

SUPERNOVA M33

Tips:

- store battery with 20% charge for longer periods
- the lens can be cleaned best with a soft, wet cloth. Blow or brush off dirt without applying pressure.
- The attachment rubber o-ring can be installed much easier if you hold it in place on the handlebar while tilting the whole light towards the o-ring. Removing the light is also much easier, this way.
- The 5-pole connectors have a nut and groove. You can easily connect the lamp by twisting both halves in opposite directions while exerting light pressure.

Warranty

We cannot give a warranty on mechanical damages caused by crashes or normal wear. We will, however repair lights at cost price. Batteries cannot be included in the warranty because it is nearly impossible to prove the cause of a failure. The warranty also expires in cases of improper use or if any technical modifications are made. During the warranty time of 2 years from the date of purchase, warranty repairs are made free of charge. In general, it is Supernova policy to treat every problem with goodwill.

CHECKLIST FOR RETURNS

1. Please contact us before returning anything
2. Give us a detailed description of the malfunction before sending the light back.
3. Include a description of the malfunction, a return address and contact information in the parcel.
4. Important: please disconnect the lamp from the battery and pack everything carefully.
5. Include a copy of your original invoice if you still have it.
6. Send the light in an insured parcel, postage paid.
7. When shipping from outside the EU, please make it clear that it is a warranty repair shipment with no commercial value (giving a formal value of USD 20.- or equivalent will speed up things). Do NOT mention the original purchase price or any higher value!

SERVICE / CONTACT

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SUPERNOVA M33

MANUAL

The 2011 update has been the biggest step for the M33 so far! We have replaced the Seoul P4 LEDs with Cree XPG R5, which alone results in an increase in brightness of 55%. Furthermore, the LED driver electronics have been upgraded with the newest technology, taking advantage of the new Cree XPG's capability to run with 50% more current than the previous models. This all results in an overall increase in brightness of 75% in comparison to the previous model. Some of the extra brightness is spread out more, to give you a slightly wider beam. With its titanium mounting arm, the M33 can be installed on handlebars, stems and with adapters on bicycle helmets or on the head strap.

CONTENTS - TECHNICAL DATA

SUPERNOVA M33 light

3 x 5 Watt Cree XPG R5 LED

Colour temperature: ca. 6500 Kelvin

Burn time: ca. 2.5 hours at 14 Watts
ca. 35 hours at 1 Watt

Brightness: three Seoul P4 Leds
Maximal brightness: 1400 Lumens*
*(depending on outside temperature)

Material : Aluminium, polished & anodized / Titanium
PMX control unit: control electronics with several operation modes and an exact burn time calculation. Gold pin connectors in a water tight housing.



Double-sealed humidity-resistant battery

Capacity: 35 Wh

Voltage: 14.5 V

Cells: 4

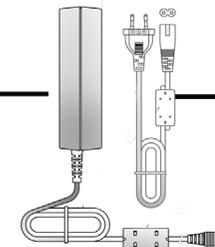
Type: Lithium Ion

Charge time: ca. 2 hours 80%, 4 hours for full charge.



Power supply for 100-240 Volts / 50-60 Hz

Optional US, Australian, UK power cables.



Accessories: 50 cm cable extension (Art. # E431), helmet mounting adapter (Art. # HM33-HS), head strap (Art. # HM33-HB).

IMPORTANT SAFETY NOTES

1. Please always disconnect the battery after use! The light does have a protection against involuntary activation, but we strongly recommend this precaution.
2. The lamp head gets very warm after a very short time. Please Keep it away from heat-sensitive materials or body parts.
3. Always pull on the plug, never on the cable when disconnecting the battery.
8. Only use the charger provided.
9. Keep the light out of reach of children. Danger of retinal damage!
10. Never look directly into the light! Never shine the light directly in someone's eyes!
11. The use of this extremely bright lighting system on public roads may be forbidden in your country. Please check your local laws and traffic regulations.
12. The battery burn time indicator can decalibrate over a long period. A full discharge and recharge cycle will recalibrate the system.

FURTHER NOTES

Please always be prepared for the lamp switching off at any time when the control unit is flashing red (in handlebar mode). The burn time can be extended by many hours by switching to a lower setting when the red flashing sets in. The burn times indicated in the manual may vary due to the age and temperature of the battery.

TIPS FOR A LONG BATTERY LIFE

The Lithium Ionen batteries used by Supernova are very easy to maintain. The intelligent, temperature controlled charge technology ensures perfect charging at all times. Two electronic protection systems prevent a deep discharge. There are three things you can do to prolong the lifespan of your battery:

1. Charge the battery 30% when storing it for several months (if you really have to go without nightriding that long). Store it in a cool, dry place. A fridge (not the freezer!) is OK, if you make sure the battery is in a watertight bag. Please recharge the battery after 6 months. Remember to disconnect the head unit.
2. Try to avoid exposing the battery to excessive heat (like in a car parked in the sun).
3. Never charge below freezing temperatures.

SUPERNOVA TAIL LIGHT - OPTIONAL

Art. Nr. E808

No tools are needed to install the battery Tail Light:

1. Install the light on your seat post with the rubber o-ring.
2. Insert the T-connector between battery and main light (mind the "tongue and groove" alignment).
3. The rear light switches on automatically when the front light is activated.
4. You can choose between steady or flashing rear light.
5. Flashing rear: press two buttons in succession as usual, but keep pressing the second button a bit longer to make the rear light flashing. This only works when switching the light on.

TROUBLESHOOTING

- | | |
|--|---|
| 1. The light does not switch on | - Is the battery empty?
- Did you press the two buttons in succession? |
| 2. The lamp switches off too early | - Could it have been decalibrated after long storage?
A full discharge and recharge should help. |
| 3. The control unit flashes red, the battery is fully charged | - You are in helmet mode, with flashing "rear light" PMX. Please restart the light after 5 seconds in handlebar mode by pressing buttons 1 - 2 in succession. |
| 4. The control unit is red, but The battery should be full | - you may be in helmet mode. |
| 5. The control unit is flashing white | - the light was in danger of overheating and automatically dimmed to a lower setting. This happens in room temperature without air movement. |
| 6. The light cannot be switched to the Highest brightness setting. | - the lamp is too hot (white flashing control unit) Harmful brightness settings are blocked automatically. |

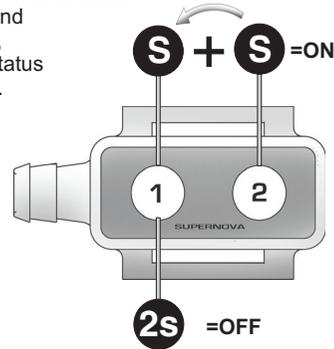
SUPERNOVA M33

The PMX control unit explained

Symbols: **S** = Press shortly **2s** = Hold down 2 seconds (3s=3sec etc.)

SWITCHING THE LIGHT ON AND OFF

A software lock prevents accidental activation of the M33!
To switch on the light, press **buttons 1 and 2** in succession.
The light will then be switched on in the second brightest setting, in **bike mode**. In this mode, the PMX continuously indicates the battery status with LEDs glowing blue, green, yellow or red.



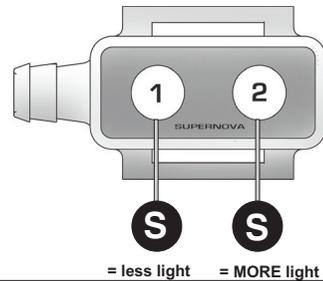
To activate the **helmet mode**, press **button 2 and then 1**.
PLEASE NOTE: holding down button 1 a bit longer will make the PMX flash, otherwise it will glow red.

To switch the light off, hold down button 1.
The safety lock activates after 5 seconds.
Then, you can switch the light from helmet to bike mode or vice versa.

BRIGHTNES SETTINGS

The M33 has five brightness settings.
It starts in the second brightest setting!
Button 1 dims the light, button 2 increases the brightness. In bike mode, the PMX will flash in the colour of the light setting chosen:

- | | |
|--------------------------|-------|
| 5 (Power setting): white | 14 W |
| 4 (start setting): blue | 8.0 W |
| 3 Dimmed level 1: green | 4.5 W |
| 2 Dimmed level 2: yellow | 2.0 W |
| 1 reading light: red | 1.0 W |



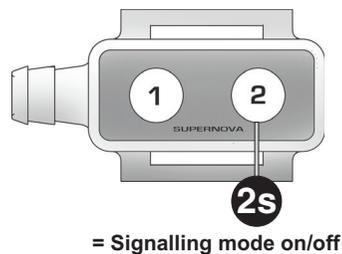
SIGNALLING MODE SOS / FLASHING

Activate the signalling mode by holding down button 2 for two seconds
CAUTION! The first signal is an aggressive strobe light!

The following settings can be cycled through by using the two buttons:

- Strobe light
- Random flickering
- bright S.O.S. signal
- low-power S.O.S. Signal

Exit the signalling mode by holding down button 2 for two seconds.



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BATTERY FUEL GAUGE

An electricity meter in the battery measures the exact amount of power charged and consumed. The advanced RISC chip in the control unit receives the capacity information through a dedicated communications wire directly from the battery. This is why Supernova uses a 5-pole connector, not a simple 2-pole version. Since the control unit knows the power consumption at any given time, it can then calculate the exact burn time at every brightness setting. The burn time is indicated in two ways: to give you a rough indication of the remaining battery capacity, the control unit glows in the following colours for the respective capacity:

- 75-100% capacity = BUE
- 50-74 % capacity = GREEN
- 25-49 % capacity = YELLOW
- 5-24 % capacity = RED
- 0-4 % capacity = FLASHING RED

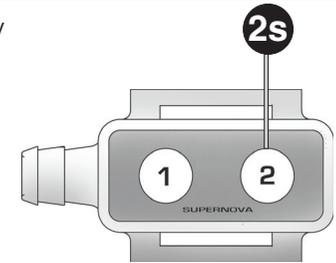
Burn time control handlebar mode

The burn time indication can be called up by pressing button 2 for two seconds.

White flashes of the control unit lights indicate remaining hours and green flashes indicate 15-minute intervals.

Example: the unit flashes white twice and green three times to indicate a remaining burn time of 2 hrs 45 min. At the selected brightness setting.

Please note that the processor needs approx. 20 sec. to measure & recalculate the burn time after the brightness setting has been changed.

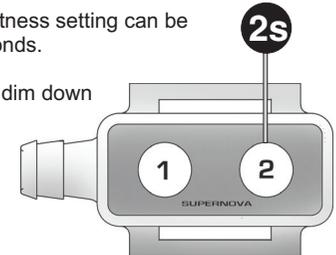


Burn time control helmet mode

The remaining burn time at a chosen brightness setting can be indicated by pressing button 2 for two seconds.

In this mode, the main light beam will then dim down and tell you the remaining burn time in bright flashes - long ones for hours and shorter flashes for 15 minutes.

Please note that the processor needs approx. 20 sec. to measure & recalculate the burn time after the brightness setting has been changed.



The Supernova burn time indication is currently the most accurate method. Extremely low temperatures can affect the measurements. The maximal burn time indication is 9 hours.

Please remember to disconnect the battery after each use, because the stand by power will discharge the battery very slowly, which will decalibrate the fuel gauge until the next full discharge.



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CARE INSTRUCTIONS

LAMP & BATTERY

Never use any aggressive cleaners or high pressure hose on the lamp.
If necessary, use a moist cloth. Mud in the cooling fins should be removed
The battery pack must not be submerged in water or exposed to heat of more than 200° F (!
Never open the inner shrink tubes around the battery cells. Danger of explosion! You can carefully remove the neoprene bag and wash it at no more than 40° C (104° F).

CONNECTORS

The Supernova connectors conform to the IP67 standard and are watertight and dust proof. They do not need to be treated with any kind of lubrication. Contact spray may be used after several years to improve the functionality.

FAQ

How does the battery react to low temperatures ?

In general, all Supernova battery cells have been chosen to withstand low temperatures very well. Many parts are even compliant with military specifications, but to reach a maximum burn time, the battery should not be left out in the cold before being used.

What is the life expectancy of the LEDs ?

Approx. 50.000 hours with good cooling, slightly less if only used indoors.

Can I use the light without airflow to cool the housing?

Yes, but the housing will get very warm. The integrated protective circuits will dim down the light when a certain temperature is reached to protect the LEDs from overheating. The cooling capacity of the housing allows the light to run in the second highest setting (8 W) without external cooling.

Is the light waterproof ?

This is not a diving light, but all components have been sealed against even the worst downpour. The control unit is sealed and additionally covered with a special varnish, the battery is protected by shrink tubes and silicone sealant inside the neoprene bag and the lamp head is also completely sealed. Do not use a high-pressure hose or steam cleaner. Never open the housing.

Will the sealing o-rings become brittle ?

The o-rings are made from a UV resistant, long lasting EPDM material that will not become brittle through exposure to heat or in cold conditions.

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FIRST STEPS

HOW TO INSTALL THE LIGHT

Use the smaller of the two O-rings to install the lamp on 1" handlebars, the larger is better for stems and oversize handlebars. The o-ring is first slid onto the closed side of the titanium bracket, then attached to the open side, going around the handlebar or stem. This is much easier if you hold the o-ring in place half way around the handlebar or stem with your fingers and then use the titanium bracket as a lever to move the hook towards the o-ring.



INITIAL CHARGE

The battery will only come with a partial charge (for the routine tests done with every light). Before using it, you should charge it fully. Normal charging takes 2 hrs with the small and 4 hrs with the large battery. The room temperature should be between 0° and 30° C (32° - 86° F).

BATTERY STATUS

The control unit shows you the battery capacity by flashing coloured LEDs every time you connect the lamp to the battery. The colours have the following meaning:

BLUE	- battery charged 75-100%
GREEN	- battery charged 50-74%
YELLOW	- battery charged 30-49%
RED	- battery charged 5-29%

CAUTION!

Only when started in handlebar mode (pressing button 1 and then 2), the control unit of the lamp will glow in different colours according to the battery charge status during use. In helmet mode (activated by starting the light pressing first button 2 and then 1), the control unit will glow or flash only in red, to give you a position light on the back of your helmet.

IMPORTANT SAFETY INFORMATION

1. Always disconnect the charger by pulling on the plug, not on the cable.
2. Unplug the charger when it is not used.
3. Do not use the charger if the plug is damaged in any way.
4. Do not open anything. Danger of explosion and life-threatening electric shock!
5. Do not cover the battery or the charger with anything.
6. Keep all accessories out of reach of children.