

# Operating Instructions



## Solar LED String light "Butterflies"

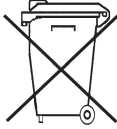
These instructions relate **ONLY** to this product and contain important information for using the product for the first time. Please keep these instructions for later reference and should always accompany the product in the event of transference to a new user.

### Customer support:

If you have problems or questions regarding this product, simply contact us!  
Internet: [www.esotec.de](http://www.esotec.de)  
By phone: +49 9605-92206-0 Internet: [www.esotec.de](http://www.esotec.de)  
By e-mail for ordering spare parts: [ersatzteil@esotec.de](mailto:ersatzteil@esotec.de)  
By e-mail for questions: [technik@esotec.de](mailto:technik@esotec.de)  
Manufacturer Art.-No.: 102183

### 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.



NiMh

### 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.

### 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 it of 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!



## 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.
- This product is only suitable for private use!

## 3. Intended Use

This product is designed for use in private premises.

The string of lights is automatically switched on at darkness and switched out at morning light. A pressure switch on the solar module can be used to switch the light on or off. The other switch can be used to select between permanent or flashing light.

With a full accumulator, the maximum duration of illumination amounts to 10 hours. The amorphous solar module already slightly charges the integrated accumulator in daylight. The string of lights is suitable for year-round outdoor operation. Normal rain or snow won't harm the string of lights, however, hose water that e.g. arises when watering the garden, has to be avoided. The string of lights must not lie in the water!

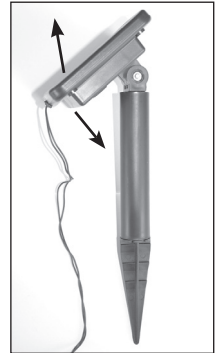
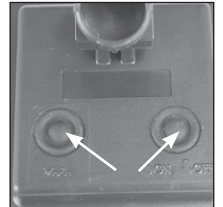
**Note:** Make sure that the solar module is always facing to the south and that shadows are avoided. The product may **not** be used if facing north. In the winter, it is required to keep the solar module free of snow. Due to the reduced solar radiation, the duration of illumination will be shorter in winter.

## 4. Putting into Operation

1. Please carefully take all parts out of the package and unfold the string of lights.
2. Wrap the string of lights around a shrub or bush. Please make sure that the string of lights is not permanently positioned in water (e.g. in a pond). Normal rain and snow won't harm the string of lights; however, hose water that e.g. arises when watering the garden, has to be avoided.
3. Switch on the lamp by pressing the button **ON/OFF**. Now select an operating mode between permanent and flashing light by pressing the switch „**Mode**“. For test purposes you can darken the solar module, the string of lights will then start to shine with the set operating mode.
4. Now insert the ground spike into the plastic pipe. The plastic pipe is now inserted in the mount on the back side of the solar module.
5. Now insert the solar module into the ground in a sunny place.

**Note:** In position "OFF", the string of lights is switched off and the accumulator will not be charged.

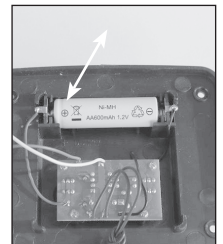
**Note:** During the winter months please generally expect a shorter light ON time. If the lamp should not shine on the first evening, please wait for a sunny day.



## 5. Exchange of the Accumulator

The capacity of the accumulator will decrease after one to two years and the accumulator has to be exchanged. The accumulator is available from your retailer or the manufacturer. Installed in this product is an AA-NiMh battery with 1.2 V/ 600 mAh.

1. Move the switch on the back side of the solar module to the position „**OFF**“
2. Unscrew the 4 screws on the back side of the solar module with the corresponding screwdriver and take off the back panel of the solar module.
3. Remove the used accumulator from the battery bracket and insert a new, freshly charged identical in construction accumulator.
4. Now close the housing in reverse order and reset the desired operating mode via the switch on the back side of the solar module (see item 4).



**Note:** Used batteries have to be disposed of in an environmentally sound way and do not belong into the household waste. Your dealer is required by law to take back your old batteries.

## 6. Malfunctions

### The lamp is not activated at darkness

- Is the lamp switched on?
- A source of extraneous light (e.g. street lamp) simulates daylight on the solar module and prevents its 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.

- Battery weak or defective. Exchange of the battery/accumulator at the latest after 2 years.

## 7. Technical Data

Capacity solar module:	2 V/ 180 mA (0,36 Wp) amorphous
Illuminants:	30 x LEDs
Light color:	3000 K
Duration of illumination:	max. 10 h with a fully charged accumulator
Battery pack:	1 x AA-NiMh 1.2 V/ 600 mAh
Protection class:	III
Protection type:	IP 44