## **Instruction manual**

# **LED Light Sticks**

D20-1509-W0 LED Light Sticks RB-Y (set of 3 types)

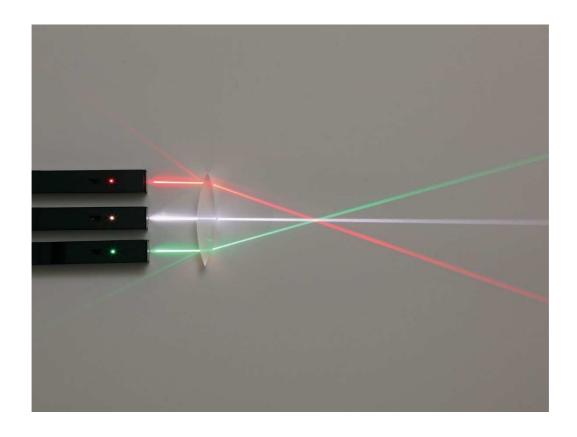
D20-1509-X0 LED Light Sticks RB-Y4C (set of 4 types)

D20-1509-W1 LED Light Stick RB-YW

D20-1509-W2 LED Light Stick RB-YR

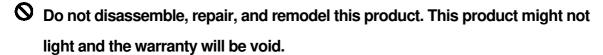
D20-1509-W3 LED Light Stick RB-YG

D20-1509-W4 LED Light Sticks RB-YB





## **A**Safety Precaution



- O not directly touch the light-emitting section because it reaches high temperature when lit.
- S Keep dry. Otherwise, the product can be short-circuited and will not be lit.
- O not insert anything such as a wire into the slit. Otherwise, the light-emitting section may be damaged.
- O not look directly into the LED light emission because the built-in light source unit emits high-intensity and powerful beam that is harmful for human eyes, even if not so much as laser beam.
- Teacher or trainer must instruct students about the safe ways of conducting experiments with this product before actually conducting experiments.
- When you find that something is broken, please do not repair the product by yourself and contact your distributor.
- Remove batteries if not used for a long time. Otherwise, the product could be damaged by fluid leaking from the batteries.

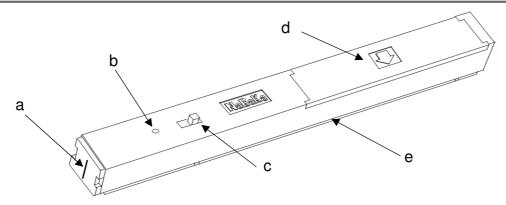
### **Product's Feature**

Light Stick emits 17mm-thick "belt-like" beam in a vertical direction, well-defined enough during/after transmitting through a lens. Furthermore, it is possible to clearly track the traveling path of the ray even in a classroom of normal illumination level.

Product line of the Light Stick includes white light, red light, and green light. Each stick emits a single beam of a single color, which makes it possible to create single or multiple parallel beams, or convergent or divergent beams emitted from random angles.



## **Specification**



- a: Light-emitting section (Slit)
- b: Indicator (hole)
- c: Switch

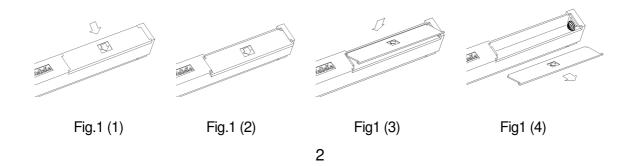
d: Battery cover

- e: Magnet
- Light source: High brightness "Beam" LED, Cylindrical lens
- Power source: Size AA battery x 2 for each light box (sold separately)
- Size of each light box: 110 x 112 x 52mm
- Others: Built-in magnet on back surface of each light box
- D20-1509-W0: Set of three Light Stick (white, red, and green color each)
- D20-1509-X0: Set of four Light Stick (white, red, green, and blue color each)
- D20-1509-W1: White color, 1pc
- D20-1509-W2: Red color, 1pc
- D20-1509-W3: Green color, 1pc
- D20-1509-W4 Blue color, 1pc

### Setup procedure

#### 1. Tips for opening a battery cover easily:

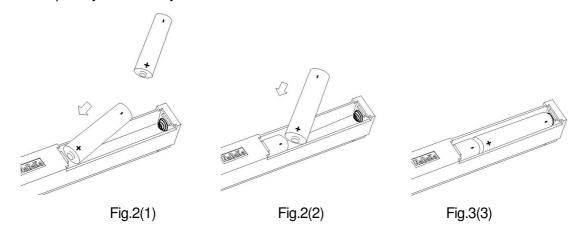
Press the battery cover to slide (shift) it aside a little in the direction of the arrow engraved on the cover (see Fig1 (1) & (2)) and slide down one edge of the battery cover into the box (see Fig1(3)). Finally, take the battery cover out from the body (see Fig1 (4)).





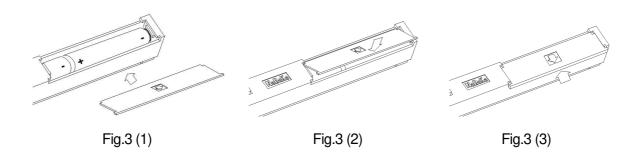
#### 2. How to put batteries into the battery box:

Install two units of AA battery into the battery box following Fig.2. Note that polarity matters for your installation.



#### 3. How to put the battery cover back on the battery box:

Place aslant the battery cover on the battery box of the body (see Fig.3 (1)). Press one edge of the battery cover onto the box (see Fig.3 (2)) and slip the other edge into the box to close the box (see Fig.3 (3)).



### Long term storage of the product

For long-term storage, please remove batteries from Light-Stick to prevent electrolytic solution leakage.

