

# Operating Instructions



## Solar lamps „Sara“

### Customer support:

If you have problems or questions regarding this product, simply contact us!

By phone: +49 9605-92206-0

By e-mail for ordering spare parts: [ersatzteil@esotec.de](mailto:ersatzteil@esotec.de)

By e-mail for questions about the product: [technik@esotec.de](mailto:technik@esotec.de)

Product: Manufacturer Item No.: 102160, 102161

These instructions relate ONLY to this product and contain important information for using the product for the first time. Please keep these instructions for later reference and should always accompany the product in the event of transference to a new user.

## 1. Introduction

Dear Customer,

Thank you for purchasing the solar light. With this solar light you purchased a product manufactured according to the current state of technology.



This product fulfils all requirements of the valid European and national regulations. The conformity was proved. The relevant declarations and documentation are deposited with the manufacturer.

To maintain this state and guarantee a safe operation, you as the user will have to follow this operating manual!

## 2. Safety Instructions



- In case of damages caused by not following this operating manual, the warranty rights will expire! We exclude liability for any consequential damages!
- We exclude liability for property or personal damages caused by inappropriate handling or not following the safety instructions.

- In these cases any guarantee rights will expire.

Due to safety and admission reasons (CE) it is not allowed to arbitrarily reconstruct and/or change the solar light.

Therefore, please keep to the operating manual.

The accident prevention rules of the association of the industrial trade cooperative association for electric plants and working material are to be considered in industrial environments.

## 3. Intended Use and Function

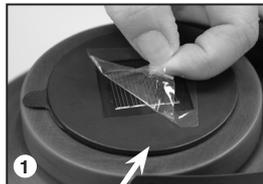
The solar lamp is designed for outdoor use. The integrated rechargeable battery is charged by the solar cell installed upper side of the lamp. The lamp is automatically switched on at darkness and switched out at the break of dawn. A yellow/orange light emitting diode (LED) with an integrated flickering effect is used as light source. This LED has a pleasant luminosity with a low consumption of power.

The solar lamp has to be positioned free from shadows and with direct solar irradiation; this is the only way to achieve the full luminescing time! During the winter months, it is recommended to store the lamp indoors. For this purpose, please switch off the switch (OFF) and charge the battery every four weeks in a standard battery charger while it is stored inside.

**Note:** During longer periods with insufficient insolation, the accumulator is charged insufficiently in order to guarantee a permanent readiness for operation. **However, that does not mean that the solar lamp is defective.** Please wait for the next sunny days and the light will work accordingly or charge the battery with a customary battery charger.

## 4. Putting into Operation

1. Please carefully take the lamp out of the package.
2. Remove the protective foil from the solar module (illustration 1).
3. Carefully pull on the sticking out lug to take the upper part out of the lamp (illustration 2).
4. Move the switch into the position „ON“ (illustration 3).
5. Now reinsert the upper part into the lamp.
6. Now hang up or set up the lamp at the desired place.



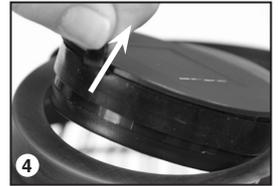
### Note:

The duration of illumination strongly depends on the intensity and duration of the solar irradiation during the day. On days with insufficient sun, the duration of illumination will generally be shorter. Make sure that the sunlight reaches the solar module as long and as free from shadow as possible. In case the light should not give light on the first evening, please wait for a sunny day or charge the battery with a customary battery charger.

## 5. Exchange of the rechargeable Battery

On average, batteries of solar lamps have to be exchanged every two years. Please only insert identical in construction batteries with identical voltage and capacity. In case you should not be able to get those batteries in the shops, you may also use batteries with a higher capacity.

1. Carefully pull on the sticking out lug to take the upper part out of the lamp (illustration 4).
2. Open the battery compartment lid and take it off (illustration 5).
3. Take out the used battery and replace it by a new, identical in construction battery. Pay attention to the correct polarity of the battery when inserting it into the battery compartment (illustration 6). It is recommended to charge the battery in a battery charger before inserting it.
4. Now close the lamp in reverse order.



**Note:** Used batteries or accumulators must be disposed of in a non-polluting way and do not belong into the domestic waste. Your dealer is legally obliged to take back the old accumulators.

## 6. Malfunctions

### The lamp is not activated at darkness

- A source of extraneous light (e.g. street lamp) simulates daylight on the solar module and prevents the activation. Place the solar module at a darker place.

### The lamp is not switched on at darkness at all or only for a short time.

- Lamp is activated via the switch (see item 4)
- Battery weak or defective. Exchange of the battery/accumulator. (see item 5)

## 7. Technical Data

- Solar module: crystalline silicon 2V/ 40 mA (102160)  
crystalline silicon 2V/ 80 mA (102161)
- Illuminants: 1 yellow flickering light emitting diode (LED)
- Light color: yellow
- Operating voltage: 1.2 V
- Battery: NiMh 1,2 V/300 mAh (Mignon, AA)(102160)  
NiMh 1,2 V/600 mAh (Mignon, AA)(102161)
- Protection type: IP 34
- Protection class: III
- Luminescing time: max. 8 h with a full set of batteries

## Battery take-back

- Batteries must not be discarded into domestic waste.
- The consumer is legally required to return batteries after use, e.g. to public collecting centers or to battery distributors.
- Contaminant-containing batteries are labeled with the sign "crossed-out trashcan" and one of the chemical symbols. Used batteries should be disposed environmentally friendly and should not be discarded into domestic waste. Your dealer is legally required to take back old batteries.



## Rechargeable battery notes

- Rechargeable batteries should not be played with by children. Never leave rechargeable batteries lying around; they could be swallowed by children or pets.
- Rechargeable batteries must never be short-circuited, disassembled or thrown into fire. This leads to a danger of explosion!
- Leaking or damaged rechargeable batteries can cause chemical burns when they come into contact with skin. For this reason, please make use of suitable protective gloves.
- Rechargeable batteries should only be replaced by structurally identical rechargeable batteries from the same manufacturer. Normal batteries must not be used since these are not rechargeable.
- Make sure the rechargeable batteries are inserted with the correct polarity.
- For long periods of time of non-use (for example, storage), remove the inserted rechargeable batteries to avoid damages via the leaking rechargeable batteries.

## Manufacturer / Importer

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Internet: [www.esotec.de](http://www.esotec.de) WEEE-Nr: DE 59284711

## Disposal:

Dear customer, please cooperate in avoiding waste. When you intend to dispose of the product in future, please consider that it contains valuable raw materials suited for recycling.

Therefore, do not dispose of it with domestic waste but bring it to a collection point for the recycling of waste electrical and electronic equipment.

Thank you very much for your cooperation!

