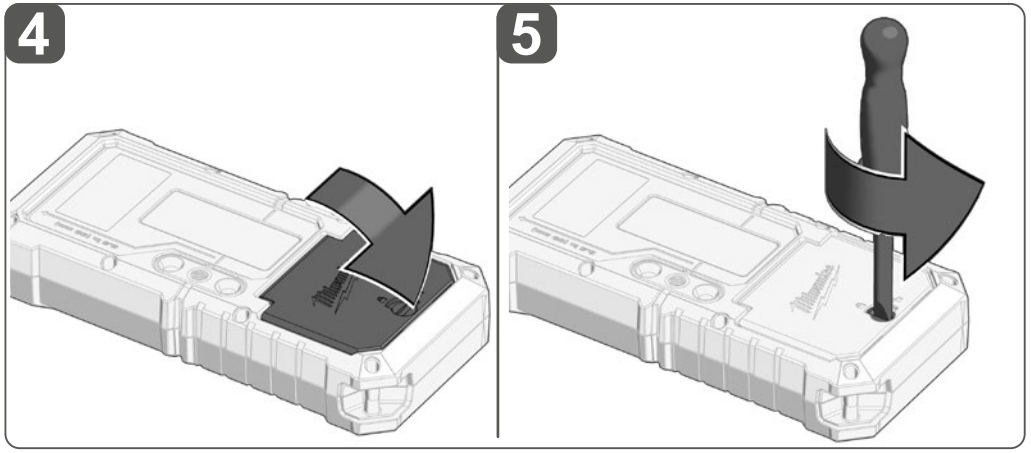
Units of measure

Battery door: compartment for 2 AA batteries

Battery door turn lock

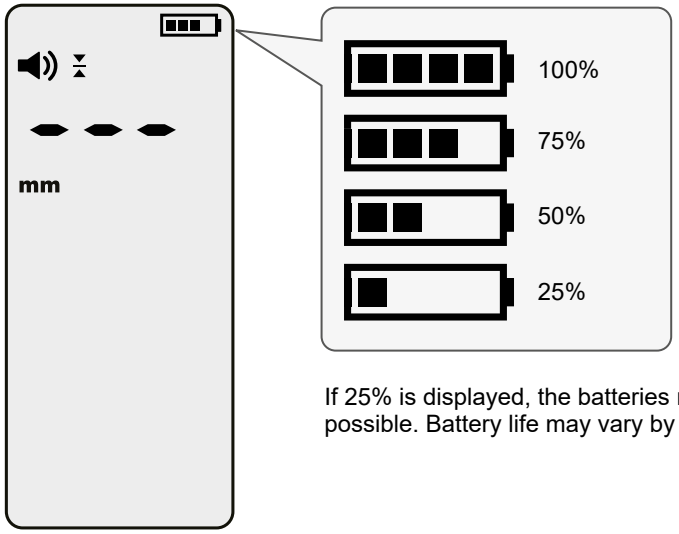






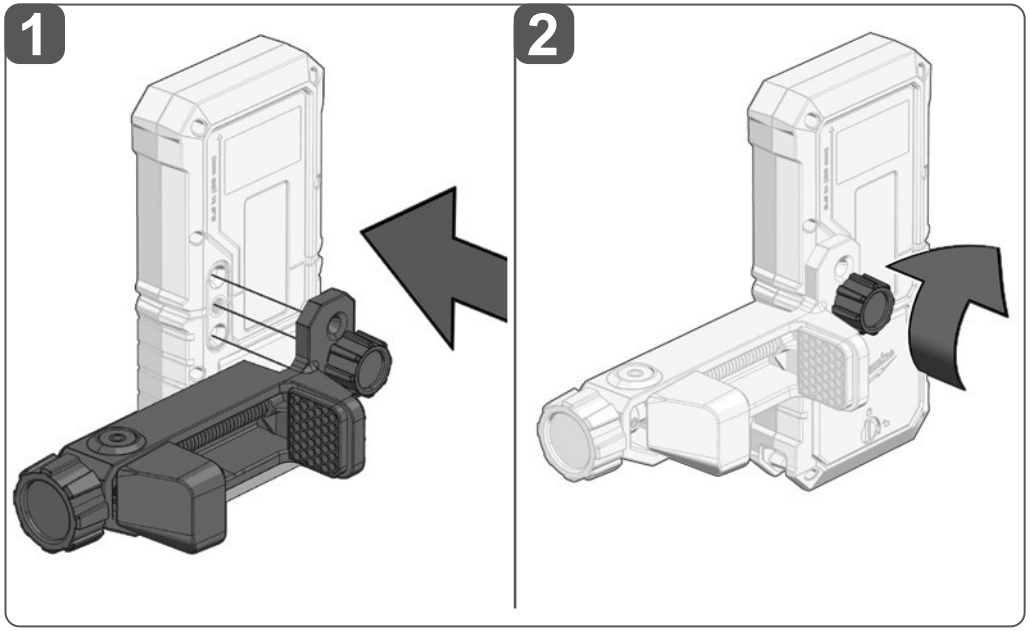
Only use alkaline batteries. Do not use zinc-carbon batteries.
If the detector will not be used for a long time, remove the batteries to protect against corrosion.

After switch on the detector the fuel gauge will display the battery life.

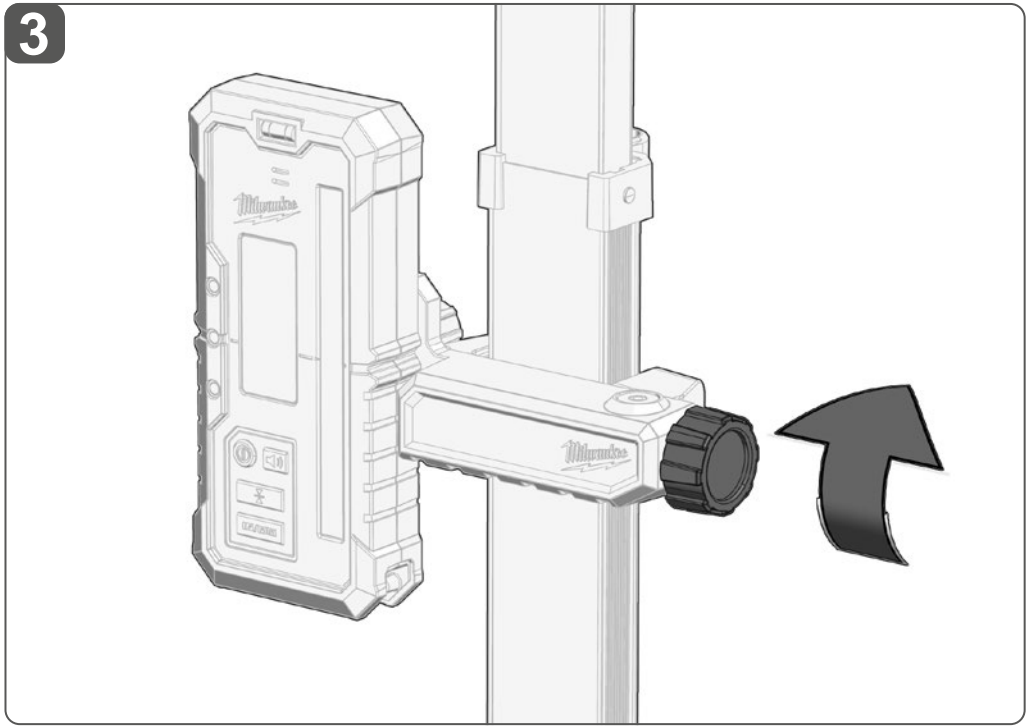


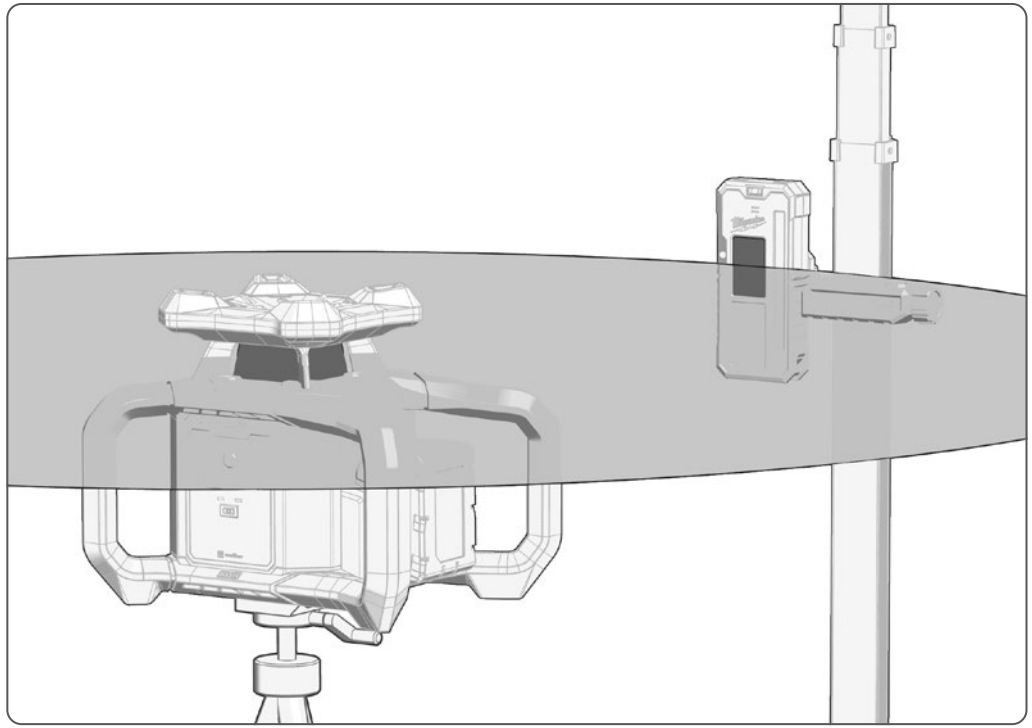
If 25% is displayed, the batteries must be replaced as soon as possible. Battery life may vary by brand/age.

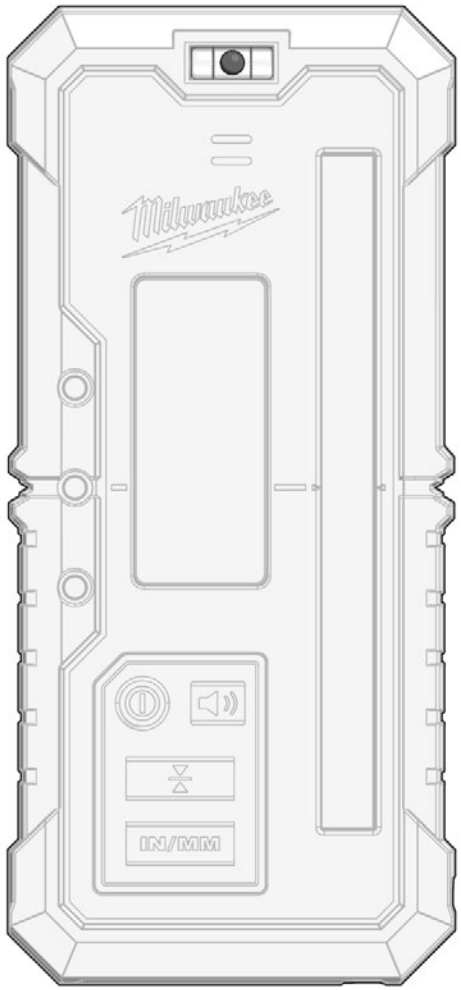
CLAMP



The detector can be attached to the Milwaukee ROD with the clamp.



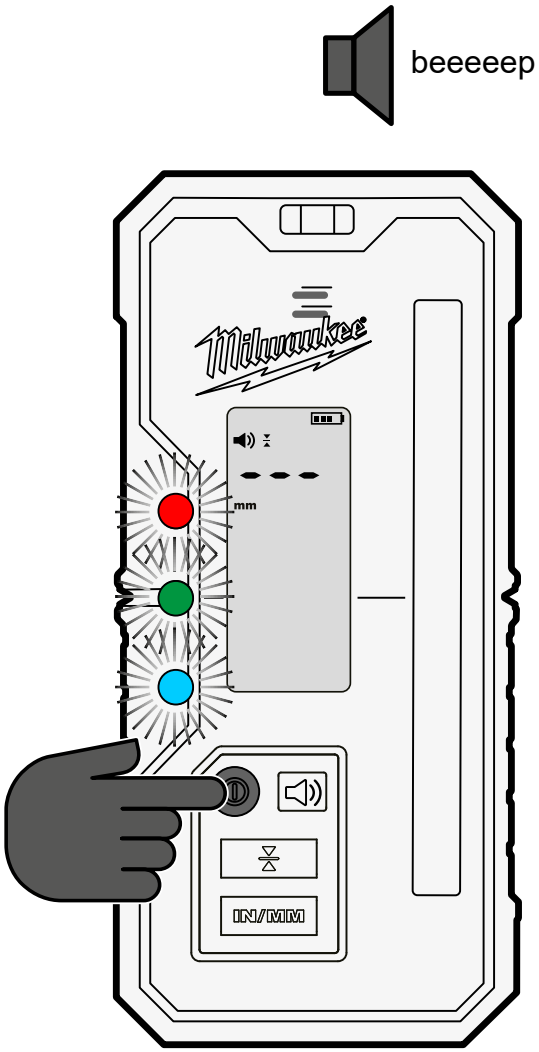




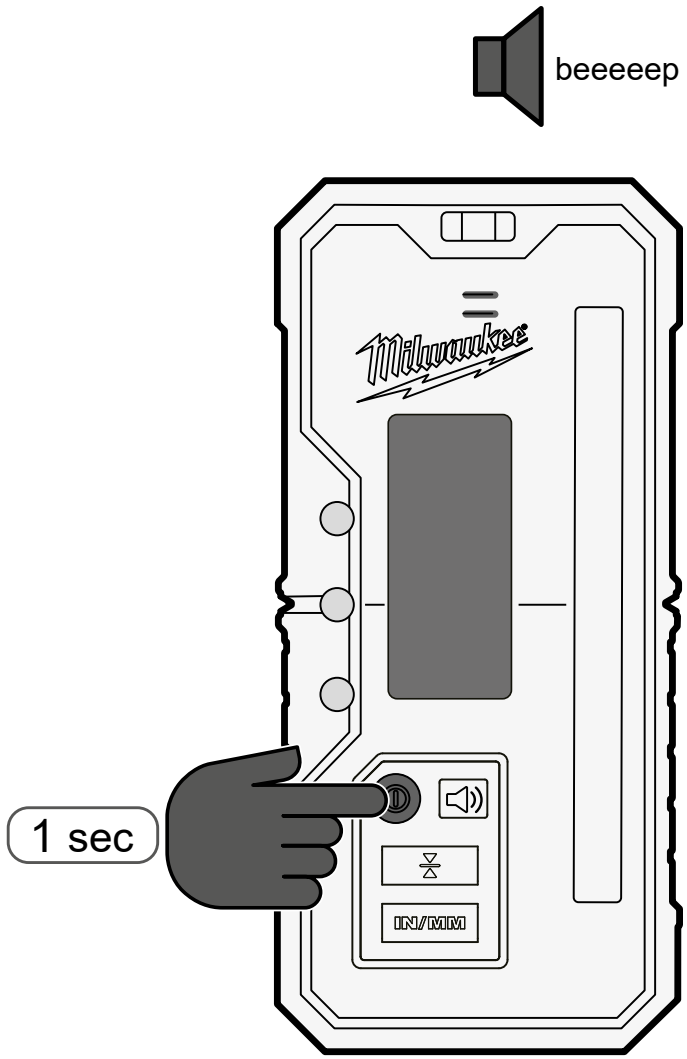


Align the laser detector horizontally according to the level.

ON



OFF

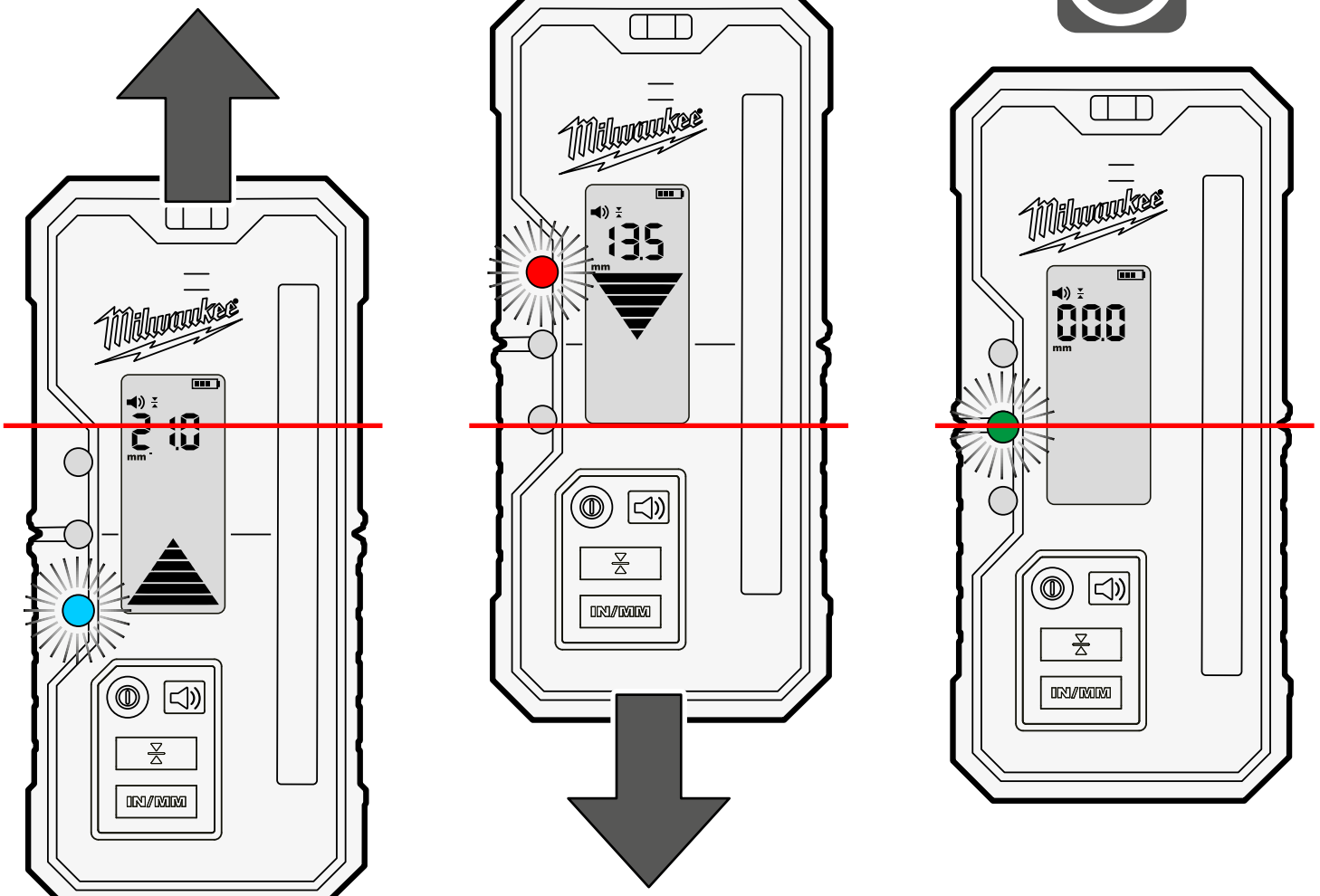


On initial startup select the desired language (see chapter settings).

The backlight will illuminate after any button press or when a laser beam is detecting on the sensor. The backlight will stay on for 15 seconds. The timer will reset every time a button is pressed or when a laser is sensed for the first time (i.e. it wont stay on if a laser stays on the sensor, but if a laser moves off then back on, the timer will reset).

Auto shut-off will occur if there are no button presses and no laser beam detected for 15 minutes.

Note: The laser and detector are independent of one another. A power button press on the detector will power off the detector, but not the laser.



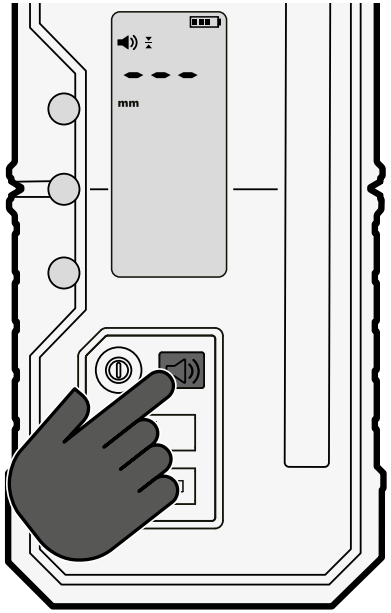
After switching on, the detector is in direct read out mode.

If a laser is sensed, the direct read out, the arrow indicator and laser locator indicator LED will illuminate. If no laser is detected, the arrow indicator and the LED will remain off, and the Direct Read Out will show no value and will display "- - -".

Note: If the laser leaves the sensor, the up or down arrow segments will begin to cycle indicating the direction that the laser was last detected.

The RD600 is especially design for the Milwaukee laser M18 RLOH600, but can also be used as a detector for other laser with red laser beam.

Volume of beep



Three settings are available

high (≥ 95 dBA),

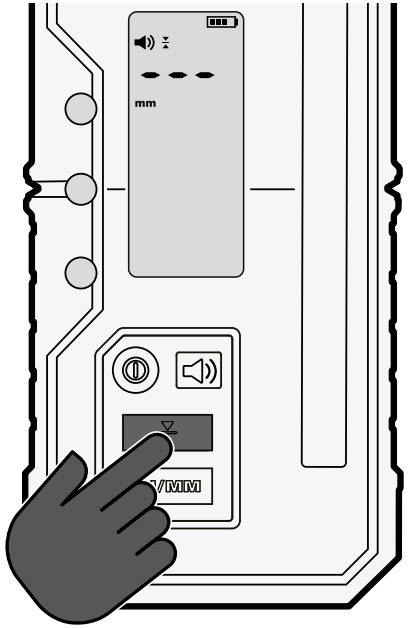
low (72 - 90 dBA),

off.

When toggling, a sample tone will play to demonstrate the currently selected setting.

The icon on the status bar will update to show the current selection.

Accuracy

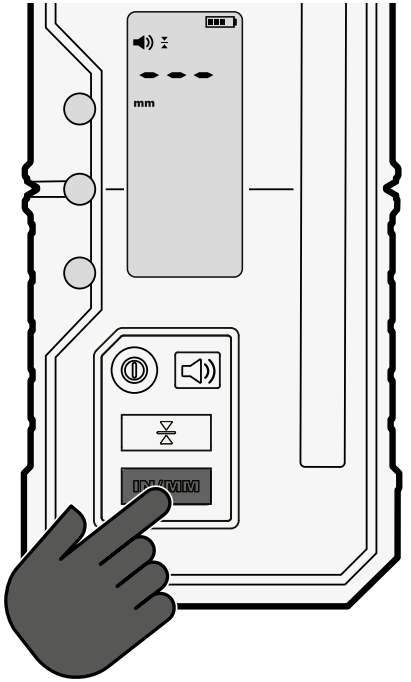


The icon on the display will update to show current selection.

Detector Accuracy

	mm	in (dec)	in (frac)	ft	level
	0.5	0.02	1/32	0.001	1
	1	0.04	1/16	0.003	2
	2	0.08	1/8	0,006	3
	3	0.12	1/4	0.010	4
	5	0.2	1/2	0.016	5

Units of measure



mm ► in ► frc ► ft

The measurement setting will show in the display.

TROUBLESHOOTING

Ensure batteries are inserted correctly according to the +/- polarity marked in the compartment.

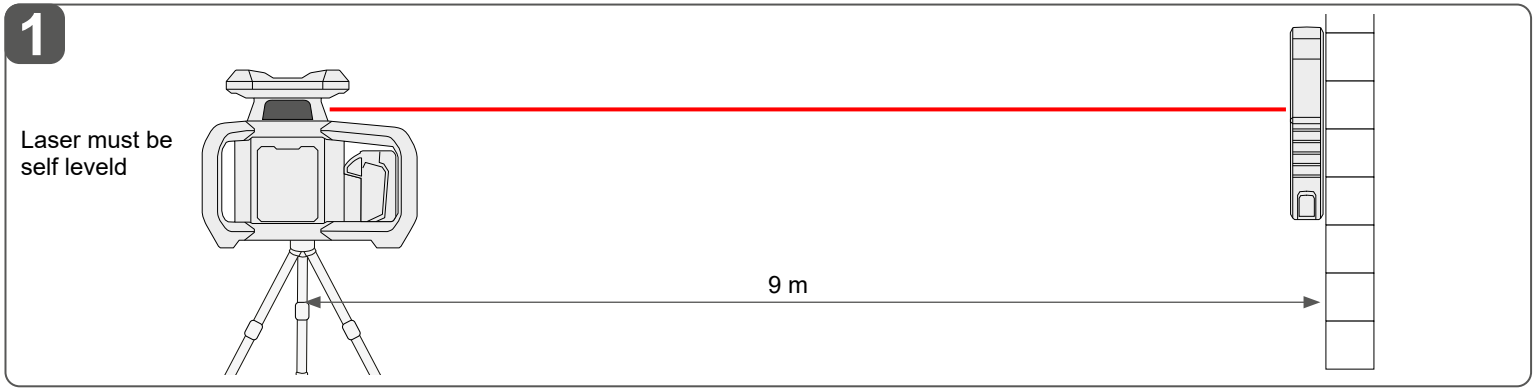
Replace batteries that may be at the end of life.

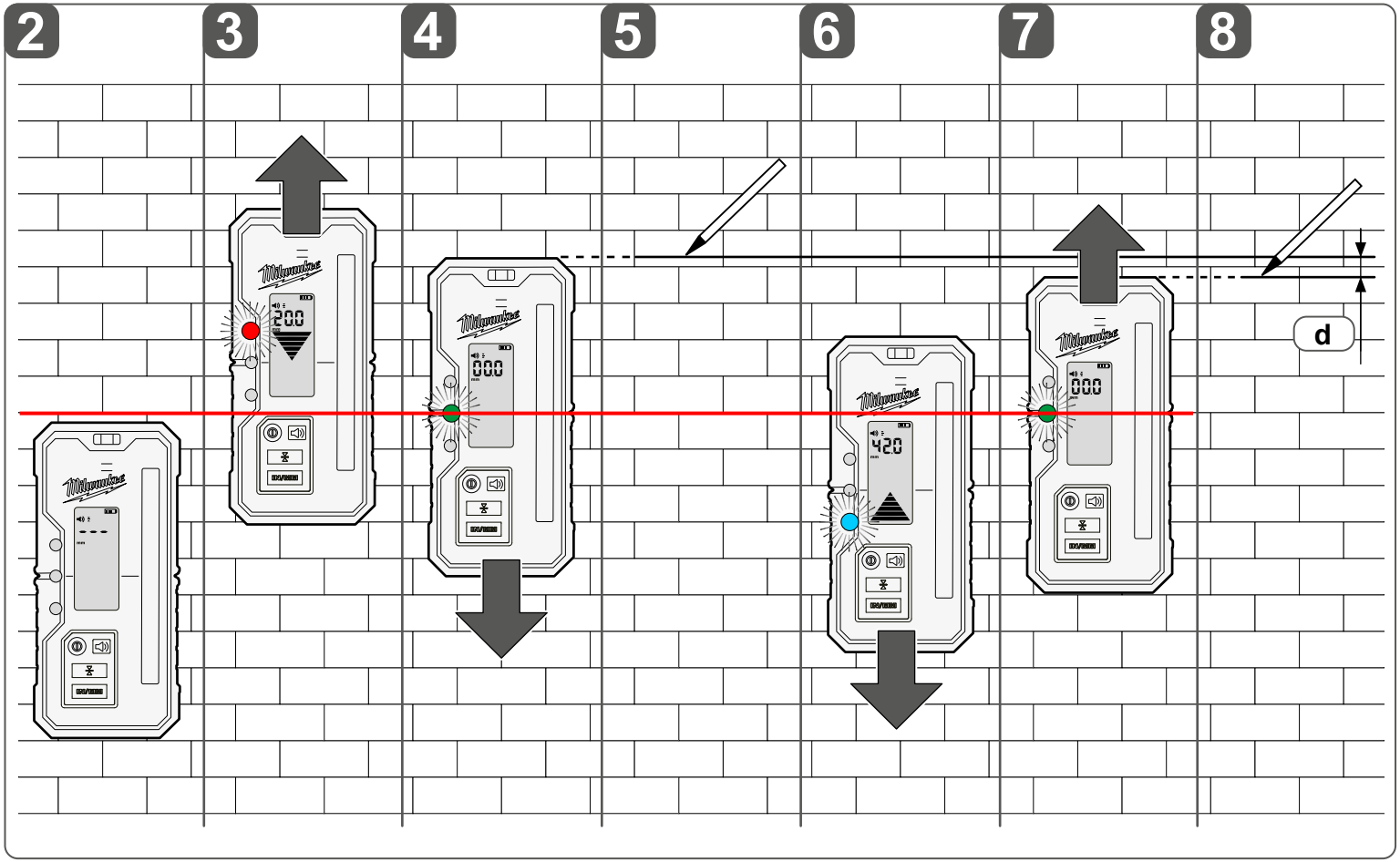
Ensure the tool‘s internal temperature is within specified operating ranges. If stored in excessive heat or cold, allow at least 2 hours to acclimate to ambient temperature before turning on the tool.

If the detector freezes, press and hold the power button for 15 seconds or remove the batteries to reset.

If problem persists, please contact an authorized MILWAUKEE service center for support.

ACCURACY FIELD CHECK





Perform the accuracy check procedure immediately upon unboxing of each new detector and before exposure to jobsite conditions.

Should any deviation from listed product accuracy be found, please contact a MILWAUKEE service facility. Failure to do so could result in rejection of warranty claim.

Influences on Accuracy

Ambient temperature changes can impact laser accuracy. For accurate and repeatable results, the described procedures should be done with the laser off the ground and placed in the center of the working area.

Mount the laser on the tripod and check the leveling of the tripod.

Abusive treatment of the laser, such as excessive impacts from drop, can also lead to changes in product accuracy. Therefore, it is recommended to perform the accuracy check procedure after any drops or before completing any critical jobs.

For best results, use with MILWAUKEE Lasers.

NOTE: Extreme temperatures will affect laser accuracy.

Detector Accuracy Check Procedure

1. Set up compatible laser 9 m from flat wall.
2. Place detector flat on wall directly in front of the laser source and slightly below the projected laser line.
3. Keeping the detector bottom parallel with the ground, raise detector until down arrow appears.
4. Lower the detector until center line appears.
5. Mark a line on the wall.
6. Continue to lower detector until the up arrow appears.
7. Raise detector until center line appears.
8. Mark a line on the wall.

Compare the distance d/2 to the following table:

ultrafine	1,0 mm (± 0,5 mm)	@ 30 m
fine	2,0 mm (± 1 mm)	@ 30 m
medium	4,0 mm (± 2 mm)	@ 30 m
course	6,0 mm (± 3 mm)	@ 30 m
ultra course	10,0 mm (± 5 mm)	@ 30 m

Note: If the measured accuracy is out-of-spec according to this table, contact an authorized MILWAUKEE service center.