

Automatic self-leveling line laser LS4V4H

Operating Manual

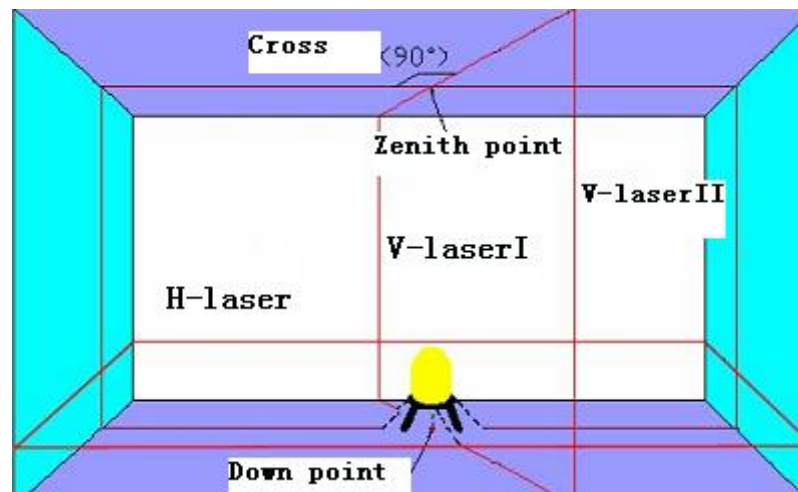


MICE
LASERS

1 Functions

This instrument is equipped with the semiconductor diode with wavelength of 635nm, which the laser beam has supreme visibility. And also this instrument adopts the electric self-leveling technology, so it has large leveling range and high accuracy.

The instrument can emit four crossed vertical lasers, four horizontal laser(in the same surface) and a down point, the cross point of four vertical lasers over the instrument is the zenith point, which stays in the same plumb line as the down point. Emitting directions of the laser depicted as follows:

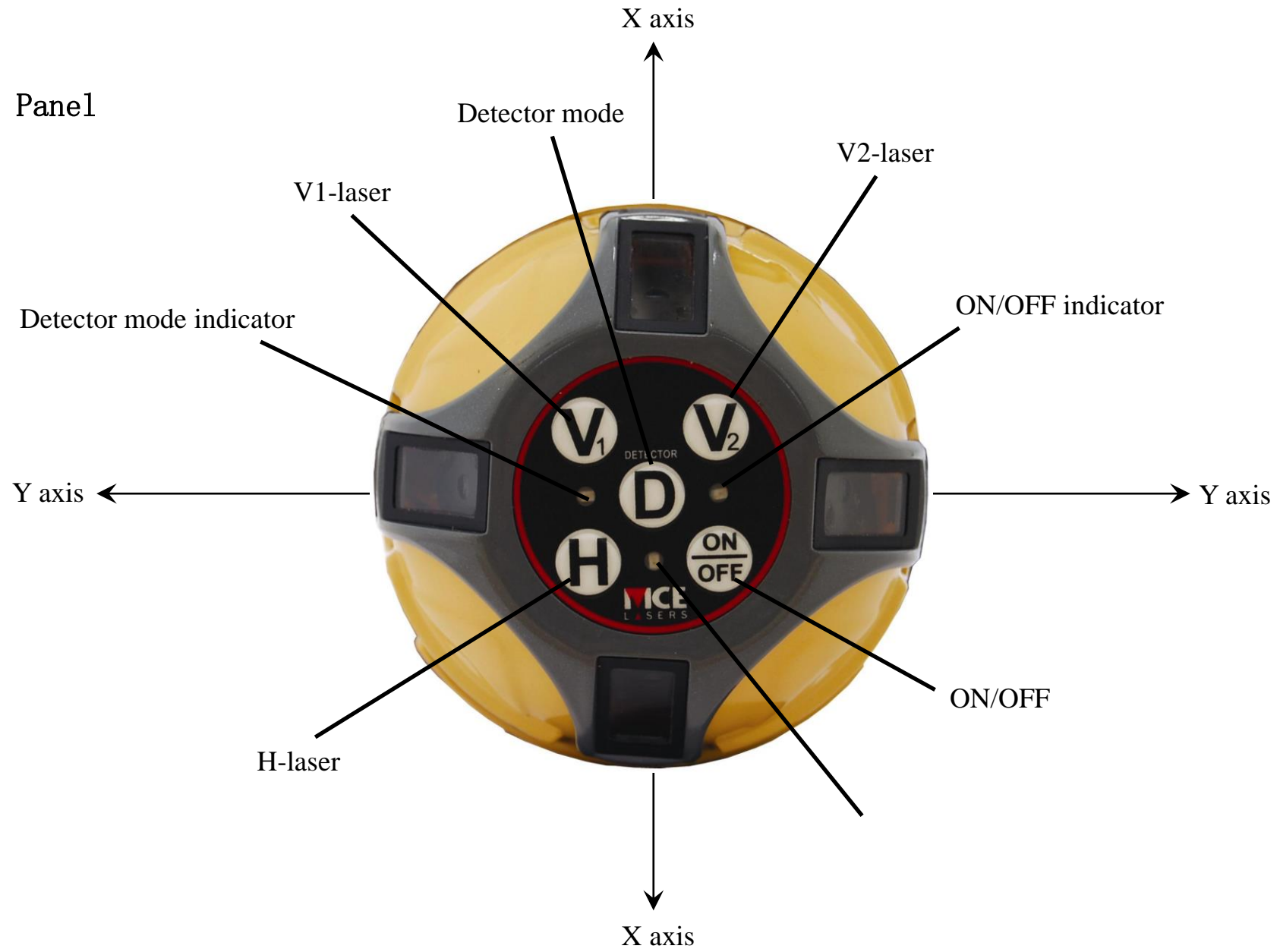


2 Introduction

2.1 Main body



2.2 Panel



3. Directions

3.1 Battery Installation



Place 4 sections of rechargeable batteries into the battery box , then put the battery box cover onto the battery box as the above illustration.

3.1.1 Charging

One battery box with 4 sections of rechargeable batteries and a charger are included in the accessories of the instrument.

3.1.2 Charger

When the power indicator on the panel winks, the batteries need to be charged immediately. Connect the input plug of charger with AC, and then insert the output plug of charger into the plughole of charger box.

When the indicator on the charger lights, charging are progressing.

When the indicator on the charger winks quickly, charging has finished.

Notices:(1) Causes for charger indicator winking slowly

A: Having not inserted the output plug of charger into the plughole of the charger box completely.

B: Troubles in the connection of the output plug with the plughole of charger box, or the troubles inside the batteries.

- (2) Using the standard rechargeable batteries of the instrument, the whole course of charging will be finished in 4 hours approximately.
- (3) Power required for the charger Frequency :50-60HZ; Voltage: 85V-265V。
- (4) If keeping the instrument in storage (not using for a long time), please take out the batteries (alkaline batteries or rechargeable batteries).
- (5) The brand-new or unused batteries need to be recharged or discharged for three times to acquire the standard capacity.

3.2 Operation

3.2.1 ON/OFF

Press the key ON/OFF to make the instrument power on, and then the automatic self-leveling starts up when the power indicator lights. At the same time the horizontal laser will be emitted.

When the power indicator winks to show the voltage of the batteries is too low. On this occasion,

the batteries need to be renewed.

Press the key ON/OFF again to make the instrument power off.

3.2.2 Panel Controlling

1. Press the key H after instrument is power on, and then the horizontal laser II will be emitted.
At this moment, press the key H again, all the horizontal laser go out.
2. Press the key V1 after the instrument is power on, and then the two vertical lasers of V1 direction will be emitted; At this moment, press the key V1 again, the two vertical lasers will go out.
3. Press the key V2 after the instrument is power on, and then the two vertical lasers of V2 direction will be emitted; At this moment, press the key V2 again ,the two vertical lasers will go out.
4. Press the key V1 or V2, the down point will light simultaneously.
5. Press the key OUTDOOR to choose the modulation of the laser. Press the key OUTDOOR after the instrument is power on, then the lasers of the instrument will be able to be located outdoors with the detector.
Press the key OUTDOOR again to shut off the modulation of the lasers.

3.2.3 Leveling

When the instrument is placed improper or the slope of the instrument exceed the leveling range $\pm 4^\circ$ permitted due to some other reasons, all the lasers will go out ,which show the instrument is out of level. On this occasion, please turn around the screw of the foot under the base to adjust the slop so that the instrument will resume the state of leveling.

4. Specifications

Accuracy:	$\pm 1\text{mm}/10\text{m}$
Self-leveling range:	$\pm 4^\circ$
Working distance:	Radius: approx. 10m (indoors), Radius: approx. 50m(using the detector)
Line laser wavelength:	635nm \times 8(4V & 4H); 650nm \times 1(Down point)
Power:	DC 4.8V-- 6V(4 sections of NI-MH rechargeable batteries or 4 alkaline batteries)
Continuously working time:	Approx. 4 hours All diodes light, Up to 15 hours depending on diode light combination
Dimension:	140(Φ) \times 221(H) mm
Weight:	1.75kg