



MULTI LINE LASER
INSTRUCTION MANUAL



To help you use this instrument conveniently, we provide a specific operation manual for you. Please read the manual carefully before you use the instrument and keep it well.

1. Instrument accessories

Standard accessories:

 - 1. Instrument
 - 2. Aluminum carrying case
 - 3. Instruction manual
 - 4. Laser glasses
 - 5. Laser target
 - 6. Alkaline battery
- Optional accessories:**

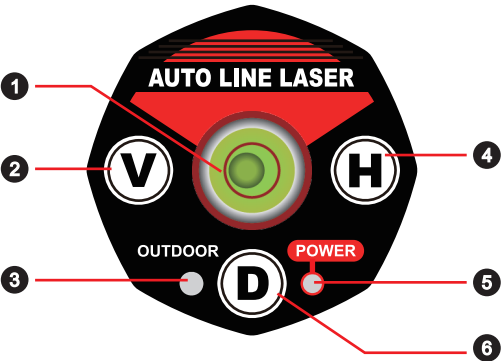
 - 1. Tripod
 - 2. Detector
 - 3. Wall Bracket
 - 4. Battery charger

2. Cautions
- 1. Multi line laser is classified as a Class 2M laser product according to United States Government Code of Federal Regulations CFR21.
 - 2. Do not stare at the laser, it will damage your eyes.
 - 3. When moving the instrument, please turning off the power.
 - 4. Do not use an acute article like finger nail to push the button on the top of the unit.
 - 5. When the instrument does not be used, please take off the battery to avoid battery electrolyte effusion.
 - 6. Do not break up or throw the battery into fire, please recycle the battery after use.
 - 7. Do not use or reserve the instrument under humid condition.
 - 8. Avoid using C-ZN battery as far as possible.
 - 9.Using AC adaptor, only rechargeable battery must be put inside the battery cover.

3. Functional description
- 1. The horizontal and vertical are separate button, it could make switches has more longer life span.
 - 2. Can be used for indoor or outdoor. When using for outdoor, the detector during the work can be used over 80m of radius.
 - 3. Electronic compensator ensures more quick self-leveling.
 - 4. When the instrument inclines over 3°, the laser line automatically gleams.

- 5. 360° rotating fine adjustment mechanism makes it easier to find objects correctly.
- 6. When turning off the power, Built-in locking system can automatically lock the compensator to avoid vibration in the transportation.

4. Instrument layout
- 1. Circular bubble (LED)
 - 2. Vertical laser switch
 - 3. Detector LED(Can only be used when LED is on.)
 - 4. Horizontal laser switch
 - 5. Power LED
(Green light turns to red when the power is low.)
 - 6. Detector switch



FOR YOUR RECORD

Place Of Purchase :

Date Of Purchase :/...../.....

5. Operation
- 1. Take out the battery lid. According the sign "+ , - " , insert four alkaline batteries or rechargeable batteries to the battery socket, then cover the battery lid.
 - 2. Turn power switch ON. Switch on the power and set the compensator free at the same time to make it self-leveling correction automatically. (Turn power switch OFF. Turn off power supply, and the compensator is automatically locked at the same time.)
 - 3. Adjust the three leveling screws to make the bubble into black circle.
 - 4. After the instrument powers on , if buzzer sounds (LED will also glitter at the same time), It means the tilt angle is over 3°. In this situation, please adjust the legs of the instrument or adjust the tripod to make the bubble of the instrument into the center position. LED will stop to glitter and buzzer sound will also stop.
 - 5. Make the instrument's floor (down) point aim at the object on the floor. Rotate the instrument to aim at the object roughly. Then turn the fine adjustment to aim at the object accurately. When the instrument is put on the tripod , please use the extensive pole of the tripod to make the instrument reach the horizontal position and finally tighten the screw of the extensive pole.

6. Care and maintenance
- 1. Do not attempt to open the instrument. Only qualified service personnel should repair the instrument.
 - 2. Do not drop, knock, or shake the instrument to avoid changing precision.
 - 3. Remove the battery from the main unit when storing the instrument for a long time.
 - 4. To clean the instrument, use a soft cloth with mild soap.
 - 5. Don't use harsh chemicals, cleaning solvents, or strong detergents, and do not store the instrument in dusty and dirty areas.
 - 6. To clean glass window, please use lens tissue.

7. Specifications

Technical specifications	LS-168R
Laser beam	4V1H1D
Light sources	635nm laser diode / floor point 650nm
Laser safety class	Class 2M for High power
Anti-dust & water	IP-54
Accuracy	±1mm/10m
Auto Bias Technology™	±3°
Working range (with detector)	Radius 50m (with detector)
Rotation	360 rotation
Fine adjustment	360 fine adjustment mechanism
Time of continuous working	3.7H
Mounting thread	5/8" x 11
Operating temperature	-10°C ~ +40°C
Weight	1.2kg
Size	Φ 97 x 195mm

