

Operating Manual

LINE SITE[™]
LSL-205

WARNING AND CAUTION

- While the instrument is operating, be careful not to expose your eyes to the emitting laser beam. Exposure to a laser beam for a long time may be hazardous to your eyes (laser beam: equivalent to Laser Class 2 Standard).
- Do not try to dismantle the instrument. Have it repaired by your dealer or supplier.

Self-Dismantling may worsen the problem.

- When attaching the instrument to a tripod, make sure the instrument is securely fixed to the tripod and the tripod leg clamps should be securely fastened. If not securely fastened or tightened, the main unit could fall off or the tripod could fall over.
- When setting the tripod, be aware of the tripod shoes which are sharp. These sharp points allow tripod to be securely positioned on the ground.

Operate this laser product with the height of laser avoiding that of eyes of vehicle drivers or pedestrians. Avoid putting the laser on a highly reflective material such as mirror. When disposing of this instrument, take a measure by removing the batteries so that the laser will not be emitted.

Introduction

Congratulations on the purchase of your Linesite LSL 205 Series Laser. Although simple to use, we recommend that you read this manual before operating the laser.

Description

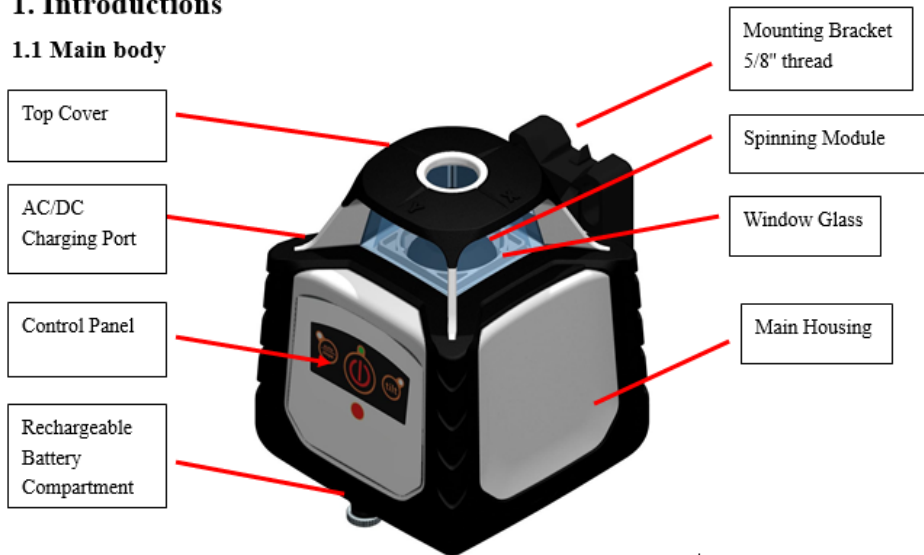
The Linesite LSL205 is ideal for general construction, site preparation, foundation building in medium working range. It automatically self-levels in horizontal condition.

Functions

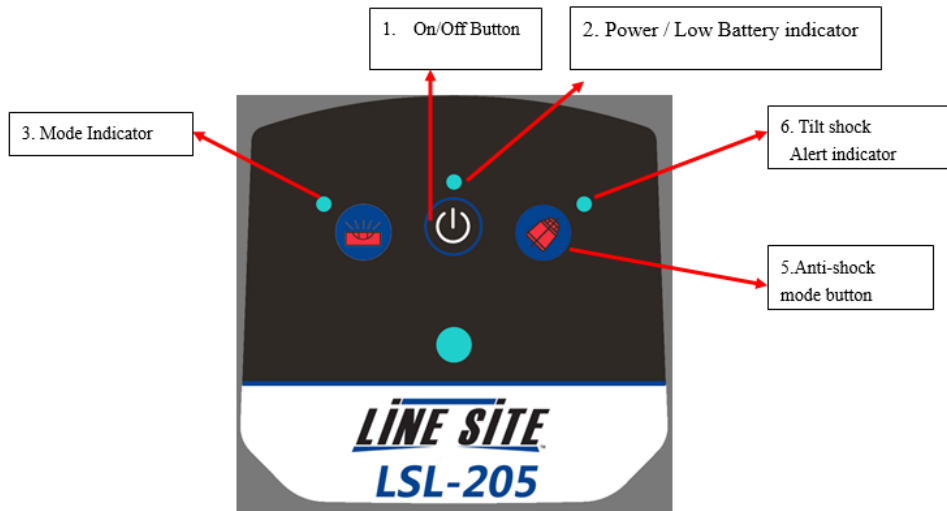
This instrument is equipped with the red semiconductor diode with wavelength of 635nm. The laser module will rotate 360 degree and hence form one laser surface for leveling and alignment applications.

1. Introductions

1.1 Main body



1.2 Control Panel



1.3 Main Panel Explanation

- (1) ON/OFF: Controlling the state of power.
- (2) Power indicator: Power indicator: When on, the instrument is starting up. Otherwise it is shutting down.
- (3) Mode indicator: When on, the instrument is leveling manually. When it blinks, it stays in alarm. (The slope of the instrument is out of range).
- (4) Anti-shocking mode button: Press to enter anti-shocking alert mode. Under this mode, the laser will stop spinning if the unit is bumped or disturbed. Then users need to reset the laser unit.
- (5) Anti-shocking Alert indicator: When the light is blinking slowly, it is in Automatic Drift System model. When the light is blinking quickly, the laser will not level.

2. Directions:

2.1 Instrument Placement

2.1.1 Horizontal Leveling

Lay the instrument on the tripod or stable flat surface, or even hang it on the wall. Set upright the instrument and keep the slope of instrument within the range from -5° to $+5^{\circ}$.

3. Operations

3.3.1 Power

Press the Key ON/OFF to bring automatic leveling into function when the power indicator lights.

When Power indicator lights, it shows the voltage of the batteries is insufficient. Then the rechargeable batteries need to be charged.

Press the Key ON/OFF again to switch off the instrument and power indicator will go out.

3.3.2 Leveling

Press the Key ON/OFF to bring automatic leveling into function when the laser beam begins to wink. After automatic leveling, the laser module will rotate at the speed of 600r.p.m.

If the instrument is placed improperly, or the slope of instrument exceeds the range of $\pm 5^\circ$, at that moment mode indicator and the laser beam will wink together. Then place the instrument into correct position.

4. Power

When the voltage indicator lights, the batteries need to be charged immediately. Connecting the charger with AC, insert the plug of charger into the plughole at the bottom of the instrument (As depicted above).

If the red indicator of charger lights, it shows the batteries are being charged.

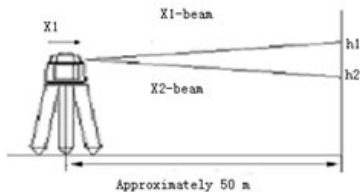
If the green indicator of charger lights, it shows the course of recharging has finished.

Notices:

- (1) Using included rechargeable battery pack of the instrument, recharging will be finished within 7 hours.
- (2) Power required for the charger: Frequency: 50-60HZ; Voltage: 100-240VAC
- (3) Charging and using of the instrument can progress simultaneously.
- (4) If keeping the instrument in storage (or Leave the instrument unused for a long time), the batteries (dry battery or rechargeable battery) need to be taken out.
- (5) Make sure to charge the laser unit every 3 months if the laser is not operated frequently.

5. Horizontal Accuracy Checking

- (1) Place the instrument at the point of 50m in front of wall (or set a scale plate at the point of 50m away from the instrument), and then adjust the level of the base approximately to aim the X1 to the wall (or scale plate), as depicted below.



- (2) After switching on the power, use the laser detector measuring the h_1 of X1-beam on the wall or scale plate.
- (3) Loose the screw of the tripod, turn around the instrument for 180° to measure the h_2 of X2-beam on the wall or scale- plate. The method should be the same with h_1 .
- (4) Check the Y-beam in the same way.

6. Specifications

Leveling Accuracy (H)	±1.5mm at 10m
Leveling Range	±5°
Working Range with Receiver (Diameter) depending on working environment	Diameter:350m
Visible Working Range depending on working environment	25m
Light Source	Laser Diode, Class 2 (IEC60825-1,2014) wavelength: 635-650nm
Working Temperature	-5°C-- +50°C
Storage Temperature	-15°C - to +60°C
RL Power Supply	DC 4.8-6V (NI-MH rechargeable battery pack)
RL Charging Time	No less than 7hrs (Do not use Alkaline batteries)

6. Specifications - Continued

Hours in continuous use	Approximately 20 hours (Rechargeable)
RL IP	IP 55
Dimension	160mm x 120mm x 120mm
Weight	2.1kg
Laser Detector Precision	Rough Band: 3mm/ Precise Band: 1mm
Laser Detector IP	IP55
Laser Detector Power Supply	9V

7. Item Checklist

Item	LSL-205
Rotary Laser level	*
Hard carry case	*
Rechargeable battery pack (Installed)	*
Laser receiver with clamp	*
Laser target	*
Visibility glass	*
Charger	*
User manual	*



Side Magnets

Marking Central line

Power Button

Volume Switch

Top Magnets

Sensing Window

Backlighting Switch

Accuracy Band Switch

