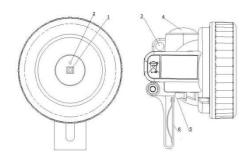
KSE-LIGHTS GmbH



User manual for KSE-LIGHTS LED cap lamp

Model **KS-7600-MX** with ATEX permission in compliance with 94/9/EG Please read the manual before use.

I. Structure and functions



- 1. main LED
- 2. charge indicator LED
- 3. eye for neck band
- 4. power switch for main and secondary LED
- 5. charging port for charging cup system
- 6. adjustable lamp holder

II. Technical Data

power supply: lithium battery 3.7 V, 2.8 Ah

working duration: ≥ 14h

illuminance with charged battery: ≥ 3700 Lux

illuminance after 14h: ≥ 500 Lux

battery life time: ≥ 80% capacity after 500 times recharging

working temperature: -20°C bis +60°C waterproof up to 1 meter, IP 67

charger: input AC 100 – 230 V output DC 5.2 V

working currency: < 600 mA charging time : < 9h

weight: 155g

protection class:

Ex II 2G Ex ib IIC T4
IBExU13ATEX1061

III. Use

- 1. The lamp must be charged before using it. For charging please connect the lamp with the charging cup device. The contacts of the charger are not under tension when the lamp is not placed inside. The charging current is switched on by inserting the lamp. The indicators in charger and lamp will show red lights. When charging is completed, the charging current will be stopped automatically and the LED in the charger will turn to green. The indicator in the lamp will stay red.
- 2. The power switch on top of the lamp has two stages: <u>Press the switch for a short period, the lamp will illuminate</u> "emergency light." Next press "main light", another press will shut off light.
- 3. The lamp is provided with a safety circuit against overload, too deep discharge, high voltage and short circuit. If it does not work at first use, the battery must be charged. The lamp can be charged even after short use without reducing the capacity of the battery.

IV. Warning

- 1. Do not let the lamp drop and avoid impact.
- 2. Protect the glass surface from scratches to prevent the illumination being adversely affected.
- 3. Do not use the lamp in environments beyond recommended working temperatures.
- 4. Keep light off when charging the battery and only charge with the original KSE-LIGHTS charging devices.
- 5. Do not remove the name plate or serial number.
- 6. Never open the lamp or the charging device. In case of failure, please return the lamp to seller, NEVER open!
- 7. Do not throw the lamp into fire the battery could explode!
- 8. Never direct the light of the lamp directly in the eyes of humans or animals!
- The lamp or the charging devices may only be opened by specialists that are authorised by KSE-LIGHTS.Being opened without authorisation, the lamp will lose its warranty and safety can no longer be guaranteed.

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- 10. Never look at visible LED radiation with optical instruments.
- 11. Looking at the radiation source with optical instruments can cause danger for eyes.
- 12. EN 60825-1:2003; $< 8.4 \cdot 10^5 \text{ cd/m}^2$; 400 nm 780 nm.

V. Maintenance

- 1. Soiled lamps can be cleaned with running water.
- 2. Dirt or corrosion at the charging jack can be treated with contact spray "Kontakt 61" made by Kontakt-Chemie®. This can be obtained at KSE-LIGHTS.
- 3. We recommend a regular care of contacts if the lamp is used often or if it is soiled.

VI. Service:

The warranty of this product is valid for two years after purchasing. The time of warranty starts with the date on purchase invoice. The warranty extends over material defects or dysfunctions that are not caused by improper use. In case of guarantee please fill out the customer service form full and return this together with lamp and a copy of the purchase invoice to the local distributor. The lamp will be repaired or a replacement will be issued.

Never open lamp or charging device without authorisation! Use only original KSE-LIGHTS charging devices and spare parts!

Secondary damage caused by the use of the lamp with broken parts are not covered by the warranty. In case of misuse, the warranty will be invalidated.

For the following conditions we will repair the product at appropriate charge:

- 1. Beyond the two-year warranty or if the customer service form is not completed.
- 2. If the serial number is missing or differs from number inside the product.
- 3. If lamp or charging device are damaged by improper operation.
- 4. If lamp or charging device were opened or cracked or damaged by impact.
- 5. Secondary damages caused by the use with broken parts (such as broken housing or switch rubber).

Service Form

serial no.:	model:
date of purchase:	phone:
name:	adress:
company:	failure: