# Universal Laser Level Marker

Model: KC-084

# **Operation Manual**



## **Universal Laser Level Marker**

### **OVERVIEW**

KC-084 Universal Laser Level Marker can generate a striking red laser line on the surface of objects. 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 is attached with metal pins to facilitate fixing and it can be rotated by 360°. It is convenient for taking, easy to operate and with rapid measurement. It is saving time, energy, of high efficiency and assures quality of construction.

KC-084 Universal Laser Level Marker is a Class 2 laser tool conforming to the 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 may occur.
- To avoid injury, always make sure the pins are fully retracted and the protecting covers are covered before handling or storing the tool.
- Don't abandon the protecting covers for push pins at will.
- 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:

DANGERClass 2 Laser ProductPER EN60825-1:1994+A1:2002+A2:2001Pmax<1mW,  $\lambda = 630 \sim 660$ nmDo 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. Level vials
- B. Laser outlet
- D. Push pins
- E. Base
- G. Alignment plate
- H. Protecting cover
- F. Pointer

- J. On/off button
- I. Battery Lid

C. Push tab

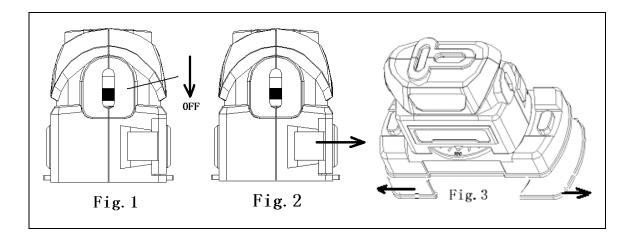
### **OPERATION INSTRUCTION**

### **Battery installation**

- 1. Make sure that the laser is at OFF state. (see Fig. 1)
- 2. Open the battery lid on the back of tool. (see Fig.2)
- 3. Insert a 9V block battery with reference to the correct polarity.
- 4. Put the battery to the compartment and close the lid.

### Tool installation

Install the main frame on the base. (see Fig.3) Please take away the protecting covers when use it.

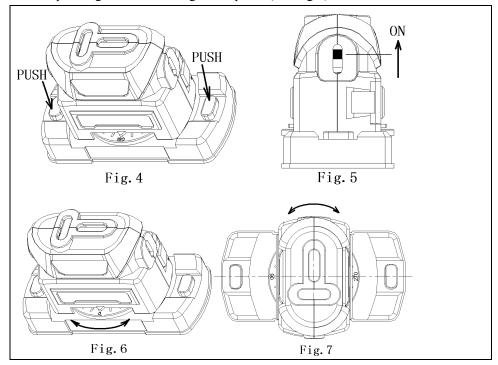


### Operation instruction

### • For level surface use:

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

- 2. Place the tool on the start place to the laser direction.
- 3. Fix the tool. (if needed, please press the push pin button on the base when operating on the soft surface.)
- 4. Turn on the laser (do not stare into the laser beam, see Fig.5)
- 5. Turn the laser line to desired position.
- 6.If need a line with any angle to the above laser line, keep the tool static, rotate the alignment plate until the "0" scale align to the pointer. (see Fig.6)
- 7. Turn the tool according to the desired angle and make the pointer indicate the corresponding scale on the alignment plate. (see Fig.7)



### • For wall use (dry wall or wooden wall only)

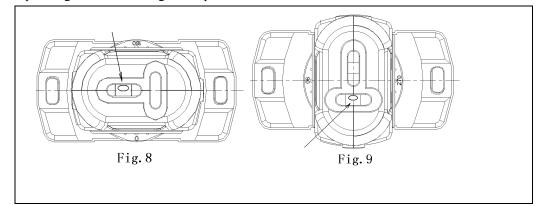
1.Determine the start place and laser direction on the level surface.

2. Place the tool on the start place to the laser direction.

- 3. Press the push pin button on the base to locate the tool.
- 4. Turn on the laser (do not stare into the laser beam)
- 5. Adjust the laser line to desired position.
- 6. When need to project the horizontal line on the wall, turn the tool until the bubble in the horizontal level is between the two lines. (see Fig.8)
- 7. When need to project the vertical line on the wall, turn the tool until the bubble in the vertical level is between the two lines. (see Fig.9)

8. When need a line with any angle to the above laser line, keep the tool static, rotate the alignment plate until the "0" scale align to the pointer. (see Fig.8)

9. Turn the tool according to the desired angle and make the pointer indicate the corresponding scale on the alignment plate.



### • Tips:

• 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.

• For convenient operation, the project direction of the laser line is generally from bottom to top and /or from right to left when operate the laser tool.

• 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 drop, 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	Universal Laser Level Marker
Model	KC-084
Recommended use	Indoor
Length of laser line	2m
Width of laser	<5mm
Accuracy	±1mm/m
Power of laser	<1mW
Laser wavelength	630-660nm
Laser class	Class 2
Power supply	A 9V block battery
Working current	<40mA
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	106mm×52mm×72mm
Weight	140g (battery not concluded)

### 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.
- $\bullet$  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.