

# LUCIFER S2 RED

EN  
USER GUIDE



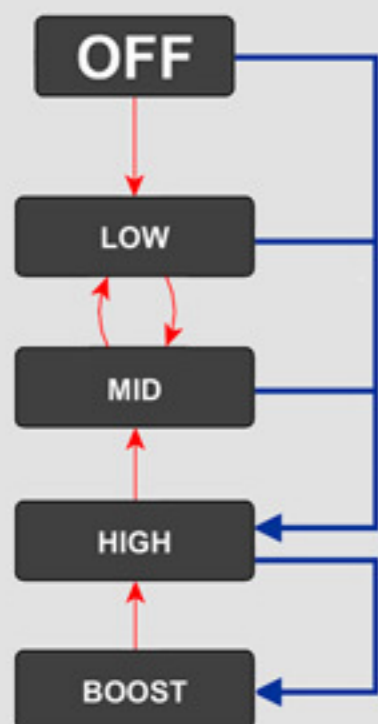
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POWERFUL HEADLAMPS MADE IN THE CZECH REPUBLIC

## ADVANCED UI

## EASY UI

8-15 seconds long  
button press  
from off state



VERY LOW	2 CLICKS
WHITE BLINKING	3 CLICKS
RED LIGHT	4 CLICKS
RED BLINKING	5 CLICKS

VERY LOW	2 CLICKS
WHITE BLINKING	3 CLICKS
RED LIGHT	4 CLICKS
RED BLINKING	5 CLICKS

→ long press  
(to 1s)

→ short click  
(to 350ms)

## BASICS

Headlamp has got 5 lighting modes and 3 special modes (blinking, battery test, red light, red blinking).

There is no memory for the last mode and headlamp turns on everytime the same. Headlamp can be turned off with a very long press.

Headlamp has got 2 different user interface schemes - easy one and advanced one. You switch between them with 10s button press.

On the left side is advanced user interface and is set as default. Modes can be changed with short, long and very long presses. A short click lowers the mode and cycles between low and mid mode. Long press switches to a higher mode.

On the right side is easy user interface - you switch modes only with a short press by cycling modes LOW-MID-HIGH-BOOST-LOW etc.

## RUNTIMES

Runtimes are specified as minimum time in given mode when used with 3450mAh Battery. Runtimes are lowered when battery gets frozen (under 0° Celsius).

Mode	Light output [Lumens]	Runtime [h:m]
RED LIGHT	7	85:00
VERY LOW	25	85:00
LOW	100	20:00
MID	200	10:00
HIGH	400	4:00
BOOST	800	1:40

## DISCHARGE WARNING

Electronics monitor remaining battery charge and give 3 levels of warning, alerting the user to levels of battery discharge down to 33%, 10% or completely empty with 1, 2 or 3 blinks of the beam. Three flashes indicates that the batteries are fully discharged and headlamp can be shortly turned off.

This signalization can be slightly inaccurate, especially in highest modes. The most accurate signalization gives STATE OF CHARGE TEST.

When batteries are not able to supply enough energy, headlamp switches to lower modes. When its finally switched to the lowest mode, headlamp no longer regulate brightness and light diminishes over a long time and then shuts off completely.

## STATE OF CHARGE TEST

You turns on battery test with 1 second press or longer. Headlamp will then indicate the state of charge of connected battery with a series of flashes.

5 blinks	= 80-100%
4 blinks	= 60-80%
3 blinks	= 40-60%
2 blinks	= 20-40%
1 blinks	= 0-20%

remaining  
charge

### LI-ION TECHNOLOGY

There is no need to cycle Li-Ion batteries. You can charge them anytime, you don't have to discharge them before. Battery gets naturally old from the time it was manufactured, life can be significantly prolonged.

### MAXIMUM PROLONGING OF BATTERY LIFE

Do not fully discharge battery if you don't need to. **Do not store batteries fully charged or fully discharged.** We recommend 50-60% charge for long time storage. Disconnect connector everytime during transport or if you don't use it.

Do not dispose batteries to temperatures under 0° Celsius. In cold, place them under your clothes or into the pocket.

When batteries get frozen limit use to lower modes to minimize damage.

### OVERHEATING PROTECTION

Headlamp monitors its temperature and switches to lower mode in case of overheating. Overheating can occur in high and boost mode when the headlamp is not moving.

Warning! **Temperature of the headlamp body can reach up to 60°C.**

### CHARGING

Batterypack should be charged with attached 4.2V wall charger. Charging of fully depleted batterypack takes 6 hours. Charger lights **red during charge** and **green when completed.** First plug charger into the mains and then batterypack to the charger!!

You can also use any bay charger which is made for charging li-ion cells. Charging end voltage must be set to 4.2V.

### RED LIGHT ALWAYS FIRST AFTER TURN-ON

Headlamp can be set to **turn on always first in the red light** no matter how you press the button. Also STATE OF CHARGE test signalize with red blinks.

This function is activated and deactivated with 8-15 seconds long button press from the OFF state.

### BASIC SAFETY

**DO NOT USE DAMAGED BATTERIES!**

**KEEP BATTERIES OUT OF HIGH TEMPERATURE** (inside car in direct sun, near the fire etc.)

**DISCONNECT CONNECTOR DURING TRANSPORT!** (prevent accidental turn on)

**CHARGE BATTERIES WITH APPROPRIATE CHARGER ON SAFE PLACE UNDER YOUR SUPERVISION!**

**DO NOT CHARGE BATTERIES WITH TEMPERATURE UNDER 5°C.**  
Wait until they have room temperature.

**THIS LIGHT IS NOT A TOY!**  
kids are allowed to use it only if they know how

**DO NOT LIGHT INTO EYES!**  
can damage your sight.

**KEEP THE HEADLAMP TURNED DOWN ON A ROAD!**  
do not blind drivers in traffic

**HEADLAMP CAN HEAT UP TO 60°C!**

## BATTERIES

Only **protected li-ion 18650 cells** supposed to be used in the battery tube.

Be careful when inserting batteries into battery tube or in a bay charger, not to damage its surface.

Watch out for **correct polarity** as indicated in the picture below.

## BATTERY TUBE

**When headlamp is not used or transported**, turn the tube cap half a turn counterclockwise so the battery is disconnected from the headlamp and could not turn on accidentally. Also you prevent any battery discharging.

**For longer thread life and easy operation**, apply vazeline on threads and o-ring seal and clean these surfaces when they are dirty.



Headlamp body	CNC milled, aluminium alloy 6063, hard anodized
LEDs	1x Cree XP-L2, typ. 4500K, CRI 70, bin V6
Waterproof rating	IP66
Modes	6 modes, all constant regulated
Maximum light output	800 lumens
Maximum runtime	85 hours
Maximum beam distance	220m
Electronics	microprocessor driven synchronous boost converter efficiency 91-96%
Protection against	overheating, opposite battery polarity
Discharge warning	at 33%, 10% and 0% remaining capacity
Quiscent current	400 uA
Supply voltage	2.7-5.5V DC
Operation temperature – headlamp	-40 - 70°C
Operation temperature – battery pack discharging	-20 – 60°C
Operation temperature – battery pack charging	10 – 45°C

Case	plastic and aluminium openable
Battery configuration	1 cell 18650 protected
Battery type	Lithium – Ion, type 18650, only Protected
Compatible charger	4.2V, 0.5A, CCCV (constant current, constant voltage) mains charger or any bay charger for 1 li-ion battery (4.2V max. charging voltage)
Overall weight	170 gr.



## OUR MISSION

Lucifer headlamps are made and assembled in Prague, Czech Republic.

LUCIFERLIGHTS s.r.o  
SLUZSKA 779/30  
PRAGUE 8  
18200  
CZECH REPUBLIC

We are focused on creating very small, tough and light-weight headlamps designed and constructed to the highest possible standards, with the highest light outputs, longest possible runtimes, excellent ergonomics and ease of use, and with all the accessories and mounts you are likely to need.

## IDEA FOR IMPROVEMENT?

We would like to hear from you and your headlamp use. Write us email and share with us your ideas. We design headlamps for people and their votes are important for us.

## SPREAD A WORD

If you are satisfied with our headlamp and want to support us, please tell your friends about us. That will help us grow and develop new lights and accessories.

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