

## Specifications:

Item Number: MSR25/MSG25 /MSR25D

Laser Class: Class 2

Laser Wavelength: 635nm±5nm

Light source & output power: H / V 20mW

Red Light source/green line source

Horizontal Accuracy: ±3mm/15m

Vertical Accuracy: ±3mm/15m

Up Plumb: 4.5mm/15m

Down Plumb: 6mm/15m

Self-leveling Range: 4°±1°

Self-leveling Time: ≤3s

Working distance (Dot): 30m; ≥60m with detector

Working distance (Line): 30m; ≥60m with detector

Operating Time: 16h (all laser on)

Power Source: 4×“AA” (LR6) batteries

IP Rating: IP54

Operating Temperature Range: -10°C to 50°C

Storage Temperature Range: -20°C to 70°C

Mount Size: 1/4"-20 & 5/8"-11



*μ*measure







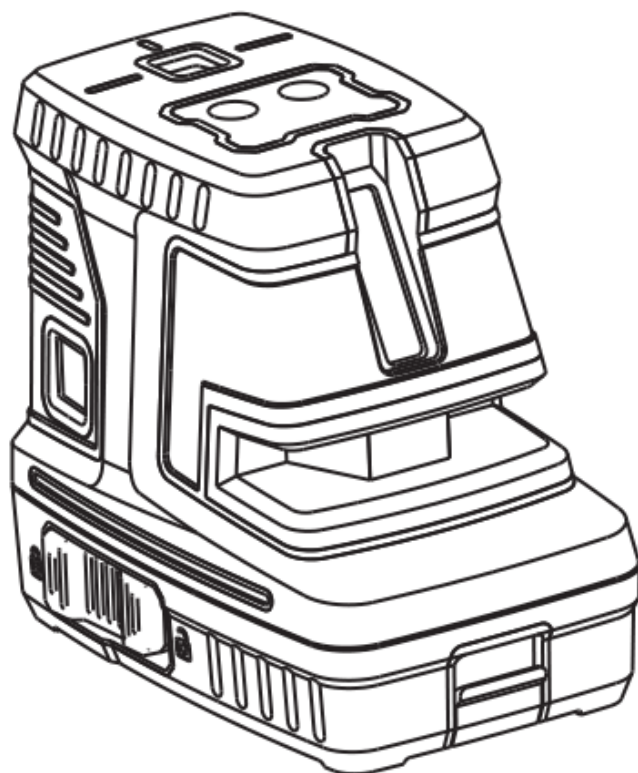


**LASER RADIATION**  
DO NOT STARE INTO BEAM CLASS 2 LASER  
WAVELENGTH 635nm-650nm 475nm  
Complies with 21CFR 104.10 and 104.11  
except for deviations pursuant to Laser  
Notice No. 55, dated July 26, 2001  
IEC 60825-1:2007  
CE  
Made in P.R.C.  
6V DC --- / 210mA max



**Manual**

**MSR25D \ MSR25 \ MSG25**  
**Cross Line / 5 Spot Combination Laser**  
User Manual





Read the Safety Instructions and User Manual thoroughly before using this product. All users must fully understand and adhere to these instructions.

### CAUTION:

- While the product is in operation, be careful not to expose your eyes to the emitting laser beam (red or green light source). Exposure to a laser beam for an extended time may be hazardous to your eyes.
- Glasses may be supplied in some of the laser tool kits. These are NOT certified safety glasses. These glasses are ONLY used to enhance visibility of beam in brighter environments or at greater distances from laser source.

### WARNING:

The following label/print samples are placed on the product to inform of the laser class for your convenience and safety.



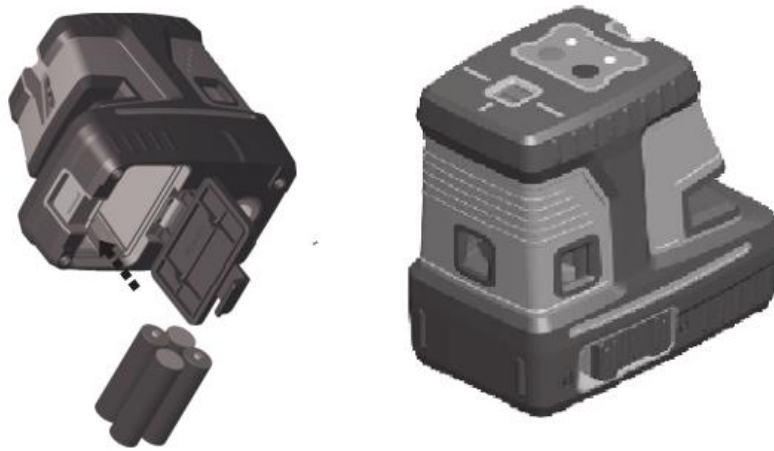
- Do not stare directly into the beam or view directly with optical instruments or set up the laser at eye level.
- Do not disassemble the laser tool. There are no user serviceable parts inside.
- Do not modify the laser in any way. Modifying the tool may result in hazardous Laser Radiation Exposure.
- Do not operate the laser around children or allow children to operate the laser. Serious eye injury may result.
- An exposure to the beam of a Class 2 laser is considered safe for a maximum of 0.25 seconds. Eyelid reflexes will normally provide adequate protection.

## Product Overview



1. LASER ON/OFF/MODE SWITCH
2. PULSE/POWERSAVE MODE
3. Lock On/Low Voltage Indicator
4. Pulse/Powersave Mode Indicator





### General Notes:

- Press to turn laser tool ON; Press and hold for  $\geq 2$  seconds to turn laser tool OFF while in any mode.
- Press repeatedly to cycle through the available modes.

### Self-leveling Mode

- is enabled when the laser tool is switched to the unlocked position.
- has laser beam(s) blink fast at 2 Hz when tool is out of self-leveling range.
- allows proper use of tool's full time pulse mode with laser detector.

### Manual Mode

- is enabled when the pendulum lock is in its locked position to position the laser tool at various angles to project non-level straight lines or points.
- disables self-leveling operations. Accuracy of the beam(s) is not guaranteed to be level, and laser beam(s) will blink about every 5 seconds.

### LED Indication

-is solid RED when pendulum is locked or battery level is low.



is solid BLUE when pressing the dedicated PULSE button

## Applications

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### Level / Point Transfer (See Figures A and B)

- Establish a horizontal reference plane by using the horizontal laser beam.
- Position the desired object(s) until they are aligned with the horizontal reference plane to make sure that the object(s) are level.

### Plumb / Point Transfer (See Figures C and D)

- Establish a vertical reference plane by using the vertical beam.
- Position the desired object(s) until they are aligned with the vertical reference plane to make sure that the object(s) are plumb.
- Establish 2 reference points which need to be plumb.
- Align either the up or the down plumb beam to a set reference point.
- The opposing plumb beam(s) will be projecting a point which is plumb.
- Position the desired object until the laser beam is aligned with the second reference point which needs to be plumb with the set reference point.

### Square (See Figures E and F)

- Establish a point where the 2 beams cross by using the vertical and horizontal laser beams.
- Position the desired object(s) until they are aligned with both the vertical and horizontal laser beams to make sure that the object(s) are square.

### Dedicated Pulse Mode (See Figures G and H)

- Pulse mode of laser tool in self-leveling mode allows use with laser detector in brighter environments or at greater working distances.

### Manual Mode

- Disables self-leveling function and allows laser tool to project a rigid laser beam in any orientation.

## Applications for reference

 - Pendulum Unlocked    - Self-leveling Operations

Figure A

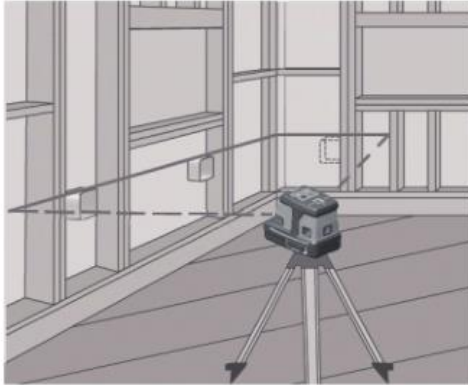


Figure B

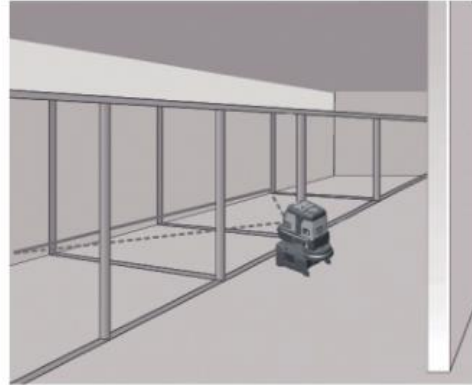


Figure C

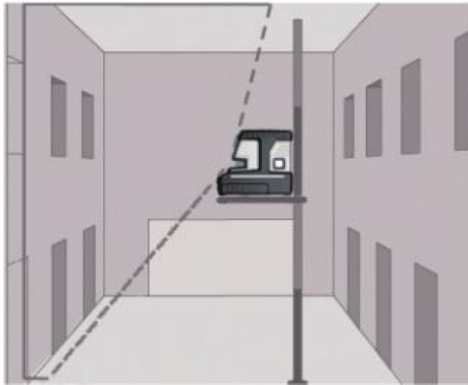
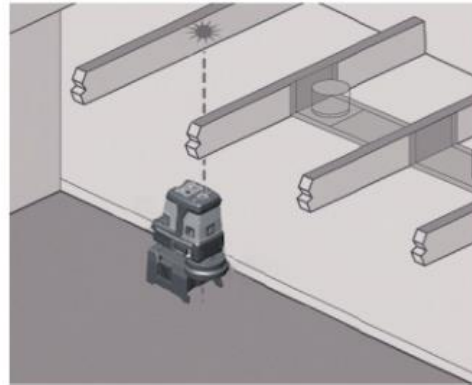
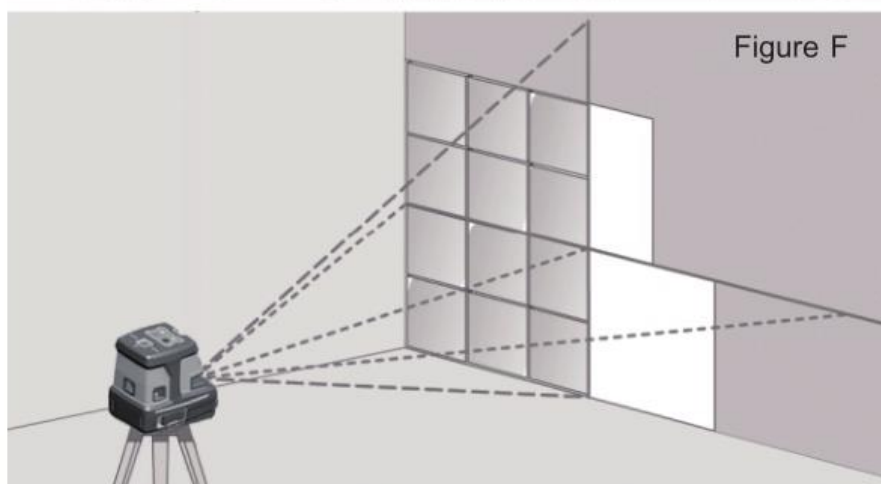
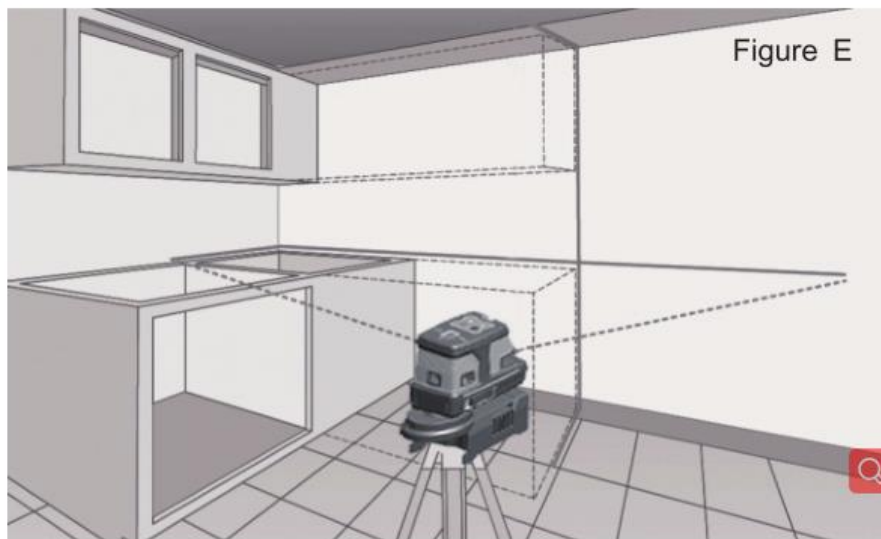


Figure D



## Applications for reference

 - Pendulum Unlocked    - Self-leveling Operations





## Applications for reference



- Pendulum unlocked



- Self-leveling operations



- Dedicated Pulse

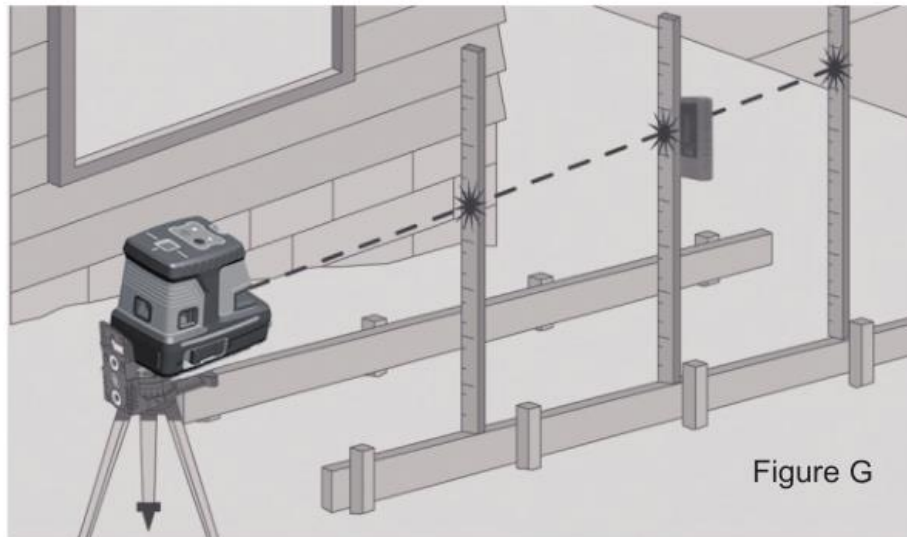


Figure G

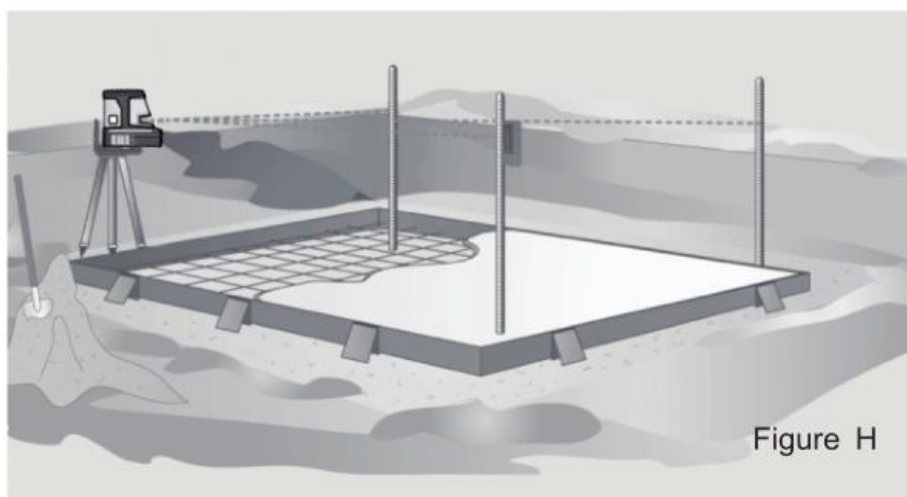


Figure H

- The laser tool is sealed and calibrated at the plant to the accuracies specified.
- It's recommended to carry out an accuracy check before its first use and periodic checks during future use especially for precise layouts.
- When not in use please power OFF the tool and place the pendulum lock in its locked position.
- In Manual Mode, self leveling is OFF. The accuracy of the beam is not ensured to be level.
- Do not short any battery terminals or charge alkaline batteries or dispose of batteries in fire.
- Do not mix old and new batteries. Replace all of them at the same time with new batteries of the same brand and type.
- Keep batteries out of reach of children.
- Remove batteries if the tool will not be used for several months.
- Do not store the laser tool in direct sunlight or expose it to high temperatures. The housing and some internal parts are made of plastics and may become deformed at high temperatures.
- Exterior plastic parts may be cleaned with a damp cloth. Although these parts are solvent resistant, NEVER use solvents. Use a soft, dry cloth to remove moisture from the tool before storage.
- Store the tool in its case when not in use. If storing for extended time, remove batteries before storage to prevent possible damage.
- Do not dispose of this product with household waste.
- Always dispose of batteries per local code.
- Please recycle in line with local provisions for the collection and disposal of electrical and electronic waste under the WEEE Directive.

## Specifications

MSR25D / MSR25 / MSG25 General Specification			
Laser Class	Class 2	Leveling Accuracy	$\pm 3\text{mm}/15\text{m}$
Leveling Range	$4^\circ \pm 1$	Horizontal/Vertical Accuracy	$\pm 3\text{mm}/15\text{m}$
Power Source	"AA" Battery x 4	IP Rating	IP54
Working Temp. Range	$-10^\circ\text{C} - +50^\circ\text{C}$	Storage Temp. Range	$-20^\circ\text{C} - +70^\circ\text{C}$
Up Plumb Accuracy	$4.5\text{mm}/15\text{m}$	Down Plumb Accuracy	$6\text{mm}/15\text{m}$
MSR25D / MSR25 / MSG25 Particular Specification			
	Wavelength	Range / Range with Detector	Working Time
MSR25D	$635\text{nm} \pm 5\text{nm}$ (Red)	20m / 50m	22H
MSR25	$635\text{nm} \pm 5\text{nm}$ (Red)	30m / 60m	16H
MSG25	$510\text{nm} \sim 530\text{nm}$ (Green)	35m / 65m	6H

pAC

## Warranty

We are confident of the quality of our products and offer outstanding guarantee for professional users of the products. This statement is in addition to and in no way prejudices your contractual rights as a professional user or your statutory rights as a private non-professional user. We warrant our laser level(s) against faults in materials and/or workmanship for one year from date of purchase provided that:

- Proof of purchase is produced.
  - Service/repairs have not been attempted by unauthorized persons;
  - The product has been subject to fair wear and tear;
  - The product has not been misused;
- Defective products will be repaired or replaced, free of charge or at our discretion, if sent together with proof of purchase to our authorized distributor(s).

This Warranty does not cover faults caused by accidental damage, unfair wear and tear, and use other than in accordance with the manufacturers' instructions or repair or alteration of this product not authorized by us.

Repair or replacement under this Warranty does not affect the expiry date of the Warranty.

To the extent permitted by law, we shall not be liable under this Warranty for indirect or consequential loss resulting from faults in this product. This Warranty may not be varied without our authorization. Calibration and care are not covered by warranty.

### NOTE:

- The customer is responsible for the correct use and care of the tool. Moreover, the customer is completely responsible for periodically checking the accuracy of the laser, and therefore for the calibration of the tool.

## Packaging

