

UV-TORCHLIGHT 15F

EN

INSTRUCTIONS
UV TORCH



Table of contents

Information on the use of this instructions 2

Safety 2

Information about the device 4

Transport and storage 5


Operation 5


Maintenance and repair 7


Disposal 7


Information on the use of this instructions


Symbols

 **Warning of electrical voltage**
This symbol indicates dangers to the life and health of persons due to electrical voltage.


 **Warning of explosive substances**
This symbol indicates dangers to the life and health of persons due to potentially explosive substances.


 **Warning**
Information marked with this symbol indicates that the device generates UV radiation. Information about how you have to protect yourself from UV radiation will be provided to you.

 **Warning**
This signal word indicates a hazard with an average risk level which, if not avoided, can result in serious injury or death.

 **Caution**
This signal word indicates a hazard with a low risk level which, if not avoided, can result in minor or moderate injury.

Note
This signal word indicates important information (e.g. material damage), but does not indicate hazards.

 **Info**
Information marked with this symbol helps you to carry out your tasks quickly and safely.

 **Follow the manual**
Information marked with this symbol indicates that the instructions must be observed.



Wear safety glasses

Information marked with this symbol indicates that you should wear eye protection.

You can download the current version of the instructions and the EU declaration of conformity via the following link:



UV-Torchlight 15F



<https://hub.trotec.com/?id=47386>

Safety

Read this manual carefully before starting or using the device. Always store the manual in the immediate vicinity of the device or its site of use.



Warning

Read all safety warnings and all instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

- Do not use the device in potentially explosive rooms or areas and do not install it there.
- Do not use the device in aggressive atmosphere.
- This appliance is not a toy. Keep away from children and animals.
- Protect the device from permanent direct sunlight.
- Do not open the device.
- Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition.
- Insert the battery into the battery compartment according to the correct polarity.
- Remove the battery from the device if you will not be using the device for a longer period of time.
- Only use the charger for rechargeable batteries. A charger that is suitable for one type of battery pack may create a risk of fire and explosion, when used with another battery pack or non-rechargeable batteries.
- Do not expose the charger to rain or wet conditions. Water entering an electrical appliance increases the risk of electric shock.
- Keep the charger clean. Contamination entails a risk of electric shock.

- Check the charger, cable and plug before each use. Do not use the charger if you detect any damages to the device. Do not open the charger and have it repaired only by qualified personnel and only with original spare parts. Damaged chargers, cables and plugs increase the risk of electric shock.
- Do not operate the charger on highly combustible ground (e.g. textiles, paper etc.) or in an inflammable environment. The heat generated by the charger during charging entails a risk of fire.
- In case of damage and improper use of batteries, vapours may be emitted. Provide for fresh air and seek medical help in case of complaints. The vapours can irritate the respiratory system.
- Under abusive conditions, liquid may be ejected from a battery. Avoid contact with liquid ejected from the battery as it may cause skin irritation or burns. If contact accidentally occurs, flush with water. Seek medical help if this liquid contacts eyes.
- Only use the supplied charger for charging a 18650 Li-ion battery protected against over- and undervoltage. The battery voltage must match the battery charging voltage of the charger.
- The use of batteries other than those recommended by the manufacturer can cause damage to the torch and endanger your safety. For operating only use a 18650 Li-ion battery protected against over- and undervoltage.
- Never charge batteries that cannot be recharged.
- Never short-circuit the supply terminal in the battery compartment!
- Do not swallow batteries! If a battery is swallowed, it can cause severe internal burns within 2 hours! These burns can lead to death!
- If you think batteries might have been swallowed or otherwise entered the body, seek medical attention immediately!
- Keep new and used batteries and an open battery compartment away from children.
- Observe the storage and operating conditions (see Technical data).

Intended use

Only use the device to irradiate objects, e.g. to find cracks or leaks, or to identify certain UV markers when checking banknotes or hygiene.

To use the device for its intended use, only use accessories and spare parts which have been approved by Trotec.

Any use other than the intended use is regarded as misuse.

Reasonably foreseeable misuse

The device must not be pointed at people or animals. Do not use the device in potentially explosive areas. Do not use the device underwater.

Any unauthorised changes, modifications or alterations to the device are forbidden.

Personnel qualifications

People who use this device must:

- use the UV lamp in accordance with safe working procedures.
- be aware of the dangers that occur when working with UV lamps.
- wear UV protection glasses.
- wear covering clothing.
- have read and understood the instructions, especially the Safety chapter.

Residual risks



Warning of electrical voltage

There is a risk of a short-circuit due to liquids penetrating the housing!

Please observe the type of protection of the device when using under water.

Do not use the focus function underwater.

Do not immerse the accessory in water.

Make sure that no water or other liquids can enter the housing.



Warning of electrical voltage

Work on the electrical components must only be carried out by an authorised specialist company!



Warning of explosive substances

Do not expose the batteries to temperatures above 60 °C! Do not let the batteries come into contact with water or fire! Avoid direct sunlight and moisture. There is a risk of explosion!



Warning

Danger from UV radiation!

The device generates UV-A radiation in the non-visible range of < 400 nm. The eyelid closure reflex does not work in this UV range. Do not look at the UV LED or into its beams during operation. Be careful not to shine the light directly on people or animals.

Do not use optics within the light cone to bundle the light beams.

When used in direct proximity to the object, the reflected UV radiation is stronger and thus more intense than at a distance of several metres. Always use suitable UV filters or safety glasses according to CE-EN166 to avoid eye damage. Also avoid prolonged exposure of skin or other living tissue.

Warning
 Risk of suffocation!
 Do not leave the packaging lying around. Children may use it as a dangerous toy.

Warning
 The device is not a toy and does not belong in the hands of children.

Warning
 Dangers can occur at the device when it is used by untrained people in an unprofessional or improper way! Observe the personnel qualifications!

Caution
 Lithium-ion batteries might catch fire in case of overheating or damage. Ensure a sufficient distance to heat sources, do not subject lithium-ion batteries to direct sunlight and make sure not to damage the casing. Do not overcharge lithium-ion batteries. If the battery is not permanently installed in the device, only use smart chargers that switch off automatically when the battery is fully charged. Charge lithium-ion batteries in due time before they are discharged completely.

Caution
 Keep a sufficient distance from heat sources.

Note
 To prevent damages to the device, do not expose it to extreme temperatures, extreme humidity or moisture.

Note
 Do not use abrasive cleaners or solvents to clean the device.

Information about the device

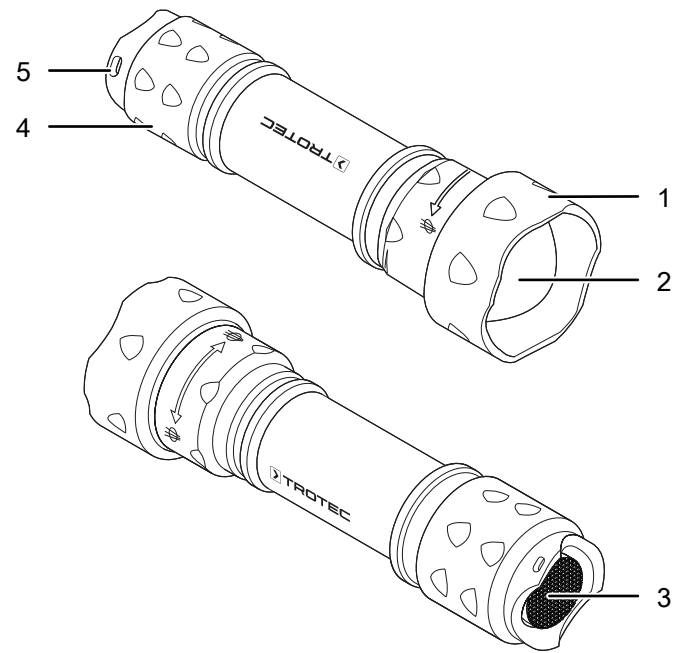
Device description

The UV-Torchlight 15F generates UV-A light in the 365 nm range.

Possible applications of the device are:

- checking for cracks or fissures using fluorescent testing agents
- leak detection with fluorescent liquids
- localization of UV active substances (blood, sweat, urine etc.)
- geocaching
- security check of documents or banknotes

Device depiction



No.	Operating element
1	Focus ring
2	UV light source
3	Power button
4	Battery compartment closure
5	Opening for wrist strap

Technical data

Parameter	Value
Model	UV-Torchlight 15F
Weight incl. battery	232 g
Dimensions (diameter x length)	45 mm x 155 mm
Radiation intensity* Radiation cone ø 250 mm	2890 µW/cm ²
Radiation intensity* Radiation cone ø 150 mm	10030 µW/cm ²
Radiation intensity* Radiation cone ø 100 mm	22560 µW/cm ²
Radiation intensity* Radiation cone ø 60 mm	38420 µW/cm ²
Radiation intensity* LED spotlight ø 30 mm	55480 µW/cm ²
Power supply	1 x 18650 Li-ion battery 3.7 V
Light source	12 x 365 nm LED
Wavelength UV-A light	365 ± 5 nm
Operating time	> 2 hours
Type of protection	IPX7

*at a distance of 38 cm

Scope of delivery

- 1 x UV-Torchlight 15F
- 1 x Li-ion battery 3.7 V
- 1 x Battery charger
- 1 x Quick guide

Transport and storage

Note

If you store or transport the device improperly, the device may be damaged.

Note the information regarding transport and storage of the device.

Transport

The supplied Li-ion batteries are subjects to the requirements of dangerous goods legislation.

Observe the following when transporting or shipping Li-ion batteries:

- The user may transport the batteries by road without any additional requirements.
- If transport is carried out by third parties (e.g. air transport or forwarding company), special requirements as to packaging and labelling must be observed. This includes consulting a dangerous goods specialist when preparing the package.
 - Only ship batteries if their housing is undamaged.
 - Mask open terminals with tape and pack the battery in a way that it cannot move inside the packaging.
 - Please also observe any other national regulations.

Storage

When the device is not being used, observe the following storage conditions:

- dry and protected from frost and heat
- protected from dust and direct sunlight
- the storage temperature complies with the values specified in the Technical data
- Battery/Batteries removed during prolonged storage

Operation

Charging the battery



Warning of explosive substances

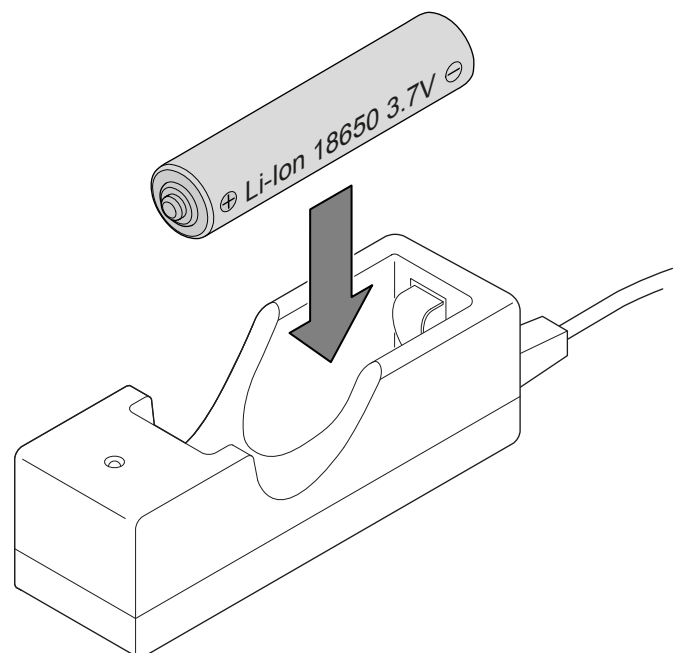
Do not expose the batteries to temperatures above 60 °C! Do not let the batteries come into contact with water or fire! Avoid direct sunlight and moisture. There is a risk of explosion!



Caution

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1. Insert the battery into the charger with correct polarity.



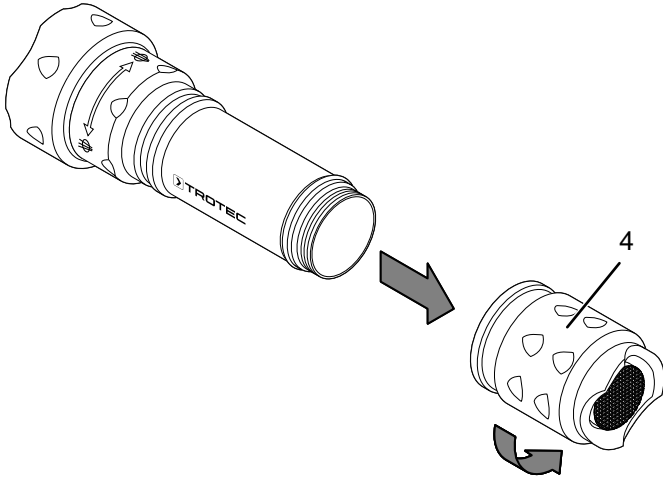
2. Connect the charger's power adapter to a mains socket.

Inserting the battery

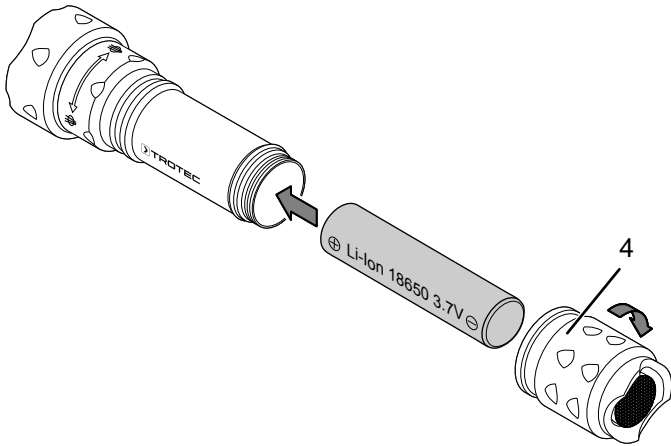
Note

Make sure that the surface of the device is dry and the device is switched off.

1. Open the battery compartment by turning the battery compartment closure (4) counter-clockwise.



2. Insert the battery into the battery compartment with the positive terminal facing the lamp head.
3. Screw the battery compartment closure (4) back onto the battery compartment.



Attaching the wrist strap

1. Attach the wrist strap to the opening provided using the connecting ring (5).

Switching on/off



Warning of electrical voltage

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Please observe the type of protection of the device when using under water.

Do not use the focus function underwater.

Do not immerse the accessory in water.

Make sure that no water or other liquids can enter the housing.



Warning

Danger from UV radiation!

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Do not use optics within the light cone to bundle the light beams.

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Info

For best results, use the device in a darkened environment.

Note

Wet urine traces cannot be made visible using the device. Only dry urine traces become visible in the UV light.

Note

On a dark background, the colour of the reflected spot may be similar to the colour of the background and thus difficult to see.

For continuous light:

1. Press the *Power* button (3) until you hear a click.
⇒ The UV torch turns on.
2. Illuminate the desired area with the UV torch.
3. Press the *Power* button (3) again.
⇒ The UV torch turns off.

For momentary light:

1. Press and hold the *Power* button (3) lightly without pressing it down completely.
⇒ The lamp is illuminated as long as you hold the button.
2. Illuminate the desired area with the UV torch.
3. Release the *Power* button (3).
⇒ The UV torch turns off.

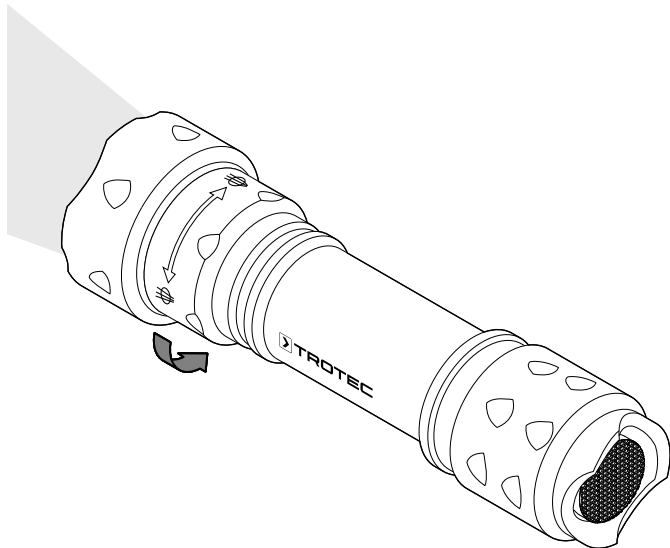
Setting the focus



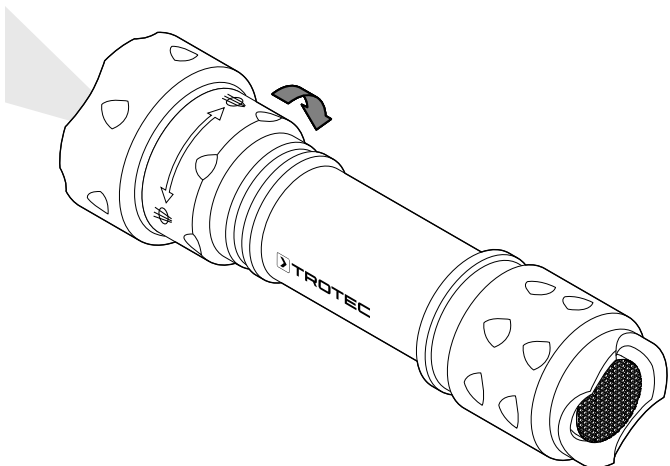
Info

Do not use the focus function underwater, otherwise water may enter the torch!

1. Turn the lamp head to the left to enlarge the light cone.
 - ⇒ The illuminated area increases while the range of UV rays is reduced.



2. Turn the lamp head to the right to focus the UV rays.
 - ⇒ The illuminated area is reduced while the range of UV rays is increased.



Maintenance and repair

Charging the battery

The battery should be charged when the light cone is only faintly visible or the device cannot be switched on. To do so, please follow the instructions in the chapter Operation.

Cleaning

Clean the device with a soft, damp and lint-free cloth. Make sure that no moisture enters the housing. Do not use any sprays, solvents, alcohol-based cleaning agents or abrasive cleaners, but only clean water to moisten the cloth.

Repair

Do not modify the device or install any spare parts. For repairs or device testing, contact the manufacturer.

Disposal

Always dispose of packing materials in an environmentally friendly manner and in accordance with the applicable local disposal regulations.



The icon with the crossed-out waste bin on waste electrical or electronic equipment is taken from Directive 2012/19/EU. It states that this device must not be disposed of with the household waste at the end of its life. You will find collection points for free return of waste electrical and electronic equipment in your vicinity. The addresses can be obtained from your municipality or local administration. You can also find out about other return options that apply for many EU countries on the website <https://hub.trotec.com/?id=45090>. Otherwise, please contact an official recycling centre for electronic and electrical equipment authorised for your country.

The separate collection of waste electrical and electronic equipment aims to enable the re-use, recycling and other forms of recovery of waste equipment as well as to prevent negative effects for the environment and human health caused by the disposal of hazardous substances potentially contained in the equipment.



Li-ion In the European Union, batteries and accumulators must not be treated as domestic waste, but must be disposed of professionally in accordance with Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators. Please dispose of batteries and accumulators according to the relevant legal requirements.

Only for United Kingdom

According to Waste Electrical and Electronic Equipment Regulations 2013 (SI 2013/3113) (as amended) and the Waste Batteries and Accumulators Regulations 2009 (SI 2009/890) (as amended), devices that are no longer usable must be collected separately and disposed of in an environmentally friendly manner.

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