

Operating Instructions



FIR

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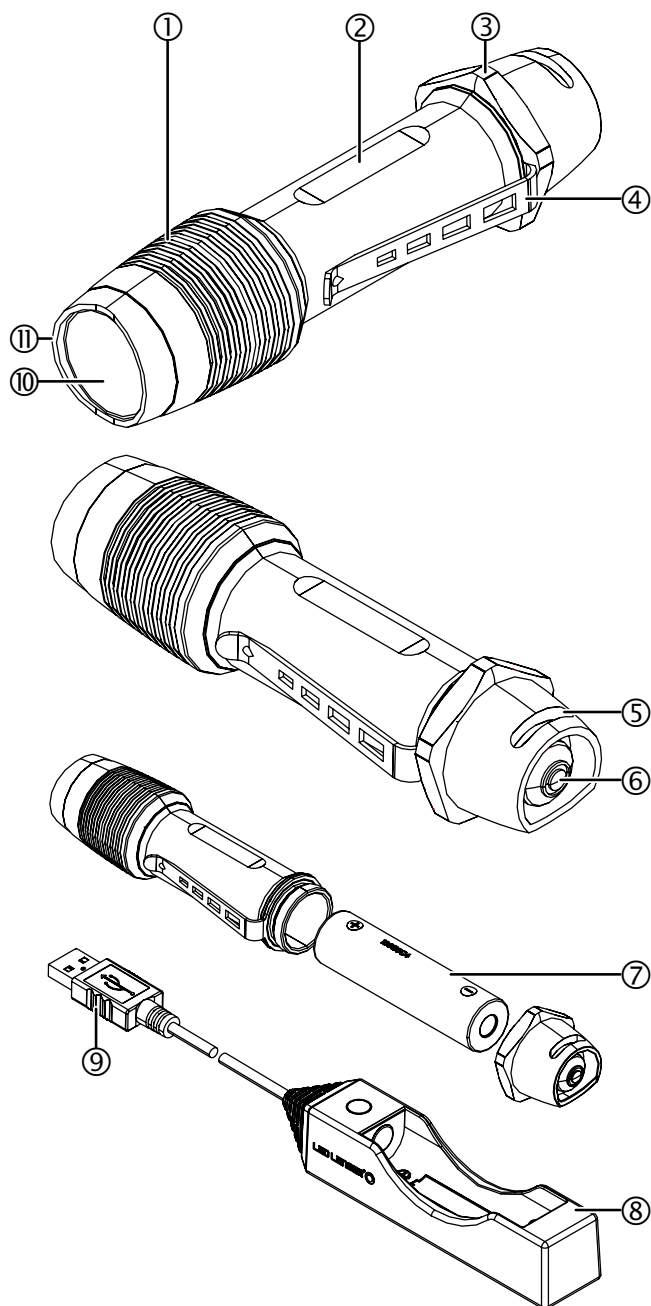
Thank you

We are delighted that you have decided in favour of one of our products. In these Operating Instructions you will find notes regarding safety and operation to help you to familiarize yourself with your new product.

Carefully read these Operating Instructions prior to using this product. They should be kept and handed over to third parties when passing on the product to third parties.

This also helps to ensure that you obtain maximum benefit from the product, get your questions answered and avoid incorrect operation. Above all, observe the warning and safety instructions and dispose of the flash-light, batteries / battery packs packaging materials properly.

1. General Product Information



1.1 Product Description

- ① Flashlight head
- ② Battery compartment
- ③ End cap that may be unscrewed
- ④ Removable clip
- ⑤ Fixture opening for wrist strap
- ⑥ On/Off push button
- ⑦ Battery pack (rechargeable)
- ⑧ Charger
- ⑨ USB connector
- ⑩ Lens
- ⑪ Front ring (can be exchanged)

1.2 Article

Designation	Article no.
F1R box	8701-R
F1R blister pack	8901-R

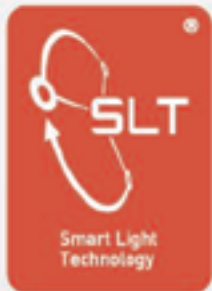
1.3 Scope of Delivery

- F1R flashlight,
- Packaging,
- General safety precautions and warnings,
- F1R quick initial start guide,
- Charger with USB connection,
- 1 x protected LED LENSER® ICR18650 lithium-ion battery pack, 3.7 V, 2200 mAh,
- Glass breaking stainless steel ring,
- Wrist strap.

1.4 Range of Use

Suitable for outdoor use. Water-tight according to IPX8.

1. General Product Information



1.5 Product Properties

- Pocket format (115 mm),
- Extremely powerful (up to 1000 lm),
- Smart Light Technology (SLT) with
 - 3 different lighting functions (High Power / Power / Low Power),
 - 2 lighting programs,
- Electronic regulation with temperature sensor (overheating protection),
- Environmentally aware, since operated with rechargeable battery pack,
- Charger with universal USB connection,
- Tailstand,
- Integrated roll protection,
- Replaceable glass breaking stainless steel ring,
- Water-tight in accordance with IPX8 (protection against permanent submersion),
- Detachable clip,
- Abrasion-proof, durable coating (HA III anodization according to military standards).

2. Important Notes on Safe Use

<p>Identification</p>	<p>2.1 Information Regarding Flashlight Identification</p> <p>These Operating Instructions are designed exclusively for the flashlights and accessories identified using the following specifications:</p> <p>– Type designation: F1R</p>
<p>Designation</p>	<p>2.2 Information Regarding Operating Instructions Identification</p> <p>All pages are marked with the relevant edition of the Operating Instructions using the type designation containing the 2-digit version number, release status and country designation(s):</p> <p>– Edition: F1R_V.01 – Status at: 7/31/2014</p> <p>This marking is binding for the validity of the Operating Instructions and should not be removed regardless of the type of publication (printed, data format or in excerpts).</p>
<p>Warranty</p>	<p>2.3 Warranty</p> <p>LED LENSER ensures the safety and proper functioning of the flashlight only under the condition that:</p> <ul style="list-style-type: none"> • The flashlight is only used according to the intended purpose and operated and maintained in accordance with the information contained in these Operating Instructions, • Only original spare parts or accessories approved by LED LENSER are used, • The flashlight is not modified in any way.
	<p>2.4 Completeness</p> <p>Check the lamp for completeness and any damage before installation.</p> <ul style="list-style-type: none"> • Unpack all components for checking and perform a visual inspection. • The components can be identified using these Operating Instructions.
	<p>2.5 Damages</p> <p>Please contact the vendor / distributor in the event of damage or missing items.</p>
	<p>2.6 Purpose of the System</p> <p>2.6.1 Standards and Regulations</p> <p>Flashlight, accessories and Operating Instructions comply with the requirements of following standards and regulations:</p> <ul style="list-style-type: none"> • General Product Safety Directive 2001/95/EG / Product Safety Act (GPSG), • Directive 2014/30/EU of the European Parliament and the Council on the Harmonization of the Laws of the Member States on electromagnetic compatibility, • Regulation (EC) No 1907/2006 of the European Parliament and the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH),

2. Important Notes on Safe Use

- DIN EN 62471:2009 Photobiological safety,
- Directive 2011/65/EU "Restriction of the use of certain hazardous substances (RoHS) in electric and electronic devices" of the European Parliament and the Council,
- IEC 82079-1:2012 - Preparation of instructions for use – Structuring, content and presentation - Part 1: General principles and detailed requirements.

2.6.2 Intended Use

The F1R is an extremely high-performance flashlight with a light cone and rechargeable battery pack. It is designed for use in the dark.

- The flashlight is suitable for continuous operation.
- The flashlight is suitable for outdoor use.
- Any use beyond the above-mentioned conditions is considered to be improper use. The user is liable for any damage resulting from such use.

2.6.3 Target Group

The flashlight is suitable for persons above 16 years of age without any limitations. Persons with physical or technical limitations and children between 6 and 15 years may only use the flashlight under the supervision of a parent or guardian.

2.7 Disposal



- The flashlight must be disposed of at a suitable place of disposal for recycling electric and electronic equipment according to the country-specific regulations.
- Submit used batteries/battery packs to a local battery collection point or anywhere where batteries/battery packs are sold in accordance with country-specific regulations.

3. Safety notes

 **DANGER**

 **WARNING**

 **CAUTION**

ATTENTION

NOTE



3.1 Safety Notes Structure

Important notes are marked with pictograms and signal words in these Operating Instructions.

3.1.1 Risk of Injuries Markings

Signal words, such as DANGER, WARNING or CAUTION designate the grading of a potential risk of injuries. The different triangle symbols emphasize the level of risk optically.

DANGER indicates an immediately dangerous situation that, if not avoided, may lead to death or serious injury.

WARNING indicates a potentially dangerous situation that, if not avoided, may lead to death or serious injury.

CAUTION indicates a potentially dangerous situation that, if not avoided, may lead to slight or minor injury.

3.1.2 Damage to Property Markings

ATTENTION indicates a potentially dangerous situation that, if not avoided, may lead to property damage.

3.1.3 Marking of Additional Information

NOTE gives you added information and helpful tips on safe and efficient use of the flashlight.

3.2 Additional Pictograms Regarding Safety Notes

Explosion hazard: warns of explosion of the batteries caused by strong heating.

Risk of glare: warns of glare caused by light beam with high brightness.

Follow the Operating Instructions: refers to compliance with these Operating Instructions.

3.3 Pictograms on the Flashlight

Optical radiation: warns of potential damage to the retina caused by photobiological radiation.

3.4 Pictograms on the Packing

CE marking: confirms conformity with the applicable standards and legal provisions.

3. Safety notes



3.5 Overview of the Key Safety Notes

- The following safety notes should be read carefully before using the flashlight!
- If the flashlight is passed on to another person, the operating instructions and these precautions and warnings must also be passed on.
- If there are warnings or warning symbols on the item, they should not be removed.

Health risk

WARNING

ACCIDENT/INJURY RISK FOR CHILDREN

Do not permit the flashlight to be operated by children, by persons under the influence of medication or drugs, or by persons with physical or mental disabilities/illnesses, as there is a risk of injury to the eyes and a risk of accidents.

Therefore:

- Do not allow children to play with the flashlight.
- Persons with limitations should only use the device under the supervision or instruction of a responsible person.

WARNING



RISK OF GLARE

The strong glare-effect of the flashlight may, however, cause temporarily limited vision and after-images that may cause irritation, disturbances or accidents.

Therefore:

- Never ever look directly into the beam of light or illuminate the eyes of another person, do not carry out pupil testing.
- Do not point the beam of light at people or animals as they may be dazzled.
- Do not use any optically highly-focused devices to observe the beam of light.
- Do not use multiple flashlights at once as this increases the optical radiation and thus increases the risk of retina damage.
- Commercial users or users in the public services are to be instructed in the applicable laws and regulations.

What to do:

- If a beam of light hits the eyes, deliberately close the eyes and move the head out of the beam of light.

CAUTION

RISK OF INJURY

Do not use flashlight or accessories if they are damaged, since there is a risk of injury.

Therefore:

- Take damaged parts out of operation and replace or have them repaired professionally.

3. Safety notes

⚠ CAUTION



PHOTOBIOLOGICAL SAFETY (EYE SAFETY)

The flashlight is classified in risk group 2 (medium risk) in accordance with standard IEC 62471 and thus extends beyond the “free group”. The risk of damage to the retina caused by optical radiation (blue light from 400 nm to 780 nm) is inherent, yet the thresholds are considerably undercut.

NOTE

ELECTROMAGNETIC COMPATIBILITY

The flashlight meets the requirements of the 2014/30/EC guideline with regard to electromagnetic compatibility.

Modifications / Repairs

⚠ CAUTION

DO NOT MAKE ANY MODIFICATIONS/REPAIRS

Repairs, additions or modifications to the flashlight are not permitted as these may lead to damages to the flashlight or a risk to persons:

Therefore:

- LEDs cannot be replaced.
- Do not open the flashlight unless this is expressly permitted by the operating instructions.
- Never carry out repairs yourself, always take the flashlight to a specialist dealer.

Batteries and battery packs

⚠ WARNING



EXPLOSION OR RISK OF ACID BURNS

Batteries/battery packs can explode as a result of strong heating.

Leaking of battery fluid can cause chemical burns.

Therefore:

Batteries and battery packs...

- May not be exposed to direct sunlight or great heat over an extended period of time,
- May not be heated or thrown into the fire and avoid heat buildup in the flashlight by covering it, for instance,
- May not be thrown into water or left out in the rain,
- May not be swallowed,
- May not be opened, damaged or short-circuited,
- May only be recharged if they are labeled accordingly,
- May not be stored within the reach of children,
- May only be inserted into the battery compartment in accordance with the displayed markings (+/-),
- Should be removed from the flashlight if you will not be using it for some time or if they are empty.

3. Safety notes

ATTENTION

BATTERIES / CHANGING THE BATTERY PACK

- Store batteries / battery packs in a clean, dry place between -10 °C and +25 °C.
- Only insert batteries in accordance with the markings (+/-).
- If necessary, clean the battery and/or flashlight contacts before inserting.
- Never use new and used batteries together.
- Only use high-quality batteries of the same type.
- Always change all batteries at the same time.

ATTENTION

RISK OF SHORT-CIRCUITING

In order to avoid the risk of a short-circuit when recharging:

- Do not touch the charging contacts with damp or metal objects.
- If need be, clean the charging contacts.
- Only recharge flashlight/battery packs in dry rooms.

ATTENTION

MALFUNCTIONING OF THE FLASHLIGHT

Always check the flashlight for functionality prior to use and, to be on the safe side, carry a replacement flashlight and sufficient replacement batteries or battery packs with you. If the flashlight does not function or does not function correctly, proceed as follows:

- Check whether the batteries/battery packs have been inserted with the poles (+/-) the correct way round and are fully charged.
- Check the flashlight or battery/battery pack contacts and clean if necessary.

What to do:

- To use all the functions again, insert new batteries or recharge the battery packs.

Disposal / environmental protection

ATTENTION

DISPOSAL/RECYCLING

Flashlights and used batteries/battery packs may not be disposed of in the household or residual waste. They must be disposed of in accordance with national legal requirements.

The materials are recyclable according to their labeling.

Reuse of the materials makes an important contribution toward environmental protection.

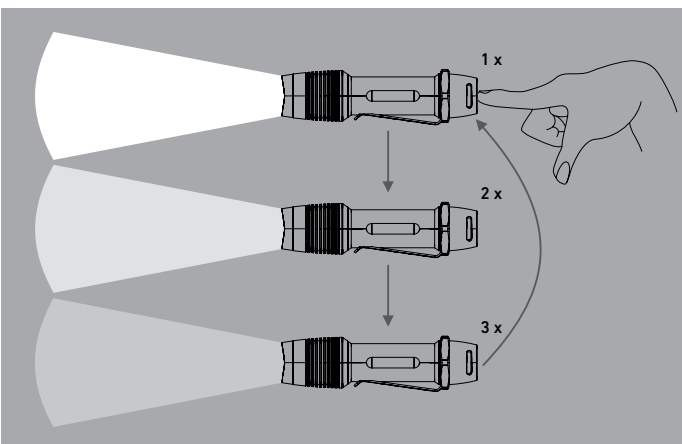
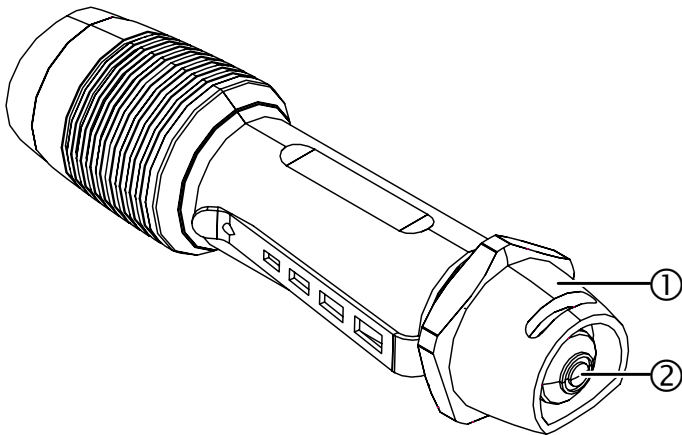
Therefore:

- Submit flashlights in to a local collection point for the recycling of electrical and electronic devices.
- Submit used batteries/battery packs to a local battery collection point or anywhere where batteries/battery packs are sold.
- Batteries / battery packs may only be disposed of when discharged.
- Separate the packaging materials and dispose of correctly.

4. Overview of Terms and Abbreviations

	The following technical terms / abbreviations are used in these Operating Instructions:
SLT	Smart Light Technology
LED	Short for Light-Emitting Diode
Battery pack	Short for rechargeable battery, i.e. rechargeable energy source

5. Operation



5.1 Switching the Flashlight On or Off

The flashlight is operated by pressing the push button on the end cap.

The push button can be engaged for constant illumination; just a gentle activation can be used to create flashes, for example, to send signals or warnings.

1. To switch the flashlight on firmly press the On/Off push button ② in the end cap ① and engage.
 - The push button engages with an audible "click".
 - The flashlight is now constantly lit.
2. To switch the flashlight off press the On/Off push button ② in the end cap ① again and release.
 - This On/Off push button unlocks with an audible "click".
 - The flashlight is no longer lit.
3. To create light signals, press the On/Off push button ② in the end cap ① gently and, if need be, hold.

5.2 Using the Lighting Functions

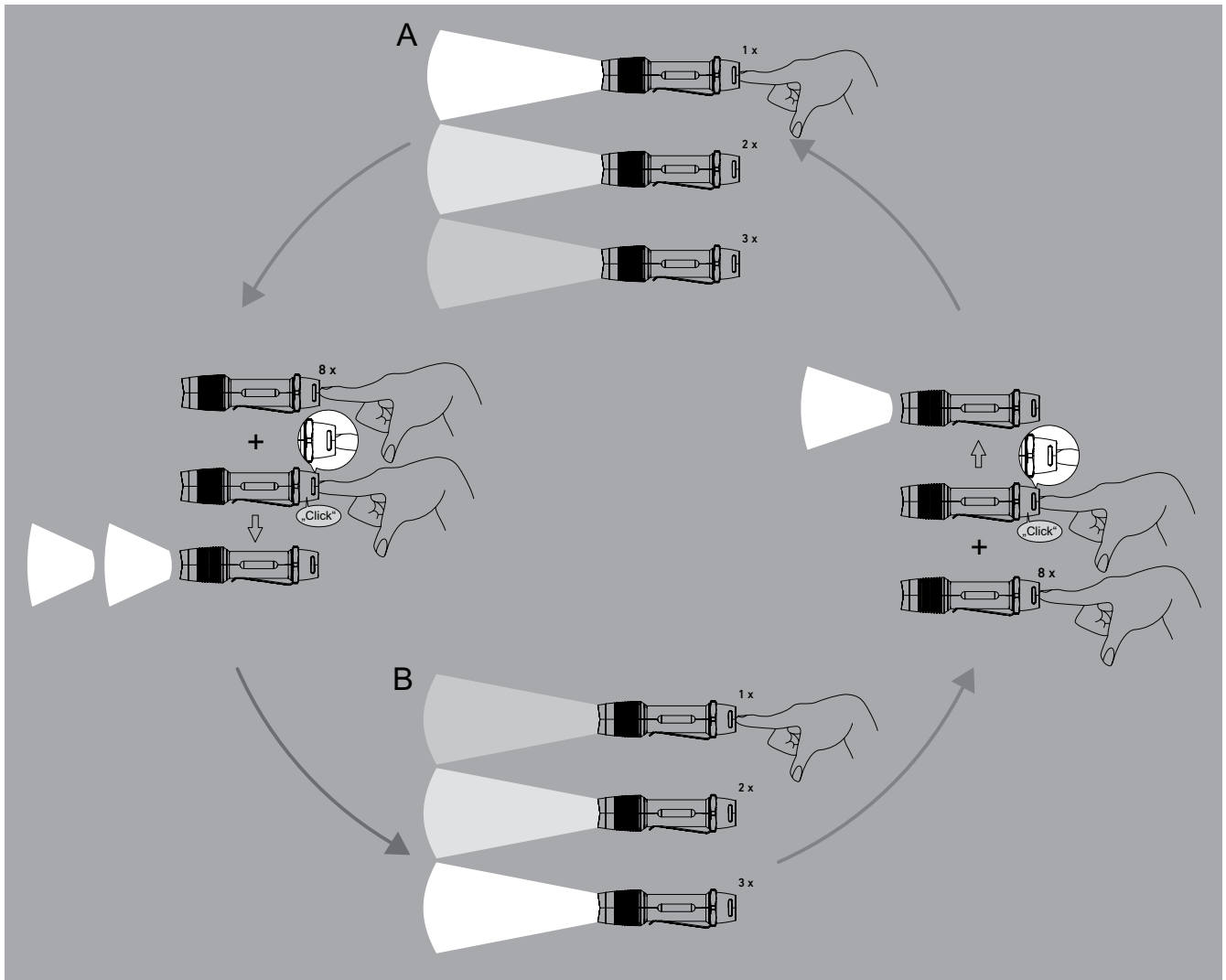
The flashlight offers 3 lighting functions:

- 1 = High Power
- 2 = Power (normal) and
- 3 = Low Power (dimmed).

1. In order to use the lighting functions, either press and engage the On/Off push button ②
 - multiple times or gently press several times and when the desired program has been located, press firmly to engage.
 - Each time you press the switch, you activate the next lighting function.
 - After more than 3 gentle button pushes, the cycle returns to the beginning.

Press the push button	Light function
1 x	High Power
2 x	Power (normal)
3 x	Low Power (dimmed)

5. Operation



5.3 Activating Lighting Programs

The flashlight has 2 lighting programs that can be used to determine the sequence of the lighting functions. In the delivered state, program A is activated. Use this method to select from the following programs:

Program A

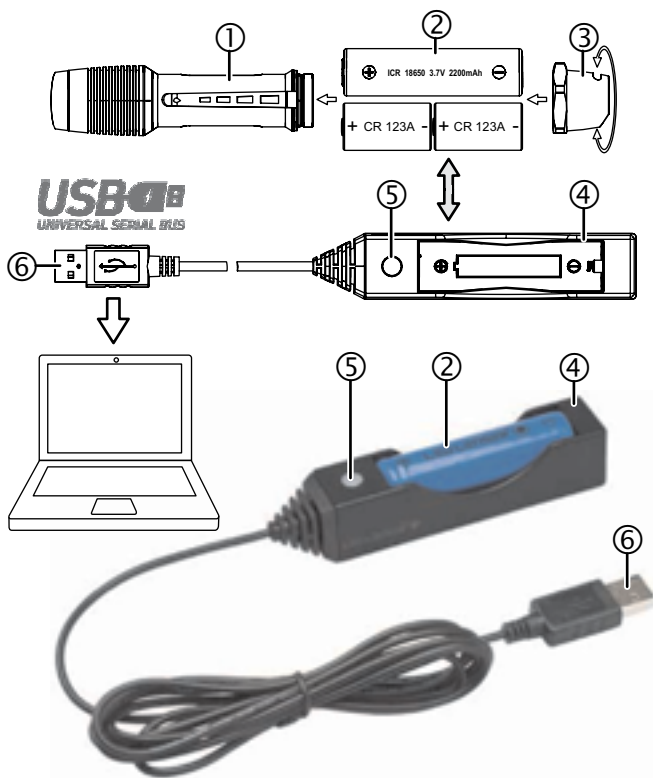
Press the push button	Light function
1 x	High Power
2 x	Power (normal)
3 x	Low Power (dimmed)

Program B

Press the push button	Light function
1 x	Low Power (dimmed)
2 x	Power (normal)
3 x	High Power

1. Switch flashlight off.
2. To change the lighting program, press the On/Off push button 8 times (or more) and then engage.

5. Operation



- The flashlight switches the lighting program and indicates this by briefly flashing twice.
- After the flash, the first lighting function for the relevant program will be selected, thus, either High Power or dimmed light will be used.
- Repeating the process switches back into the other lighting program.

5.4 Changing the Battery Pack/Batteries

1. To remove the rechargeable battery pack/batteries ②, unscrew the end cap ③.
2. Remove the battery pack/batteries ② and recharge the battery pack.

⚠ CAUTION



EXPLOSION HAZARD

Always insert the battery pack/batteries in accordance with the (+/-) markings otherwise there is a risk that the battery pack/batteries may be damaged or even explode.

3. Charged battery pack/new batteries ② should be inserted in the battery compartment ① with the plus pole (+) first.
4. Screw the end cap ③ back into place.

ATTENTION

USING BATTERY PACK/BATTERIES

This flashlight may only use 1 x protected LED LENSER® ICR18650 lithium-ion battery pack or 2 x CR 123A lithium batteries.

5.5 Recharging the Battery Pack

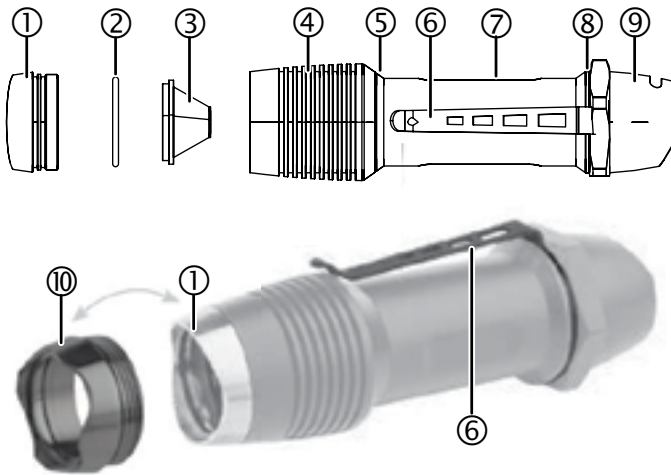
ATTENTION

RECHARGING THE BATTERY PACK

Only the rechargeable battery pack LED LENSER® ICR18650 lithium-ion may be charged in the supplied charger.

1. Remove the battery pack ②. To do this, unscrew the end cap ③ of the flashlight ①.
2. Insert the battery pack ② in accordance with (+/-) markings into the charger ④.
3. The USB connector ⑥ of the charger ④ must be connected to an ordinary USB power adapter or the USB port of a PC or Notebook.
4. Observe the charging display ⑤:
 - The red light indicates that the battery pack is currently being charged.
 - The green light indicates that the charging process has been completed.
5. Remove the charged battery pack ② and insert into the flashlight as described in chapter 5.4.

5. Operation



5.6 Replacing the Front Ring

The front ring ① screw-fitted in the delivered state may be replaced by the enclosed black coated, glass-breaking stainless steel ring ⑩.

1. Unscrew the front ring ①.
 - The lense ③ is located in the front ring ① and is removed with the front ring ①.
2. Carefully push the lense ③ out of the front ring ①.
3. Remove the rubber ring ② carefully from the front ring ①.
4. Fit the rubber ring ② to the stainless steel ring ⑩.
5. Evenly insert the lense ③ as far as it will go into the stainless steel ring ⑩.
6. Screw the stainless steel ring ⑩ into the flashlight head ④.

NOTE

SCREW IN THE FRONT RING

If the lense has not been evenly inserted or not pushed all the way forwards, the lense may tilt and it may not be possible to screw the stainless steel ring completely onto the flashlight head.

What to do:

- Insert the lense anew or align it.

NOTE

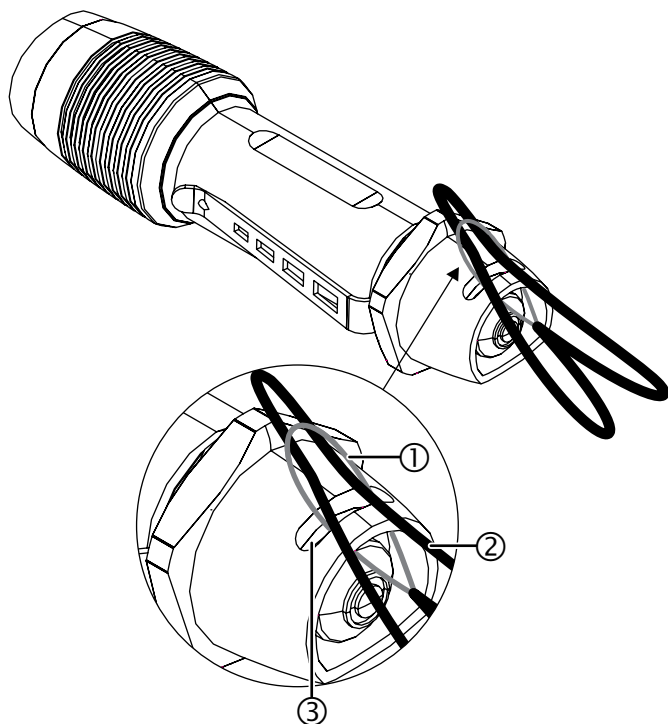
REPLACEMENT O RING

The front ring has an O ring as seal. If the O ring is damaged, there is a replacement O ring supplied with the flashlight.

5.7 Removing the Clip

1. Unscrew the end cap ⑨.
2. Remove the rubber ring ⑧ from the flashlight body ⑦.
3. Remove the clip ⑥ from the flashlight body ⑦.
4. Fit the rubber ring ⑧ to the flashlight body ⑦.
5. Screw the end cap ⑨ back into place.

5. Operation



5.8 Attaching the Wrist Strap

To attach the enclosed wrist strap to the end cap:

1. Push the thin loop ① of the wrist strap from the inside, through the attachment opening ③ of the end cap of the flashlight.
2. Push the thick loop ② through the thin loop ① and pull the thick loop ② until the thin loop ① has tightened about the attachment opening ③.

5.9 Automated Functions

5.9.1 Temperature Monitoring

The F1R is fitted with a temperature monitoring function (electronic regulation with temperature sensor). This prevents the flashlight from overheating when in use. This may result in a reduction in brightness as soon as the function is activated.

- If necessary, switch off the flashlight and allow to cool down.

5.9.2 Battery State Warning

A low charge state of the battery pack is signaled by 3 brief flashes of the LED. The flashing is repeated every 15 seconds until the flashlight switches itself off automatically after 10 minutes.

- Remove the battery pack as described in chapters 5.4 and 5.5, charge and replace.

5.10 Cleaning

The following should be noted for cleaning:

- Only dry clean the flashlight and its accessories using a lint-free cloth.
- If the flashlight comes into contact with salt water, remove the salt water immediately and fully with a lint-free cloth.

ATTENTION

DAMAGE TO SURFACES

Solvents can damage surfaces or decompose materials!

Therefore:

- Do not use any cleaning agents or disinfectants.
- Do not use scouring agents.
- Do not use gasoline, paint thinners or similar products.

5. Operation

ATTENTION

WARRANTY EXEMPTION

No warranty will be assumed for damage resulting from the use of inappropriate cleaning agents/disinfectants.

5.11 Tests

Every product is prone to wear over time. Annually, and prior to each use, check the safety and function of the flashlight as well as the batteries/battery packs.

ATTENTION

Replace and dispose of damaged or old batteries / battery packs.

Do not use defective flashlights or accessory parts and contact vendor / distributor.

5.12 Warranty

Our products are subjected to stringent quality control. Please contact the vendor / distributor in the event that this flashlight does not function according to expectations.

ATTENTION

IMPROPER REPAIRS

The device may only be repaired by an authorized repair shop, otherwise legal warranty will become void.

6. Technical data

F1R

Parameter value	Value		
LED	1 x Xtreme Power LED		
Length	115 mm		
Weight	120 g		
Batteries	1 x lithium-ion battery pack ICR18650, 3.7V, 2200 mAh or 2 x CR 123A lithium batteries		
Energy tank***	3.9 Wh		
Lighting modes	High Power	Power	Low Power
Luminous flux*	1000 lm	250 lm	10 lm
Burning life**	3 hours	6 hours	60 hours
Beam distance*	160 m	80 m	20 m
Water-tightness	IPX8		

* Luminous flux (lumen) or maximum beam distance (in meters) is measured using the setting as stated in the table. These are average values which may deviate by +/- 15 % for each individual case according to chip and battery pack.

** Average burning life up to a luminous flux of 1 lumen.

*** Calculated value of the capacity in Watt hours (Wh). This applies to the fully charged batteries or battery pack(s) contained in the relevant article in the delivered state.



