

DE EN FR

# UV-TorchLight 15F

## INT

BEDIENUNGSANLEITUNG  
OPERATING MANUAL  
MANUEL D'UTILISATION



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This present torchlight was designed and manufactured in line with the latest technological advancements and complies with the requirements as laid down in existing European and national guidelines. Conformity has been certified. The relevant declarations and documents are in the possession of the manufacturer.

As the user you must read and observe the following safety instructions in order to ensure that this condition is maintained and that no danger results from the use of this device:

## 01. Safety Instructions

**⚠ We do not accept any liability for any damage which may occur as a result of improper use or the non-observance of these instructions. The warranty expires with immediate effect in any such case!**

***Before initial operation of the torch light please read the manual thoroughly!***

### Warning

For reasons of safety and CE compliance you may on no account carry out any changes or modifications to either the device itself or any other components which may be used in connection with this device!

Please observe the following instructions prior to using the device:

- Do NOT carry out measurements on live components.

- The user is solely responsible for determining whether he or she considers the measuring results to be valid and for any conclusions that are reached or any measures that are taken as a result thereof. We can neither guarantee the validity of any measuring results nor can we accept liability for any such results. We are on no account able to accept liability for any damage which may be caused as a consequence of the use of these measuring results.

- The UV torchlight produces UV-A radiation in the visible range of  $<400$  nm. In this UV range the eyelid closure reflex of the eye does not work. Therefore, under no circumstances, look on the UV-LED or in the beam, and make sure that you don't illuminate any other people and animals directly. When used in direct object near the reflected UV radiation is stronger and more intense than in several metres distance. If it is necessary to operate a UV-LED, always use suitable UV filters or goggles according to CE-EN166 to prevent eye damage. Also avoid prolonged exposure of the skin or other living tissue. Keep UV-LEDs always out of the reach of children and avoid the operation of the UV-LED when children are



near by! Never give the LED torchlight to unauthorized persons or children or leave them unattended.

- Within the light cone, you must not use optics to focus the light rays.
- The LED is not replaceable. Please neither attempt to remove nor touch it!
- Only use the charger included in the scope of delivery. Another charger may prove too strong and lead to irreversible damage to the battery.
- Using other than those recommended by the manufacturer or rechargeable batteries can cause damage to the lamp and compromise your security.
- To operate use two new CR123A batteries or, protected against overvoltage and undervoltage, 18650 Li-ion battery.
- Please only use batteries of the same type, age and state of charge.
- Remove the batteries or battery if you do not use the torchlight for a long time.
- Please dispose of damaged or empty batteries according to local and government guidelines.

## 02. Intended Purpose and Use

The UV Torchlight 15F is a professional LED UV torch with adjustable focus for locating UV active objects and substances in industry, building physics, chemistry and forensics. The device may be used for these purposes only and within the thresholds as specified in the technical data. Any other use is considered improper.



In accordance with EU Directives, electronic equipment must not be treated as domestic waste and must be disposed of in a proper manner in accordance with Directive 2002/96/EU of the EUROPEAN COUNCIL AND PARLIAMENT of 27 January 2003 regarding old electrical and electronic equipment. Please dispose of this appliance in a manner appropriate to the relevant legal requirements at the end of its product life.

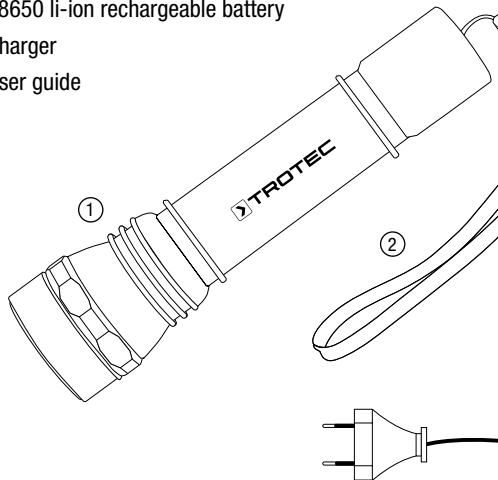
## 03. Scope of Delivery

### Checking the delivery

Upon delivery, please check your torch immediately for any signs of damage which may have occurred during

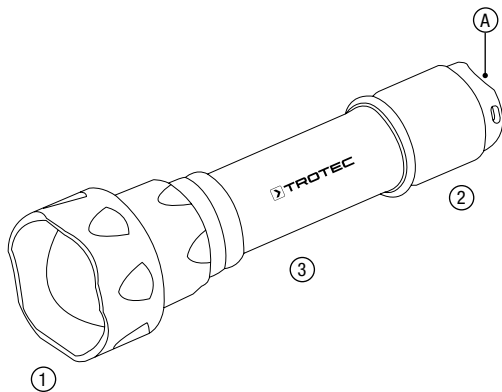
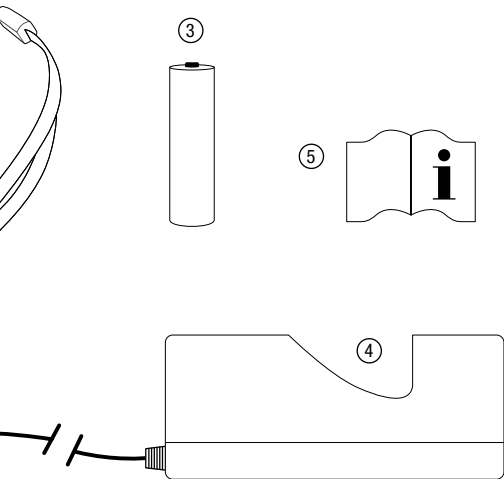
transport. Please contact the carrier/your supplier immediately if you discover any apparent defects or signs of defects or damage.

- 1 LED UV TorchLight 15F
- 2 Hand strap
- 3 18650 li-ion rechargeable battery
- 4 Charger
- 5 User guide



## 04. Control Elements, Display and Connections

- ① Reflector with focus
- ② Battery compartment cover
- ③ Grip
- A On/Off switch



## 05. Getting Started

### Inserting the rechargeable battery

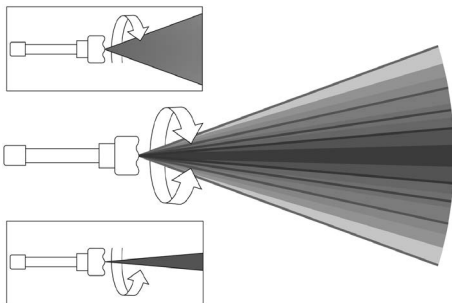
Unscrew the tailcap ❷ of the torch and insert the 18650 li-ion rechargeable battery or the 2 CR123A batteries included in the scope of delivery. Screw the tailcap back on.

### Switching on/off

Momentary light: Press switch A gently.

Continuous light: Press switch A hard. Press the switch again to power off.

### Adjusting the Focus:



The focus of the light beam can be adjusted by turning the head of the torch ❶. Do NOT adjust the focus of the torch when the torch is under water as this would allow water to enter the housing! Insert the battery included in the scope of delivery and switch on the torch to ensure that it is working properly. Direct the beam of the lamp at a banknote, for example, or any other object which is known to contain UV active substances, from a distance of approximately 1 m. The active substances will become immediately visible if the torch is working properly.

Next check the focus of the torch by adjusting the focus from minimum to maximum. The beam of the light should change from a pinpoint beam to a broad beam and vice versa. Repeat this procedure with a variety of different objects at a distance of approximately 1m in order to gain a feeling for the way the beam can be adjusted. Generally speaking, the illuminated area becomes smaller the more focused the beam is, which in turn means that fluorescent traces can be detected over greater distances because the beam is so intense. In contrast, a broad beam can illuminate a larger area, but does not allow you to detect objects or traces which are further away from the torch.

## Charging the 18650 li-ion batteries with the CH-01 charger included in the scope of delivery:

The rechargeable battery can be replaced regardless of its charge state. Place the rechargeable battery in the CH-01 charger and ensure that the positive pole is positioned in the direction of the LED. The LED remains red until the battery is fully charged. The green LED lights up when the battery is fully charged.

Take the rechargeable battery out of the charger and disconnect the charger from the mains power supply. Only charge 18650 / LRB-168A li-ion rechargeable batteries with battery overvoltage protection in the CH-01 charger!

The rechargeable battery included in the scope of delivery is pre charged.

The charging cycle lasts a maximum of 3.5 hours.

If you are planning on not using the battery for longer than 2 months, charge the battery to its full capacity before storing.

## 06. Troubleshooting

| Problem                           | Possible cause   |
|-----------------------------------|--|
| Light of the torch does not go on | Is the positive pole of the rechargeable battery / batteries facing towards the head of the torch? |
|                                   | Rechargeable battery / batteries full?   |
|                                   | Is the tailcap screwed firmly on to the battery housing?   |

### Solution

If the torch light goes on when the negative pole of the rechargeable battery / the rear battery is connected to the bare aluminium of the torch with a paper clip, for example, then the switch on the tailcap is defective. This is a spare part and can be ordered separately.

If your torch still fails to work, please contact our Service Hotline on +49 2452 962-450.

## 07. Technical Specifications

| High Performance LED UV Torch             |                     |   |
|---|---------------------|---|
| Article number                            | 3.510.011.005       |   |
| Lamp                                      | Type                | LED   |
|   | Wavelength          | UVA, peak at 365 nm   |
|   | Lamp life           | approx. 6,000 h   |
| Light output<br>(at a distance of 38 cm)* | Light cone XL       | 2,890 $\mu\text{W} / \text{cm}^2$<br>( $\varnothing$ 250 mm)  |
|   | Large light cone L  | 10,030 $\mu\text{W} / \text{cm}^2$<br>( $\varnothing$ 150 mm) |
|   | Medium light cone M | 22,560 $\mu\text{W} / \text{cm}^2$<br>( $\varnothing$ 100 mm) |
|   | Small light cone S  | 38,420 $\mu\text{W} / \text{cm}^2$<br>( $\varnothing$ 60 mm)  |
|   | LED spot light      | 55.480 $\mu\text{W} / \text{cm}^2$<br>( $\varnothing$ 30 mm)  |

\* Values are laboratory determined and can slightly deviate based on the torch, energy source and surroundings.

|                          |                |  |
|--------------------------|----------------|--|
| Power supply             | Battery        | Integrated   |
|                          | Battery type   | 3.7 V li-ion battery   |
|                          | Operating time | > 2h   |
|                          | Charging time  | $\approx$ 3,5 h  |
| IP code                  |                | IPX7   |
| Warm up time             |                | < 1 s  |
| Type                     |                | Torch  |
| Physical characteristics | Weight         | approx. 232 g<br>(incl. battery)                                 |
|                          | Housing        | anodised aluminium   |
| Scope of delivery        | Standard       | UV Torchlight 15F with rechargeable battery, charger, user guide |



## 08. Cleaning and Maintenance

### Cleaning the O-Rings

Please ensure that the O-rings and the sealing surface are kept clean. You can increase the life of your product by making sure that the O-rings are cleaned regularly with Vaseline.

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