# Automatically Level Laser Marker

Model: KC-084-Z

## **Operation Manual**



## Automatically Level Laser Marker

## **OVERVIEW**

KC-084-Z Automatically Level Laser Marker can emit two red laser beams in horizontal and vertical at the same time. It is suitable for use in construction and indoor decoration, facture of doors and windows, machining on wood and stone materials, installation of pipelines and machines to provide various basis and necessary detecting and lofting tools.

The tool has the ability to adjust the laser projection distance by using automatic leveling function of  $\pm 8^{\circ}$ . Because the tool has push pins fixation and butyl rubber tape fixing function, you can use the tool on the surface of any kind of wall. It's convenient for taking, easy to operate. It is saving time, energy, of high efficiency and assures quality of construction.

KC-084-Z Automatically Level Laser Marker is Class 2 product conforming to EN 60825-1.

## SAFETY INSTRUCTIONS

#### Failure to follow the instructions listed below may cause personal injury.

- Read and understand all instructions prior to any operation.
- Do not remove any labels from the tool.
- Do not operate the tool with the presence of flammable/explosive gases.
- Do not operate the laser tool around the children or allow children to operate the laser tool, failure to do so will injure eyes of children.
- Do not stare into the laser beam.
- Do not project the laser beam directly into the eyes of others.
- Do not set up the tool at eye level or operate the tool on or near a reflective surface, as the laser beam could be projected into your eyes or the eyes of others.
- Do not observe the laser beam by using optical tools such as binoculars and magnifying glass.
- Operate with care because the pin is sharp.
- Do not push the metal pins into material other than dry wall or wood as breakage of the pins and the tool.
- Please conserve the push pins well before handling or storing the tool.
- Please keep the tool out of reach of children and other untrained persons.
- Always turn the laser off when it is not in use.
- **Cautions:** when drilling, tacking and cutting on the wall, floor or ceiling, it is necessary to notice the wires and iron pipes inside them and this kind of materials can be detected by the intelligent scanner of our company, disconnect with the power when operate near wires.
- Warnings:

#### DANGER

Class 2 Laser Product PER EN60825-1:1994+A1:2002+A2:2001 Pmax<1mW,  $\lambda = 630 \sim 660$ nm Do not stare into beam! Avoid direct eye exposure!

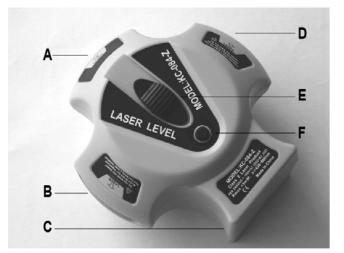
#### This tool emits a laser radiation!

• Notice: do not disassemble the tool

The laser tool has no maintainable part inside, so disassemble the laser tool without authorization will cause failure of its own protection function. Modification will cause dangerous laser leakage.

- Battery safety tips
- Please remove the battery when clean the product.
- Please remove the battery when do not use the product for a long time.
- Insert the battery with reference to the correct polarity.
- Please dispose the waste battery reasonably: battery placed under the environment of high temperature will cause the danger of explosion, please don't put the battery into the fire. Please in the polarity of the battery with insulating tape, in order to prevent direct contact with other objects. Many countries have regulations regarding battery processing. Please comply with local regulations.

## TOOL COMPONENTS



- A. Laser outlet 1
- B. Laser outlet 2
- C. Battery Lid
- D. Laser outlet 3
- E. Locked button
- F. on/off button

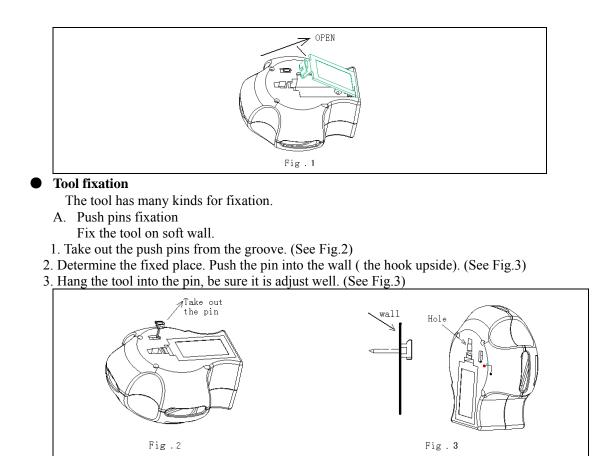
## **OPERATION INSTRUCTIONS**

#### Battery installation

1.Open the battery lid. (see Fig. 1)

2.Insert a 9V block battery with reference to the correct polarity.

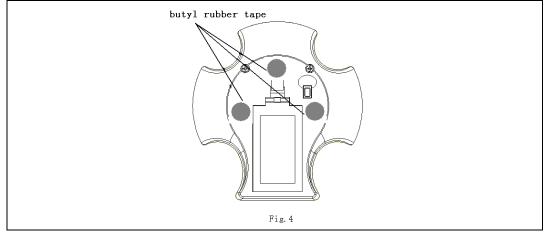
3.Put the battery back to the box and close the battery lid.



B. Butyl rubber fixation

You can fix the tool on the wall which surface is slick or unconformable for push pins fixing.

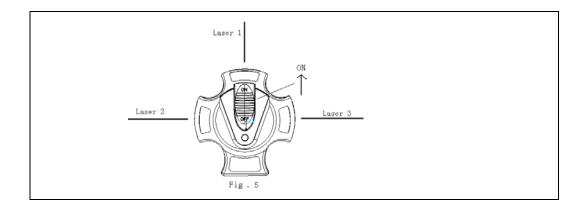
- a) Clean surface and keep dry.
- b) Stick the butyl rubber tape on the back of the tool.(see fig.4)
- c) Determine location for the tool on the wall and mark. Make sure the adhibit is firm.



#### **Operation instruction**

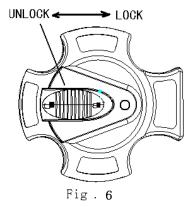
1.Determine the start place and laser direction on the level surface.

- 2. Fix the tool as per the starting place. (See "How to fix the tool")
- 3. Press the on/off button to open the laser. When in unlock state, the tool will project the horizontal and vertical laser line automatically(See Fig.5). Do not stare into laser beam, see "Warnings")



#### • Automatical leveling

- 1. Automatically adjusting level function is only applied to the vertical wall and not applied to the floor or other level surface.
- 2. When operated on the surface of the wall, make sure the laser head is fixed upward. When is on the unlocked position, the automatic level function is  $\pm 8^{\circ}$ . The tool can automatically adjust level in this range.
- 3. When is on the locked position, the tool won't have function of automatic adjusting level. (See Fig.6)



**D** Tips:

• The tool is only used to project line on the surface of the object where the tool is placed. The tool is designed to project a baseline on the surface of the object. The reflection of the baseline on any other surfaces cannot be used as a reference.

• Operation instrument should be away from magnets or magnetic environment, so as not to affect the results.

• If the laser line is darken or not visible during operation, please check and replace the battery.

• The tool is recommended for indoor use. The visibility of the laser will be affected if the tool is used outdoor.

### Cautions

- Operate with care and do not let the tool drop down.
- Do not disassemble the tool in case of damage.
- Clean the tool gently with soft fabric.
- Please place the tool with workbox when not in use.
- Do not use where there is dust and water, in order to avoid pollution laser lens.
- Remove the battery when not in use for an extended period of time in case of damage of tool by deterioration of battery.

## **TECHNICAL SPECIFICATIONS**

| Product Name          | Automatically Level Laser Marker        |
|-----------------------|---|
| Model                 | KC-084-Z                                |
| Recommended use       | Indoor or indirect sunlight             |
| Length of laser line  | 2m                                      |
| Width of laser        | <5mm                                    |
| Accuracy              | $\pm 1$ mm/m                            |
| Power of laser        | <1mW                                    |
| Laser wavelength      | 630-660nm                               |
| Laser class           | Class 2                                 |
| Power supply          | A 9V block battery                      |
| Working current       | <90mA                                   |
| Operation temperature | -1°C-+40°C                              |
| Working humidity      | 5%~95%RH non-condensing                 |
| Storage Condition     | -20°C~+60°C, $\leq$ 85% (w/o batteries) |
| Dimensions            | 105mmX100mmX55mm                        |
| Weight                | 180g (battery not included)             |

## WARRANTY

The product is warranted to be free from defects in materials and workmanship for a period of one year from the date of purchase.

#### Notice:

The warranty does not apply to the following conditions:

• Disassembling the laser tool will void the warranty.

• We are not responsible for any damage resulting from abrasion, water, dropping or disassembling.

**Tips:** Most parts of the product could be recycled, please refer to your local regulations for disposing of them instead of throwing into the dustbin.