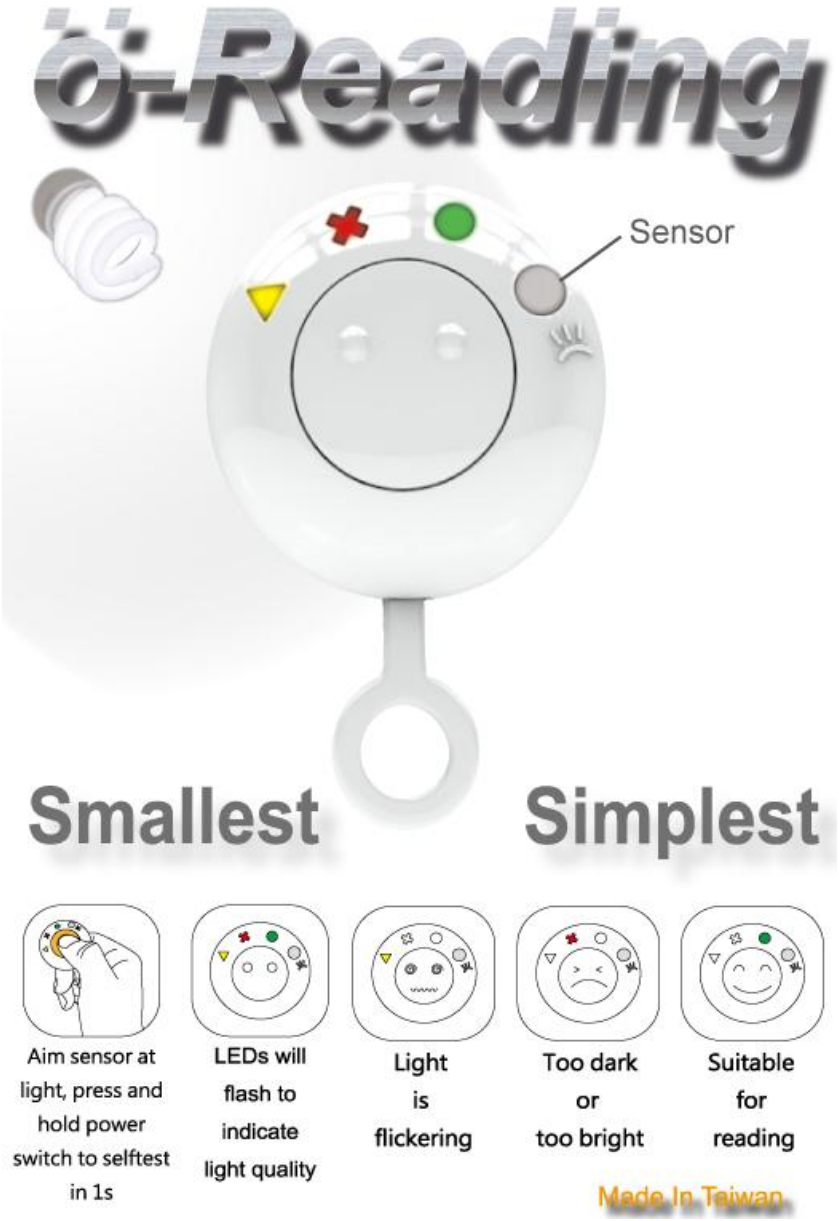
O-Reading

Ambient Light Quality Indicator

User's Manual



The first reading light quality indicator in the world
TW Patent : M379052
CE / FCC Certified

Features & Specifications

- Easy to use, even without manual
  - Pull up the battery insulation spacer to start using o-Reading.
  - Let light source perpendicular to the surface of sensor.
  - Press and hold the power switch in the middle of o-Reading.
  - In normal case, the LEDs will continue to flash.
- Simple light quality indicators, 3 LED, easy to understand,
  - Not need to remember the meaning of lux number.
  - **Green LED ●** : Suitable for reading (300 – 1000 lux).
  - **Red LED X**: Not suitable for reading (< 300 , or > 1000 lux).
  - **Yellow LED ▲**: Light is flickering.
- Industrial grade Light Sensor
  - Highly linear light current output.
  - Build-in voltage and temperature compensation.
  - High speed analog output.
  - Japanese chip level IR-cut filter.
  - Close to human eye response.
- IC Design Electronic and optical measurement
  - Measure ambient light illuminance and flicker.
  - Innovated small cosine correction technology for lux meter.
  - Instrument calibration.
  - 0.3 second super fast light sensing.
  - 2mA ultra low power consumption.
  - 1 minute enter low power mode automatically.
  - 1 CR2032 battery can sustain at least 60 hours usage.
- ECO design and production flow
  - Battery changeable.
  - No standby power consumption for mechanical switch.
  - All components are RoHS compliant, no poison and recyclable.
  - Reduce not necessary production steps, materials, and waste materials.
  - Descriptions are printed on package box, no the information sheet in box for reducing waste papers.
- Dimension: diameter about 4.5 cm, thickness about 1 cm.
- Weight: about 13 g.

Usage

Aim sensor at light, press and hold power switch to selftest in 1s

LEDs will flash to indicate light quality

Light is flickering

Too dark or too bright

Suitable for reading

The method to use o-Reading is very easy: just aim the sensor at light, then press and hold the power switch in the center (icon of oTHE). For the first second, the LEDs will flash, and the o-Reading will perform self-test. After self-tested, the LEDs will flash by different environment light condition.

If the red LED flashes, it means the ambient light is too dark or too bright. It is not suitable for reading. If the green LED flashes, it means the ambient light is between 300~1000 lx. It is suitable for reading. The yellow LED is indicator for light flicker. If the yellow LED flashes, the lamp may be near end of life, or the lamp is not so good in stabilizing the emission of light.

If you use the o-Reading very frequently, the 3 LEDs may flash for 3 times.
It means the battery runs out of power.

Battery Change Operation

Caution:

1. Before installing the battery, be sure that the positive of battery is the clip side, the negative of battery is the PCB side. The inversed installation will cause components to be destroyed.
2. When use the screwdriver to fix the housing, do not drive the screwdriver too much. The thread of a screw hole may be destroyed.
3. Do not release the two screws that fix the PCB. Otherwise the operation and accuracy of o-Reading will be affected.
4. o-Reading use CR2032 lithium battery, other battery may affect the normal operations of o-Reading.
5. Please recycle the battery at the right place.

Battery change step:

1. Use proper screwdriver to loose the screw. Turn the screw 382.5 degrees anticlockwise (A circle is 360 degrees. 382.5 is 4.5 times of driving the screwdriver manually).
2. Take off the under housing and the battery clip is on the PCB.
3. Use the screwdriver to push out the battery from the clip. It will be easier to take remove the battery.
4. Insert new CR2032 battery in the right direction. The the positive of battery is the clip side, and the negative pole is the PCB side.
5. Recovery the under housing and tighten the screw by clockwise 382.5 degrees. Please do not drive the screwdriver too much. The thread of a screw hole may be destroyed.

Loosen screw counter-clockwise | Remove CR2032 battery | Install new CR2032 battery