

# Operating Instructions

## Solar LED-Lightstring 200 PRO



### 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  
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.: 102570

### 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.

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

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.

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.

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## 4. Putting into Operation

1. Please carefully take all parts out of the package and unfold the cable with the string of lights.
2. Hang the string of lights up. Please make sure that the string is not lying in the water when it rains. 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. The solar module may either be mounted via the wall mount via 4 screws or inserted into the ground via a ground spike. Via the ball joint, it is possible to optimally position the module to the sun.

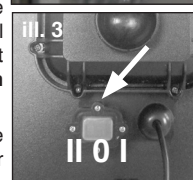
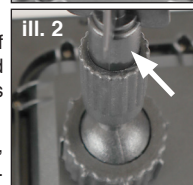
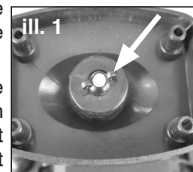
**Note:** If you want to set up the solar module via the ground spike, then please loosen the wing nut on the back side of the wall mount (illustration 1) insert the ground spike into the socket on the ball joint (illustration 2).

4. The toggle switch (illustration 3) at the back side of the solar module is used to switch the lamp on and select the different light modes. Please proceed as follows:

Put the switch into the „**Position I**“. In this position, all light modes are passed through one after the other. If you have now reached the desired mode, please put the switch into the „**Position 0**“. This mode will then remain stored. If you want to use a different light mode, please reset the toggle switch to the „**Position I**“.

The string is switched off in „**Position II**“, but in the sunshine, the accumulator is still charged via the solar module!

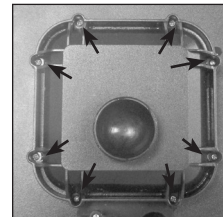
**Note:** During the winter months please generally expect a shorter light ON time. If the lamp should not shine on the first evening, please wait for a sunny day.



## 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 Li-Ion-battery with 3,7 V/ 2000 mAh.

1. Move the switch on the back side of the solar module to the position „**II**“
2. Unscrew the 8 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 point 4).



## 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 Wp amorphous   |
| • Illuminants:              | 200 x LEDs   |
| • Light color:              | 3000 K   |
| • Duration of illumination: | max. 10 h with a fully charged accumulator                           |
| • Battery pack:             | 1 x LiFePo4 3,2 V/ 1600 mAh (18650)<br>esotec spare part no.: 901043 |
| • Protection class:         | III  |
| • Protection type:          | IP 44  |

## 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.

