

# Manual for .STOOL solar lights

Model: No. 01 | .STOOL table lamp with solar shade  
Serial no. 50.100.10 to 50.101.21  
Materials: stainless steel + brass  
Heights: compact + high  
Solar screens: Blue + Green

They have acquired a special products, the world's first sustainable solar lamp. The lamp is self-sufficient, durable and high quality. It is a sustainable product with a solar efficiency above the energy standard A +++ . This manual is available on our homepage, you can read it here in the most recent version. Please check if you can do without an expression!



## 1 Intended use

The product is used for lighting, especially outdoors. Several LEDs produce a warm light with daylight characteristics. The solar screen is used to charge the integrated batteries. Use only a suitable power supply to operate the light. For safety and licensing reasons (CE), you may not modify and / or modify the product. If you use the product for purposes other than those described above, the product may be damaged. In addition, improper use can cause hazards such as short circuit, fire, electric shock, etc. Read the operating instructions carefully and keep them in a safe place. Hand the product to third parties only together with the instruction manual.

## 2 package contents

- .STOOL table lamp with solar shade
- Carrying loop in the lid compartment (for mounting)
- Brief information
- Charging cable and power supply (optional)

## 3 Summary

The lamp is simple and intuitive to use. When the lamp gets enough sunlight, it can get by completely without additional power. You will always have a high quality light source available when you need it. If you only use the lamp indoors, or if there is insufficient sunlight, then you can also charge the battery via the USB port. For this purpose, any commercially available charger of a smartphone can be used (microUSB plug). Since this is rarely needed with a self-sufficient lamp, it would be superfluous and would only land in the garbage. We only offer it on request. In our shop, you can buy a matching, high-quality charging set.

## 4 safety instructions

**Read the operating instructions carefully and pay particular attention to the safety instructions. If you do not follow the safety instructions and the instructions for proper handling in this operating manual, we assume no liability for the resulting personal injury / property damage. In addition, the warranty / guarantee expires in such cases.**

### People / product

- The product is not a toy. Keep it away from children and pets.
- Do not leave the packaging material careless. This could become a dangerous toy for children. Please recycle the packaging.
- Protect the product from extreme temperatures, strong shocks, flammable gases, vapors and solvents.
- Do not expose the product to any mechanical stress
- The lamp is protected against dust and splash water (IP54). It must not be submerged under water.
- In strong wind / storms (over 4 Bft) the lamp may be overturned and damaged and should therefore be brought to safety in time.
- The lamp may only be used to about -20 ° C. At lower temperatures, the battery will be damaged.
- Should the solar screen become damaged (crack / breakage), its performance will decrease significantly or completely. However, there is no health risk from the materials. In our manufactory the umbrella can be repaired, as well as all components of the sustainable light.
- If safe operation is no longer possible, take the product out of service and protect it from accidental use. Safe operation is no longer guaranteed if the product:
  - .. has visible damage,
  - .. no longer working properly,
  - .. was stored for an extended period under unfavorable environmental conditions or
  - .. was exposed to considerable transport loads.
- Handle the product with care. It is damaged by impact, impact or fall from a low height.
- Also observe the safety instructions and operating instructions of the other devices to which the product is connected.
- Do not connect the product immediately after it has reached a cold ambient temperature was brought into a warm room. Condensation can destroy the product. Before using the product, wait until it adapts to the changed ambient temperature.

Never look into a light source and never point the light directly at people or animals.  
Never touch the AC adapter with wet or wet hands. There is a risk of a life-threatening electric shock.

### **miscellaneous**

- Contact a specialist if you have any doubts about the operation, safety or connection of the product. You will find our service number at the end of this manual.
- Have maintenance, adjustment and repair work carried out by our specialists only.
- If you have any questions that are not answered in this manual, contact our technical support.

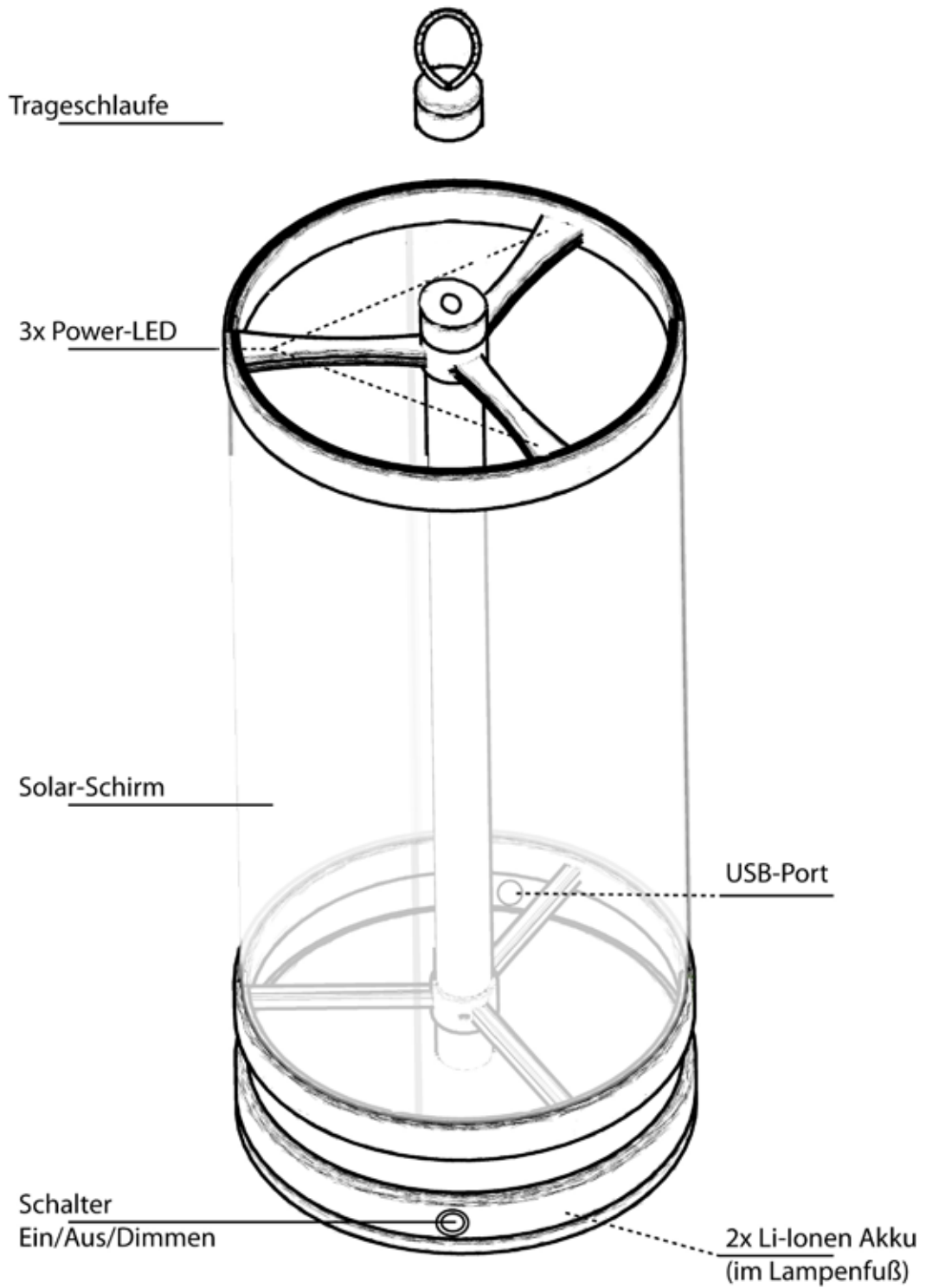
**Never try to change the batteries yourself. In case of wrong polarity there is an acute risk of injury.**

## **Warranty Notice**

Do not open the lid on the lamp base. A screw is protected with a seal. If this seal has been broken, the warranty claim becomes void. If you think the light has a defect, contact the hotline.

## **5 Commissioning**

1. Remove all packaging materials. Check for damage to the product.
2. Remove the carrying strap from the packaging and screw it firmly onto the lamp.  
(compare illustration of the following page)
3. Place the product on a stable surface
4. Make sure the light is off.
5. During initial operation, the battery must be fully charged.  
.. Either the lamp must stand for 6 - 10 hours in the sun,  
.. or you plug a suitable USB cable into the Mico USB charging socket of the lamp and the other one  
End in a suitable USB charger (available as an accessory) for ~ 10 hours.
6. During USB charging, the ring on the switch flashes blue. When charging is completed, the light goes out
7. When charging, remove the cover of the USB port and store it securely. It must be reconnected, otherwise the charging socket may be contaminated or damaged.
8. The light is now ready for operation.
9. Turn on the light at the ON / OFF switch



## 6 operation

The lamp is switched on and off with the switch (1) on the lamp base.

To press:

1x brightness „candlelight“

2x for medium brightness

3x for brightness „reading light“

4x off.

The control is also possible with the app via smartphone or tablet.

Please read the instructions for the app, or the help text.

### Charging the battery - solar operation

If possible, place the light in direct sunlight. The more intense and the longer the solar film is exposed to sunlight, the more power will be available later for the lighting. Therefore you should not cover the light under any circumstances. In the shade, only about half the energy of the sun comes on, so the solar light can convert even half of the energy into electricity.

In direct sunlight, the energy of about 1,000-1,300 W / m<sup>2</sup> hits the solar screen in Central Europe, while in southern Europe it is already over 2,000 W / m<sup>2</sup>. In the shade it is 200 - 500 W / m<sup>2</sup>, in the house it is only 10-200 W / m<sup>2</sup>, because windows very strongly keep the radiation away.

The times for lighting duration / charging are related to 1,000 W / m<sup>2</sup>.

### Charging the Battery - Battery Operation

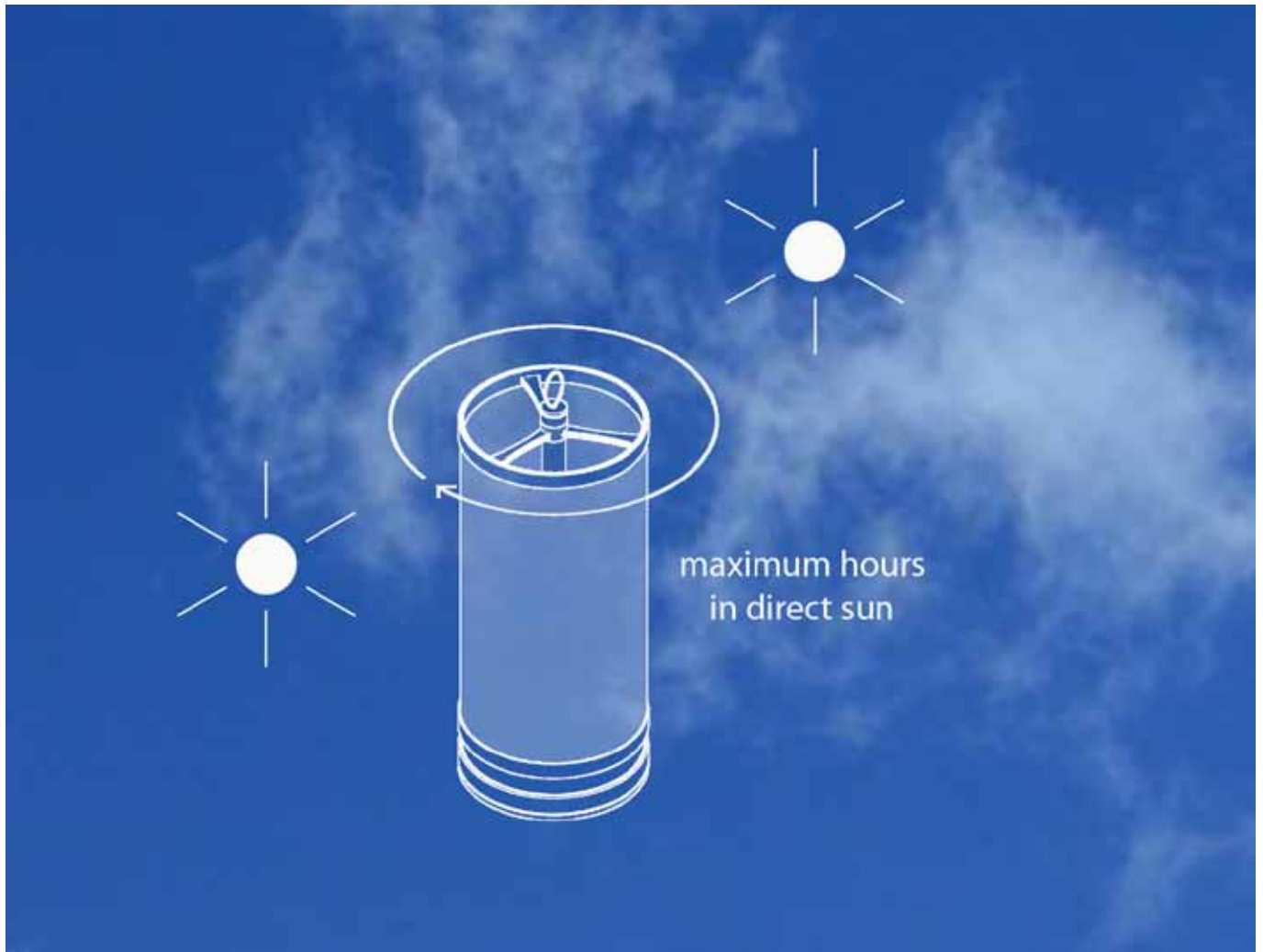
As an alternative to solar operation, you can also charge the battery via the USB port (cable: Micro-USB - USB-A). Any commercially available USB charger of a mobile phone / tablet can be used for this (can also be ordered as an accessory at <https://shop.stool-living.de>) which complies with the standard (voltage 5V, charging current 0.5 to 1.5 A).

Charging time with empty battery with 0.5 A = 10-12 hours. With a fully charged battery, the table lamp can be operated at full brightness for over 10 hours (candlelight > 30 hours).

The batteries used are „industrial batteries“ that use Li-ion technology. They are very durable batteries, which are indicated with about 1,000 charging cycles. A charge cycle is a complete discharge and charge. If the batteries are operated in the range between 30 and 70% charge, significantly more charging cycles are possible.

If the lighting time / charging power decreases noticeably, the batteries should be replaced. This occurs after about 3 to 5 years. The replacement can be done by our specialist workshop. Specialized users can do it on their own responsibility, it is essential to pay attention to the correct polarity of the batteries! Replacement batteries can be purchased in our shop (buy only from trusted source, it will be traded many inferior batteries, which can lead to damage / injury).

With the opening of the seal warranty and warranty expire).



Place your .STOOL solar lamp so that it stands as long as possible during the day in full sunshine, so that it can charge itself optimally.

In the shade, only 10-50% of the radiation arrive. Behind a window, the radiation is also significantly lower and decreases considerably in the room.

## Lighting duration of the .STOOL solar lamp depending on the irradiation duration

Der Tabelle ist zu entnehmen, wie viel Licht sie mit der .STOOL Solarleuchte ernten können

### 1 model „high“

charging time	candlelight	duration at 50%	reading light
6 hours full sun	14,34 h	5,70 h	2,90 h
8 hours full sun	19,13 h	7,65 h	3,83 h
10 hours full sun	23,91 h	9,56 h	4,78 h
8 hours half- / shadow	7,65 h	3,10 h	1,5 h
10 hours half- / shadow	9,56 Std	3,83 Std	1,91 Std
12 hours half- / shadow	11,48 h	4,59 h	2,30 h

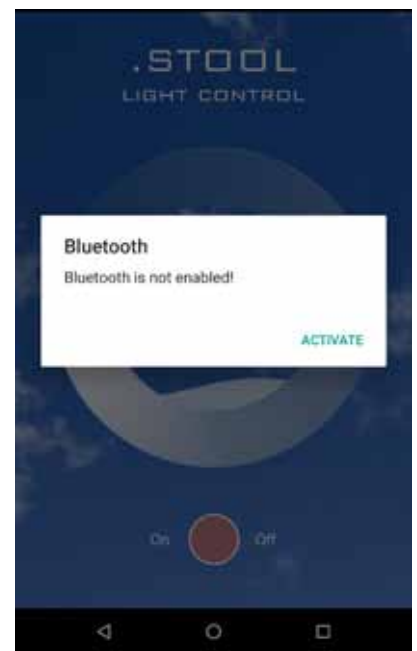
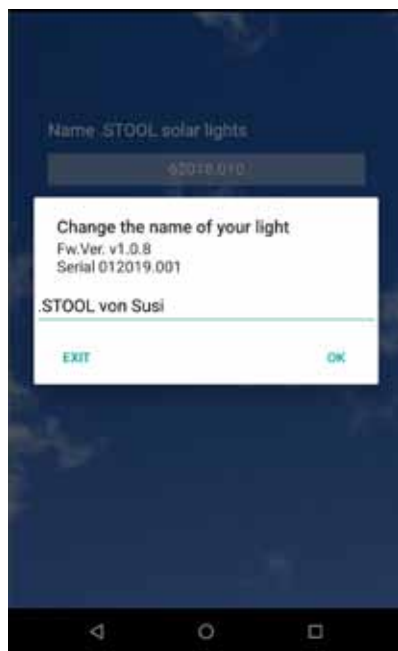
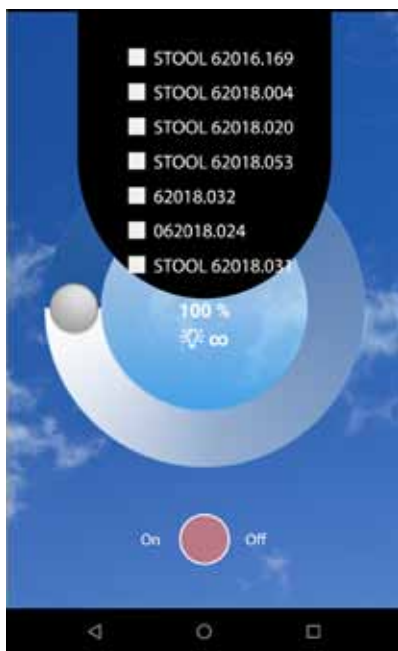
### 2 modell „compact“

charging time	candlelight	duration at 50%	reading light
6 hours full sun	8,40 h	3,40 h	1,70 h
8 hours full sun	11,25 h	4,50 h	2,25 h
10 hours full sun	14,06 h	5,63 h	2,81 h
8 hours half- / shadow	4,50 h	1,80 h	0,90 h
10 hours half- / shadow	5,63 h	2,25 h	1,13 h
12 hours half- / shadow	6,75 h	2,70 h	1,35 h

Place the .STOOL solar light in the direct sun for a long time, so that it can fill up with a lot of energy.

In the shade, the energy density is much lower (10 - 50%), therefore the reduced Yield also considerably!

But even on a covered / shady day, the light „refueled“ for the evening.



## 7 The App .STOOL- control

The control of the light is also possible with the app „STOOL- control“. This is available for the operating systems Android and Apple IOS. They can be loaded via the corresponding platforms (Play-Store, App-Store). Usage is possible with mobile devices such as a smartphone or tablet.

The control is via low-energy Bluetooth 5.0, it must of course be turned on. The control is possible up to a distance of 5-10 m (depending on the device used and local situation).



## Screen 1

### „light control“

On the start page of .STOOL - control the following functions are available:

#### 1. switch

The light is switched on / off via the switch  
green = on, red = off.

As long as no connection to a .STOOL luminaire has been established, the text „Connecting“ appears. If Bluetooth is not active, a warning „Bluetooth is not enabled“ will appear, to use the app you must agree to activation. With the current version of Android, the location must also be activated for many models. (The .STOOL-control app does not ask for your location data!)

#### 2. light wheel

The brightness can be continuously adjusted via the control wheel (0% to 100%)

#### 3. Info-Area

Helpful information are been displayed in the middle of the screen:

##### 3.1 Charge / Discharge

When the light is charged by light or via USB, the word „charge“ appears

3.2 When more power is consumed than beeing charged, the word „Discharge“ appears

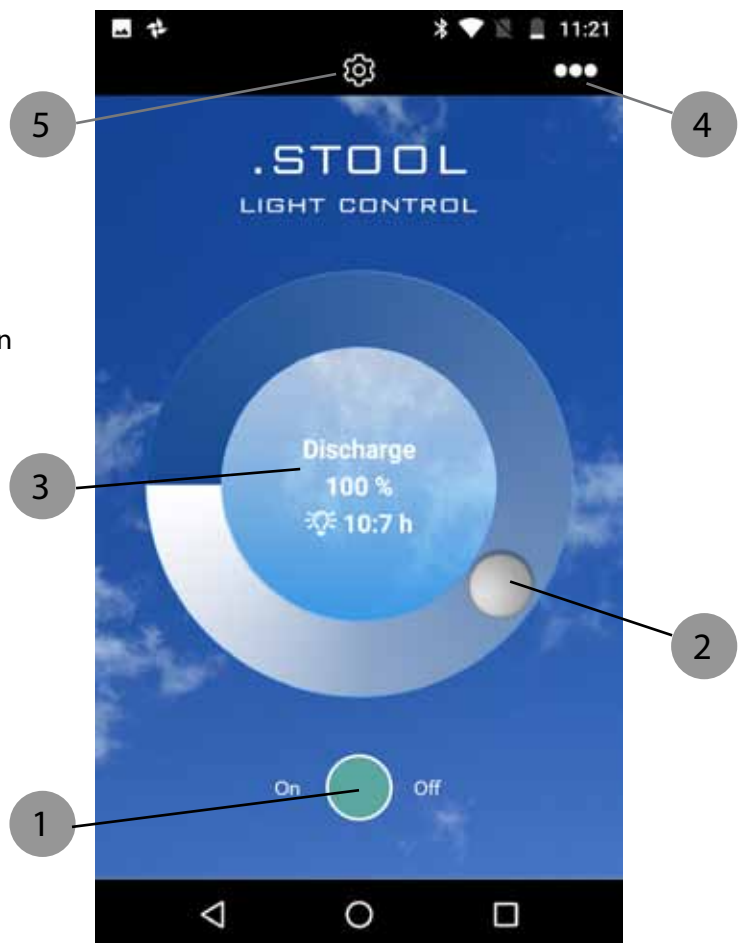
3.3 The percentage (here 100%) indicates the charge status of the battery.

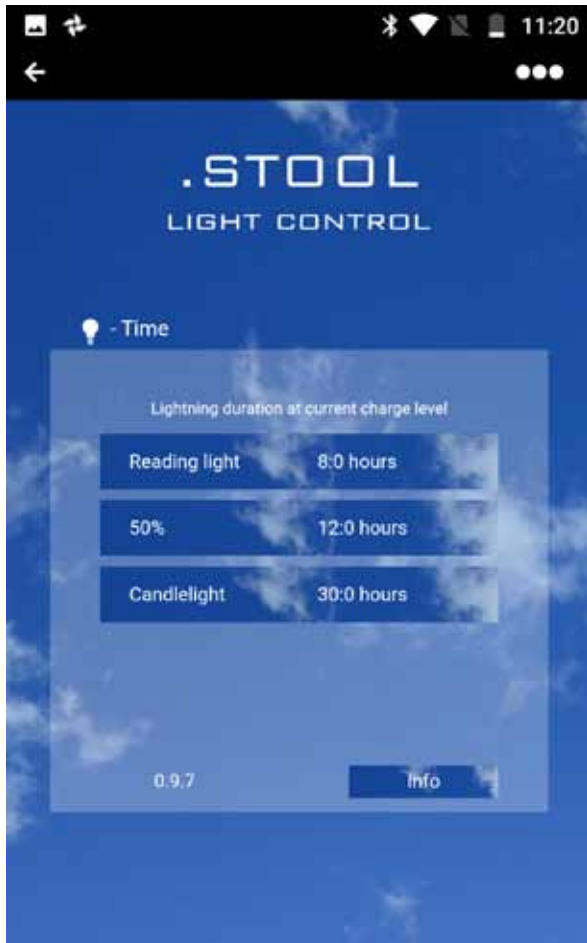
3.4 There is a time indicated behind the light bulb. This is the remaining light duration of the .STOOL solar light at medium brightness.

4. About the three points to go to the function „naming“

5. The tool icon takes you to the selection of lights

(further information on the following pages)





3

4

1

2

## Screen 2

### 1. lighting duration

Display of the remaining illumination duration for the three brightness levels „Reading light“, 50% brightness and „candlelight“

### 2. Info - Area

Click here for the info screen.

### 3. Version number

The version number of the app indicates which version of the .STOOL control app is currently installed. Regular updates are done here. In the app stores, you can find out which version is up to date.

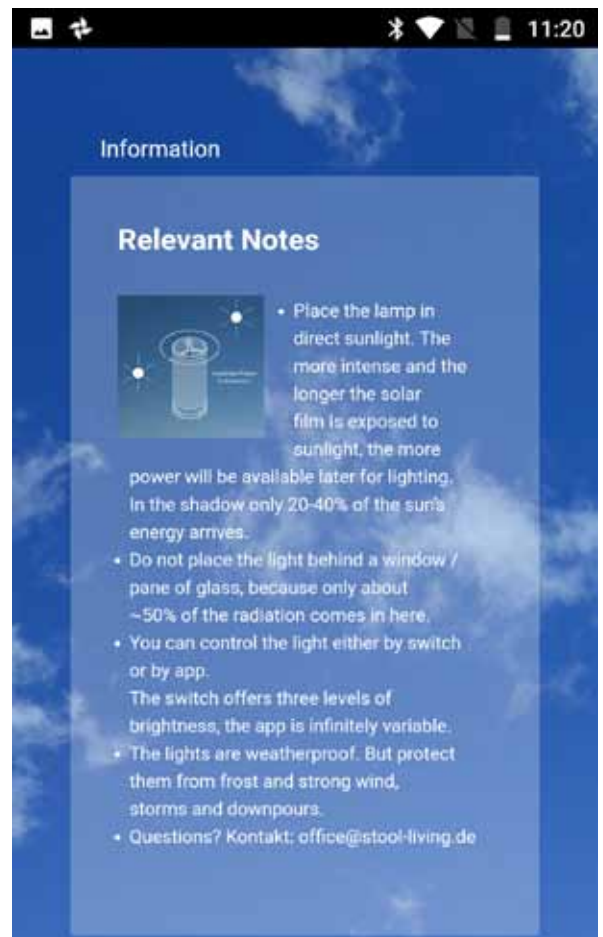
### 4. Funktion Naming

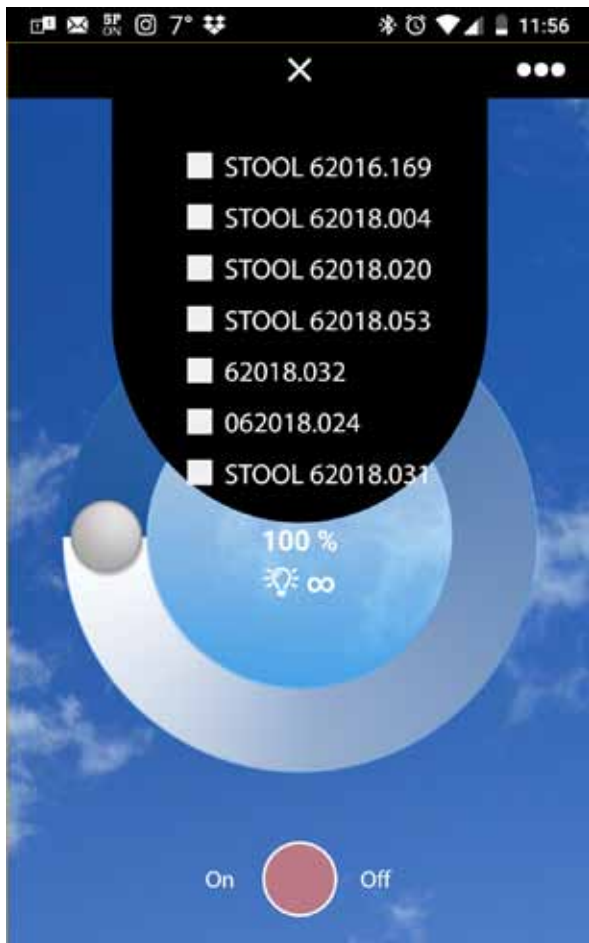
The three points will take you to the function „Naming“ (see next page)

## Screen 3

### Informations

Here you will find general information about the use of the solar lamp. It can also be displayed here current messages. This text will be automatically updated over the Internet as needed.





## Roll-down menu selection

### Select the connections

In case you have more than one .STOOL solar light, you can choose the lights that you want to control at the same time. Only the lights to which a Bluetooth connection exists are displayed. Simply select the field to make the selection.

If there is only one luminaire in the environment, only one will be displayed. Close the entry with „X“ after finishing the entry.

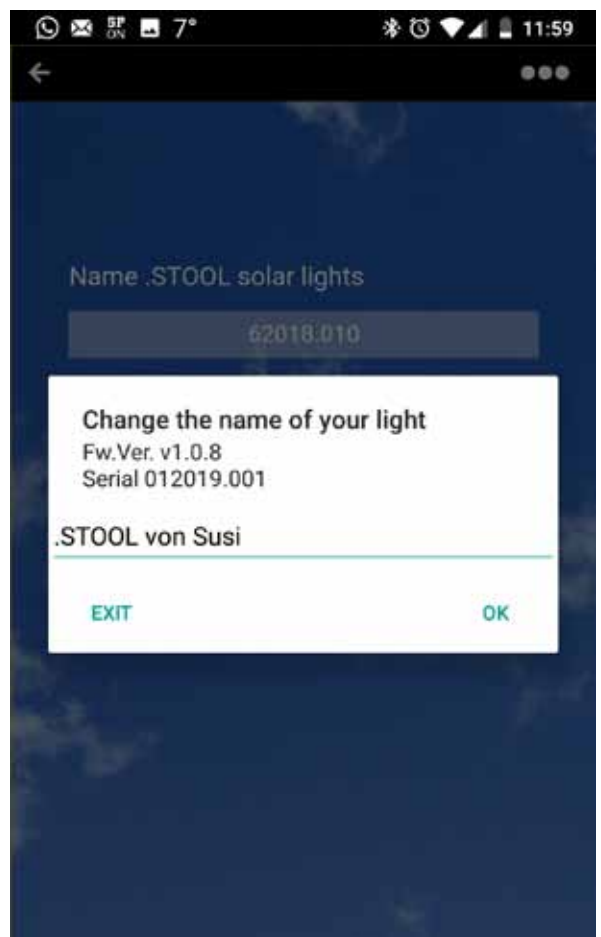
You can change the selection here anytime.

## Screen 4

### Funktion naming

Here you can name your .STOOL solar light. When delivered, the serial number of the luminaire has been entered here.

Whether you choose the name „terrace“ or „balcony“ or something personal „Sugars light“ is up to your imagination.



## 8 questions | Problems | answers

Always up to date at: [www.STOOL-living.de](http://www.STOOL-living.de)

## 9 care instructions

The entire lamp is designed for a long outdoor use. The materials have been specially selected and tested. The solar screen consists of a very durable PET film. Disconnect the device from the mains voltage before cleaning. The frame parts are made of stainless metals (stainless steel or brass / coating, care see below) for protection here is also a special paint has been applied. Do not use any sharp cleaning agents. Do not clean the lamp with a high-pressure jet. Do not immerse the lamp under water. The lamp is not suitable for cleaning in the dishwasher. Use a dry, fiber-free cloth to clean the product. If heavily soiled, use a cloth lightly moistened with lukewarm water.

### stainless steel | Edelstahl

The stainless steel used in your light is provided with a protective varnish. This prevents an environmental discoloration of the metal. With the years and especially with intensive use, this protective film can be replaced. This is no damage, but the stainless steel may discolour. If you do not like the change, you can use a commercially available budget (stainless steel care products) to wipe off the discoloration. Please test in a hidden place before, if the agent attacks the solar foil. Then you should not use the remedy and choose another one.

### brass | Messing

The brass used with your lamp is provided with a protective varnish. This prevents the known start of the metal. With the years and especially with intensive use, this protective film can be replaced. This is no damage, but the brass can discolor. If you do not like the change, you can use a commercial budget (brass polish) to wipe off the discoloration. Please test in a hidden place before, if the agent attacks the solar foil. Then you should not use the remedy and choose another one. Some parts are provided with a brass coating. Very aggressive environmental influences can lead to discoloration.

We are happy to help you with problems with care and product information. You can contact our hotline.

## 10 Technical specification

Battery:	2x Li-Ion battery 18650 with 2,900 mAh each, total capacity 5,800 mAh
LED:	3x2 Power LED with 0.8 W each
Solar Film:	Film Photovoltaics by Opvius GmbH (Nuremberg, Germany). This has an efficiency of ~3% (STC). Opvius is the world leader in semi-transparent organic photovoltaics.
Operating temperature:	-20 to +50 ° C (from -20 ° C the battery is damaged)
Brightness:	1 up to 150 lux * 2
Bluetooth:	5.0, low-energy
Input:	5V, up to 1.0A (USB)
App display:	58 mAh corresponds to 1% of the app's display
Solar charging:	~ 50-400 mAh per hour in case of tanning

\* 1 values are based on measurement results according to STC (at 1000 W / m<sup>2</sup> radiation, 25 °C, 1.5 AM) and may vary depending on the product.

\* 2 values are based on measurement results and may vary depending on product and situation.

## 11 Disposal

Our solar lights are sustainable and have an almost infinite durability. Because we are really convinced of that, we take the light back free of charge at the end of your use (Refurbishing).

We do not throw away the lights, but we remove the damaged parts and work them up again. The solar lamp then receives the state-of-the-art components of the upgrade.

Thus we avoid waste and energy consumption. Parts like the frame can be used „forever“.

On our homepage you will find the form for the return. We take over the postage for you.

**That's really sustainable!**

Electronic devices are recyclables and do not belong in the household waste. We take back our lamps.

## 12 accessories

Charging set: textile cable with charger

USB cable textile cable

Battery Samsung 18650 with 2,900 mAh

We also offer products related to organic photovoltaics:

solar film

Photovoltaics starter set

Information always up to date on our homepage

STOOL-living.de

OR directly to our online shop

<https://shop.stool-living.de>



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