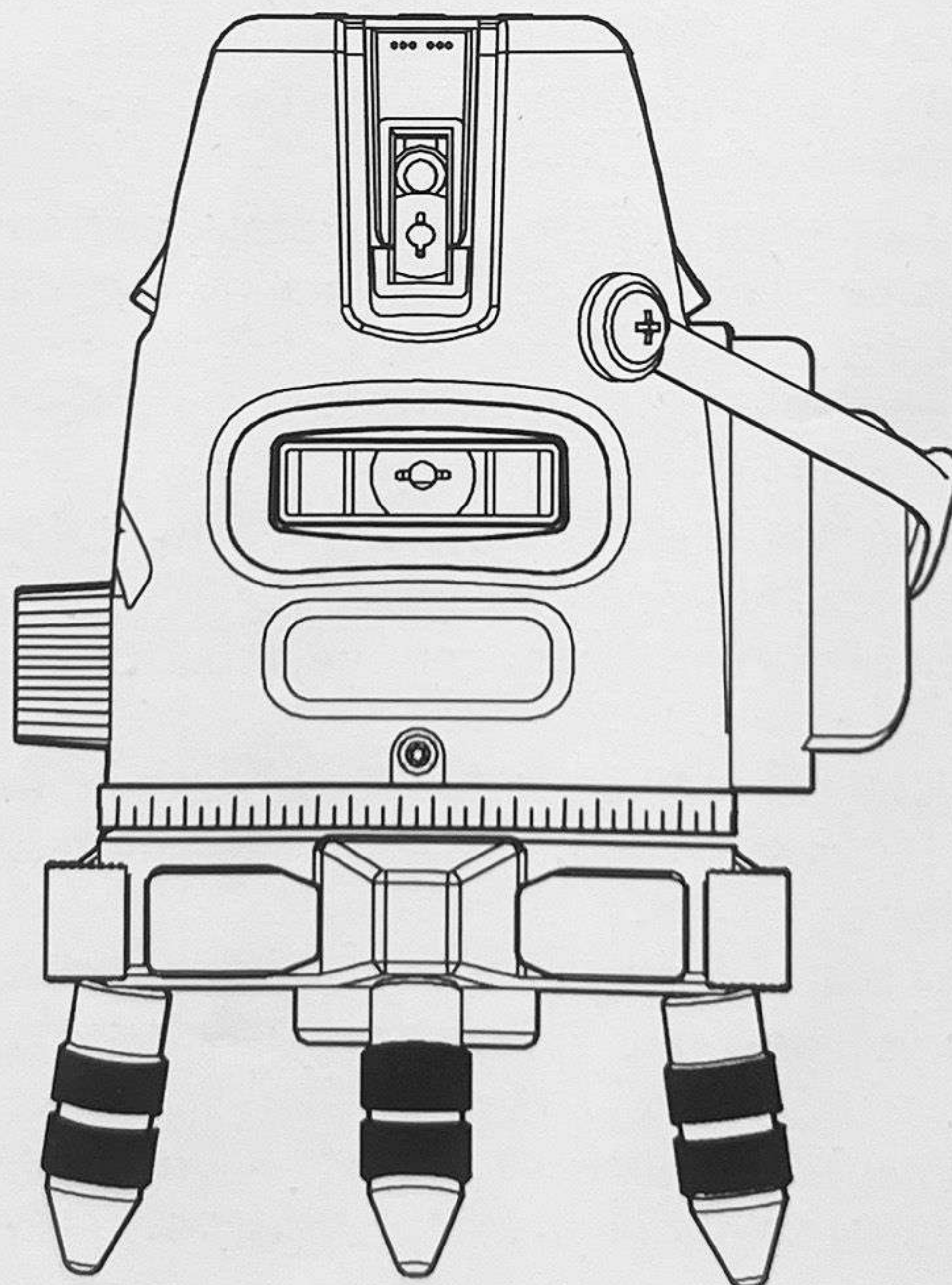


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User Manual

SELF-LEVELING LINE LASER

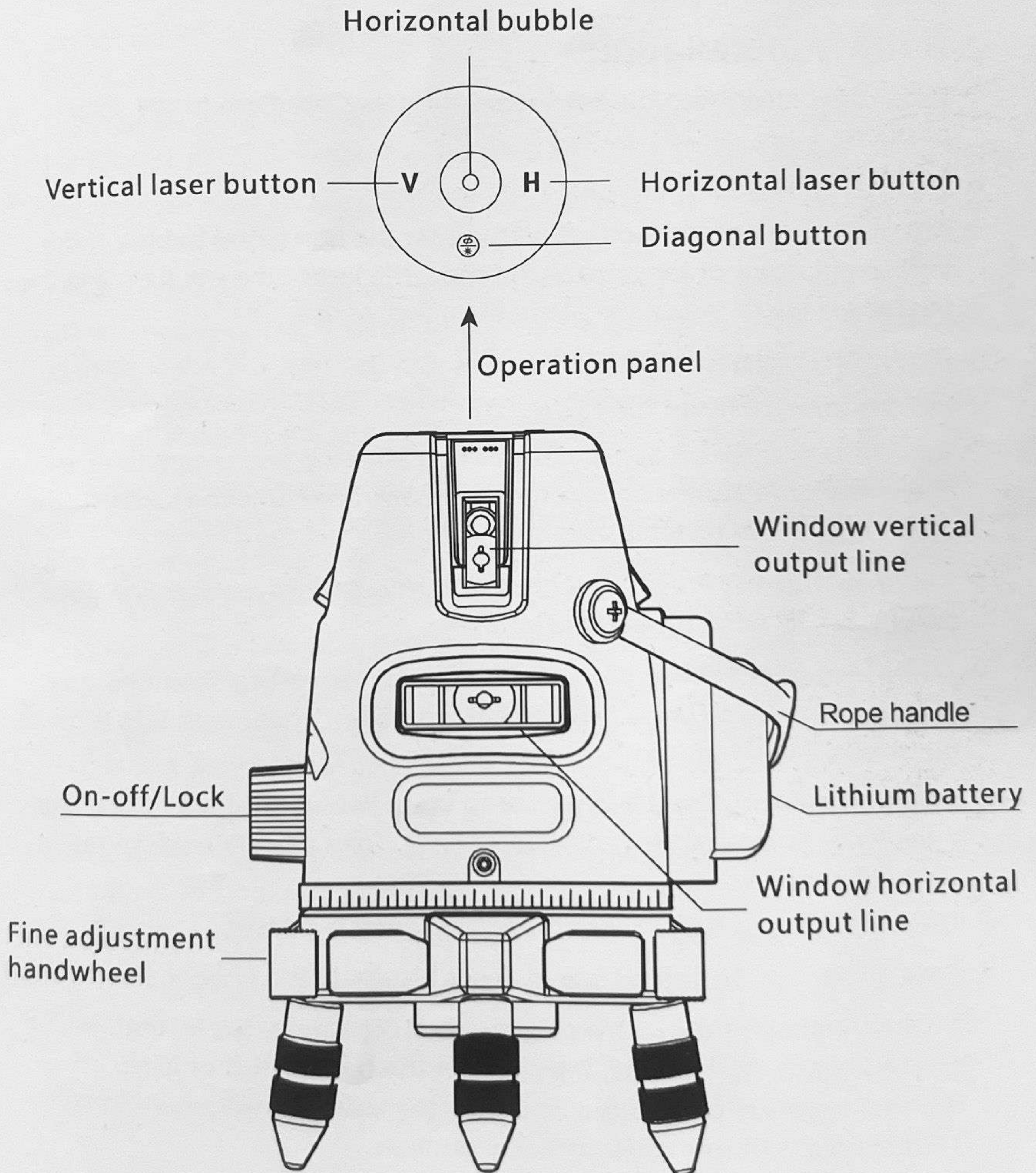
DL332302/DL332303/DL332305



1 Product uses and features

- > This product adopts the semiconductor laser transmitter with the wavelength of 515nm, produces light with high visibility, easy to identify with naked eye.
- > This product adopts Automatic level (magnetic damping) technology, large range of automatic leveling, there are no special requirements for placing on the ground, place on a flat surface or mount on a tripod, adjust to the center of the horizontal bubble.
- > The chassis bearing of this product can rotate the instrument 360 degrees, direct the laser line wherever it is needed.
- > The micro adjustment knob of this product can find the target quickly and accurately.
- > The automatic alarm function enables the instrument to automatically turn off the laser and give an alarm when the tilt exceeds the level range. After leveling, the light quickly returned.
- > The automatic locking device of this product makes the instrument lock automatically when it is closed and unlock automatically when it is opened.
- > This product is widely used in interior construction, decoration, marble veneer, water and electricity air conditioning, carpentry installation and other aspects.
- > The laser line of this product is clear and bright, it can produce two or more laser fans and bottom to point. The laser fan is projected onto the wall, one horizontal line and one or more vertical lines can be generated, the angle between two or more vertical lines is 90 degrees, the position where it intersects at the top of the instrument is the zenith.

2 Appearance and key introduction



3 How to use it

1. Instrument installation

- > The product is placed on a flat ground, lifting platform or tripod. When using the tripod, you need to tighten the bottom screw correctly to prevent damage together.

2. Battery installation

- > Install the battery into the battery box and pay attention to the snap position.

3. Instrument level

- > Adjust the instrument foot screw to center the horizontal bubble. If the instrument is out of the horizontal range, the laser tube will flash and the buzzer will alarm, which will affect the effect of use.

4. Function description

Introduction of laser function:

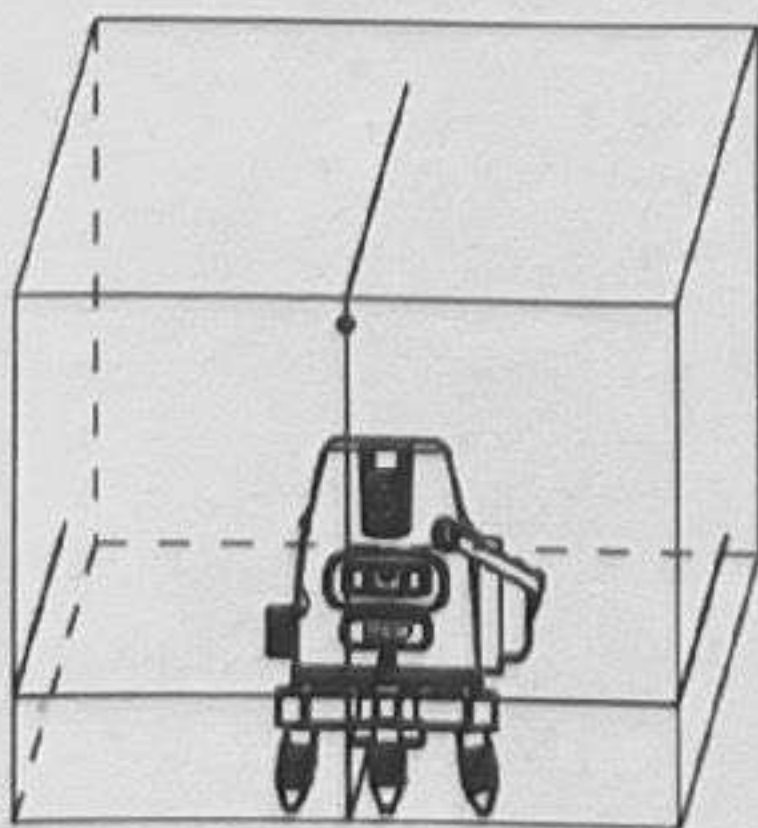
- > Turn the power switch to the ON position after the instrument level, the power indicator light is on and the automatic level function starts. At the same time, the horizontal laser line is bright.
- > 2-wire instrument; Press V key once to turn on a vertical laser line. Then press V key to close the vertical laser line.
- > 3-wire instrument; Press V key once to open one vertical laser line, and press V key twice to open two vertical laser lines. Then press V to turn off the vertical laser line.
- > 5-wire instrument; Press V key once to open two vertical laser lines, press V key twice to open four vertical laser lines. Then press V to close the vertical laser line.
- > Press the H key to turn on or off the horizontal laser line.
- > Press "U" key for 3S in the state of restart to enter the oblique line mode.
- > If the inclination of the instrument exceeds 3 degrees, the instrument will beep and flash. At this time, the screw of the base foot should be adjusted to center the bubble, and then the laser line will return to light. It adopts the principle of electronic induction.

4 Product parameters

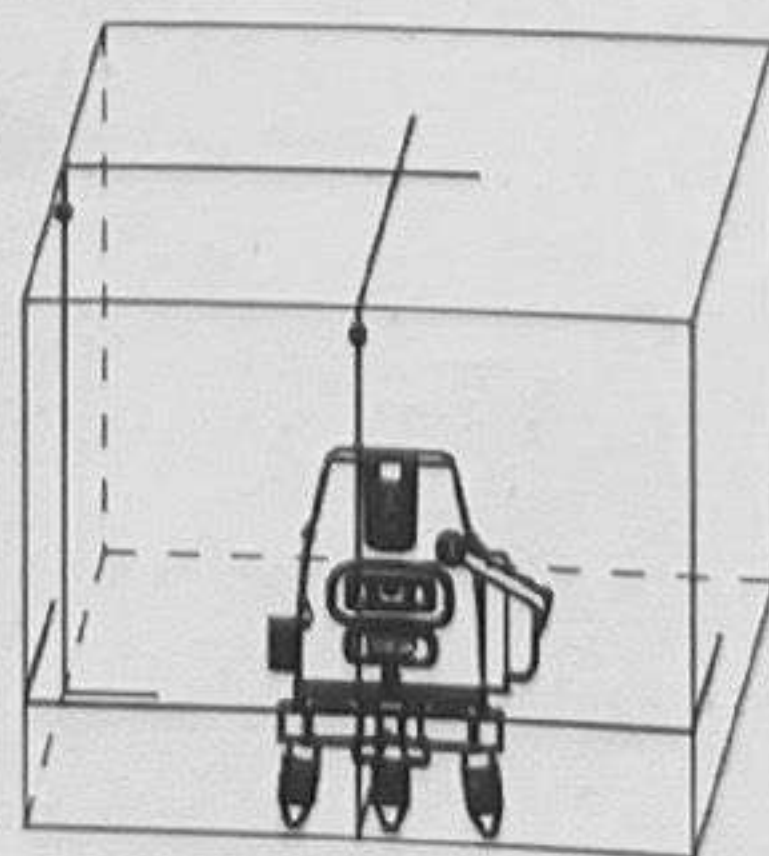
Model	DL332302	DL332303	DL332305
Parameter			
Horizontal mode	Automatic leveling of gravity pendulum		
Horizontal range	$\pm 3^\circ$		
Horizontal time	$\leq 5s$		
Accuracy of horizontal line	$\pm 1.5mm/7m$		
Vertical accuracy	$\pm 1.5mm/7m$		
Laser wavelength	515nm		
Laser linewidth	$\leq 2.5mm/7m$		
Projection angle	110°		
Scope of work	$\leq 10m$		
Battery working hours	> 8h (Full open)	> 6h (Full open)	> 4h (Full open)
Battery capacity	2400mAh	3000mAh	4000mAh
Working temperature	$-10^\circ C \sim 50^\circ C$		
Storage temperature	$-20^\circ C \sim 70^\circ C$		
Laser safety level	class II		
Out of range alarm mode	Sound and light alarm		
Accessories(2、3)	Manual, single battery pack, one-meter charge line, plastic box		
Accessories (5)	Manual, double battery pack, one-meter charge line, plastic box		

5 Light output diagram

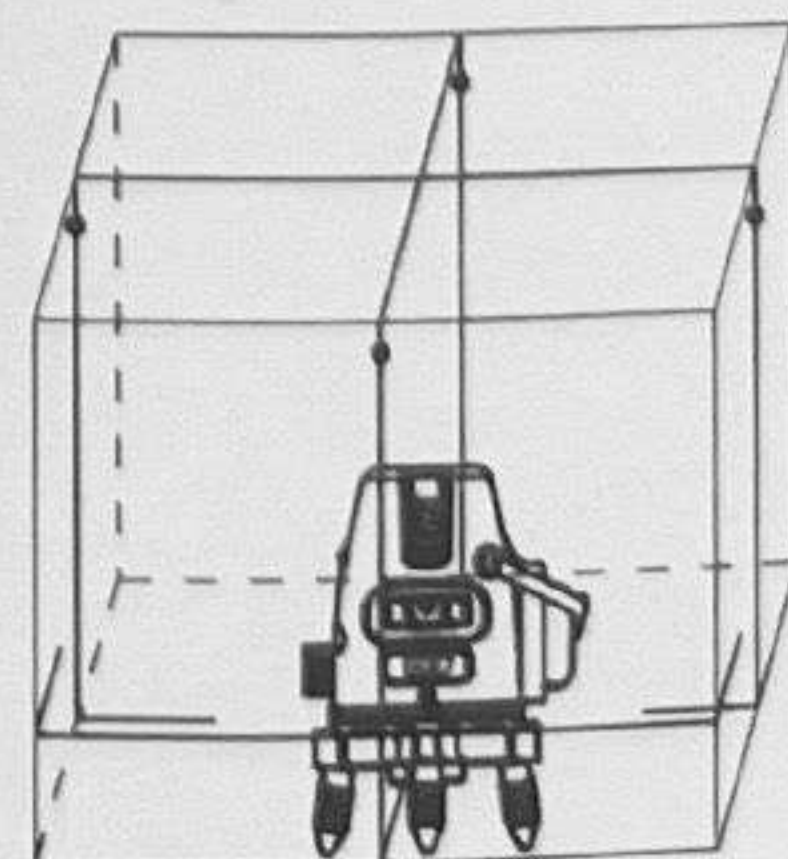
DL332302



DL332303



DL332305



6 General safety principles

1. The laser grade of this product is Class II. Do not look directly at the laser beam, it will disturb the vision of others and cause accidents or hurt your eyes. If the laser beam enters your eyes, please close your eyes consciously and immediately turn your head out of the laser beam range.
2. Please do not make any changes to the laser device.
3. Do not operate the laser instrument in an explosive environment, such as an environment with flammable gas, liquid or dust. Sparks may be generated in the laser instrument and ignite dust and gas.
4. Non-professionals should not disassemble the machine.
5. Do not wipe the machine with organic solvents.
6. Please send your machine to professional maintenance personnel, you must use the same original parts for replacement.

Battery tools use and precautions:

1. Only use the charger specified by the manufacturer. A charger that fits one battery can cause a fire if it is used in another pack.
2. Use only tools with a dedicated battery pack. There is a risk of injury and fire with other batteries.
3. When the battery pack is not in use, please keep away from metal objects, such as paper clips, hard pens, calligraphy keys, nails, screws and other small metal objects, in case one end of the battery pack is connected to another. A short circuit at the end of the battery pack may cause combustion or ignition.
4. In abusive conditions liquid will flow out of the battery. If touched, rinse with water. If fluid gets into your eyes, get to the hospital immediately. Liquid flowing out of the battery can corrode or burn.
5. Do not use damaged or modified battery packs or tools. Damaged or modified battery packs can have unpredictable results, resulting in combustion, explosion, or injury.
6. Do not expose the battery pack to fire or high temperature. Exposure to fire or temperatures higher than 130 degrees can cause the battery to explode.
7. Cannot repair damaged battery packs. Battery packs can only be repaired by the manufacturer or an authorized service provider.

7 General safety principles

1. For your safety, you must read all instructions and keep this instruction for use properly.
2. Protect the battery pack from high temperature and flame. There is a danger of explosion.
3. Do not open the battery pack without authorization, it may cause a short circuit.
4. The charger must be kept away from rain or moisture. If moisture or water penetrates, it will increase the risk of electric shock and damage the charger.
5. The charger must be kept clean. If dirt accumulates on the charger, it may cause electric shock.
6. The electrical appliances and tools must be checked before use. If a malfunction is found, it cannot be used. Do not disassemble the tool without authorization. The tool can only be repaired by qualified professionals, and only original parts can be replaced. Damaged electrical appliances, wires and plugs will increase the risk of electric shock for users.
7. Do not place the charger on flammable objects (for example: paper, textiles, etc.) when charging. In addition, the charger cannot be used in a flammable and explosive environment. It becomes hot when charging. If it is used under the above conditions, it is prone to fire.
8. Don't use it in a humid environment, and avoid direct sunlight to the instrument.
9. The instrument should not be exposed to extreme weather, nor should the instrument be placed in an environment with a considerable temperature difference.
10. Avoid violently hitting the measuring instrument, and don't let the instrument fall to the ground. The instrument must be turned off before moving the instrument.
11. Do not leave the instrument at work to prevent other people from being irradiated by the laser beam.