

SUPERNOVA POLICE T28-D LE

INSTRUCTION MANUAL

CONGRATULATIONS

The SUPERNOVA POLICE T28-D LE is the most advanced law enforcement bicycle lighting system available. This lamp was developed and tested in cooperation with the US police. The combination of a long-lasting LED police signal and a bright halogen spot or an LED spotlight (two versions are available now) ensures optimal visibility at all times. The 115 decibel siren will be heard even in very noisy surroundings.

Please take the time to carefully read this owners manual through, before using your new light, so that you can be sure that you will be able to operate your lamp safely and correctly. We wish you many hours of fun with your Supernova Lighting System!

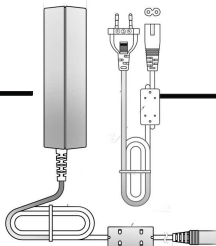
PACKAGE CONTENTS - TECHNICAL DATA



SUPERNOVA POLICE T 28-D LE headlight.
4.3 w Power LED or 16 w Halogen + LED signalling cluster.
Color temperature: 6500 K (LED) & 3400 K (Halogen)
Burn time: ca. 4 hrs @ 16 watts (Halogen)
ca. 8 hrs @ 8 watts (Halogen dimmed)
ca. 14 hrs @ 4.3 watts (LED)
Housing material : anodized Aluminum
Remote control with deep discharge protection,
battery capacity display , charge display.
Controls version: PMX7.0
Gold plated and waterproof connectors
Horizontally and vertically adjustable mounting



Battery bottle with integrated charger and energy booster
Battery capacity : 8800mAh
Optional battery pack: 4400mAh
Energy booster voltage: 14,5 V
Cell count: 6
Cell technology: Lithium Ion
Integrated charger with temperature sensor
Charger: 8800mAh battery 85% in 2.25 h 100% in 4,25 h
4400mAh battery 85% in 1.5 h 100% in 2.25 h



High efficiency power supply for worldwide use.
100-240 Volt / 50-60 Hz.
Up to 3 A charge current.

Optional accessories: Supernova tail light (# E808),
extension cable 1m (# E430), helmet mount (# E802),
12 V car charging cable (# E432), center handlebar mount
(# E780), 4400mAh Kraftwerk battery (# E030).
Accessories can be ordered at www.supernova-lights.com.

SUPERNOVA POLICE T28-D LE

IMPORTANT SAFETY FEATURES

1. To avoid unintentional light activation, the battery must be separated from the lamp after use.
2. NEVER open or twist the battery lid. This may damage the seal.
3. The lamp casing can become very hot. Let the casing cool down completely prior to handling.
4. Keep the lamp casing away from flammable materials to avoid unintentional combustion.
5. Carry a back-up light at all times.
6. Unplug the lamp by pulling the plug directly - never pull the cable.
7. Never transport the lamp when the battery is attached.
8. Ensure that the cooling fins of the battery lid is not obstructed while the lamp is in use or charging.
9. Only use the power adapter provided by SUPERNOVA. The car adapter (optional) can only be used with a 12 volt outlet. Never use 24 volts (a truck battery for example).
10. Please keep this lighting system out of the reach of children.
11. When using the lighting system attached to your bike, please ensure that the battery pack is safely secured in the 'water bottle mount.

EXTREMELY BRIGHT!

The SUPERNOVA lighting systems are extremely bright. Never look directly into the lamp, when in use or while turning it on or off. Particularly when mounted on the helmet, consider the glare to surrounding people. Due to its extreme light intensity, use of this lamp may be prohibited in some countries. Please check your country's applicable regulations prior to use.

OTHER IMPORTANT SAFETY INFORMATION

Reduce your speed when the red LED starts flashing. Be prepared that the light will automatically turn off. Lighting periods listed here are approximations and may vary with the age and temperature of the battery. This lighting system is completely sealed and has been tested for use and safety under extreme weather conditions. Nevertheless this lighting system should never be submerged in water.

SUPERNOVA POLICE T28-D LE

BEFORE FIRST USE

MOUNTING

Tighten the screw just enough that the mount and lamp will sit firmly under vibrations from riding.

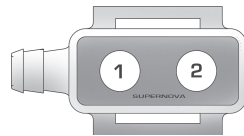
CHARGE & CALIBRATE BATTERY

Before first use, the battery must be charged completely. We also highly recommend that you calibrate it (see page five).

CHARGER

The SUPERNOVA charger is integrated in the battery lid. Current is supplied via the adapter or car adapter (optional). The adapter can be used world-wide between 100 and 240 volts. The car adapter can only be used with 12 volts (not in trucks with 24 volt batteries!). The charger has a built in temperature gauge that prohibits charging below 0 degrees Celsius (32F) and above 45 degrees Celsius (113F). When the charger is within the allowed charging temperature range, charging will occur automatically. Charging is done in two stages. In the first stage, the battery is charged with maximum current. To prevent damage and ensure a longer life for the battery, the current intake is reduced while charging the last 15% of the battery. Stage one therefore takes approximately 2.25 hours to charge the battery to 85% capacity. Stage two takes another 2 hours to charge the remaining 15%. Basic rule: As long as the battery lid is warm, the battery is still in charging mode. To get an accurate charge status, connect the battery to the headlight. The remote lights up in different colors to indicate battery status.

| | | |
|------------------------|---------------|----------|
| Steady blue light: | Charge status | 100% |
| Flashing blue light: | Charge status | 75 - 99% |
| Flashing green light: | Charge status | 50 - 75% |
| Flashing yellow light: | Charge status | 25 - 50% |
| Flashing red light: | Charge status | 0 - 25% |



The remote - charge status display

IMPORTANT SECURITY INFORMATION

1. Always pull on the plug directly, never pull the cable.
2. The aluminum lid and adapter can get very warm while charging. Make sure that the cooling vents are never covered.
3. A temperature gauge prohibits charging outside of a temperature range between 0 degrees Celsius (32F) and 45 degrees Celsius (113F).
4. Unplug lamp when not in use.
5. Do not use lighting system when plug is damaged.
6. Do not tamper with the lighting system. Only SUPERNOVA authorized personnel may open the lighting system casing.
7. Only use 12 volts with the optional car adapter - never 24 volts (trucks for example).

SUPERNOVA POLICE T28-D LE

REMOTE CONTROL

Explanations:

S = PRESS SHORTLY

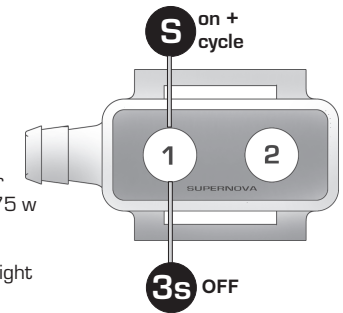
2s = PRESS BUTTON FOR 2 SECONDS

SWITCH ON SWITCH OFF

To turn on the lamp at maximum brightness, press button 1 shortly. By repeatedly pushing the button, you can cycle through the different lighting modes:

- 1st push: Halogen 16w / 4,3w LED spot
- 2nd push: Halogen / LED + Signalling cluster
- 3rd push: Halogen / LED dimmed to 15/0,75 w

To turn off the lamp, please press button # 1 for about 3 seconds. First, the signalling light will turn off and then the spotlight.



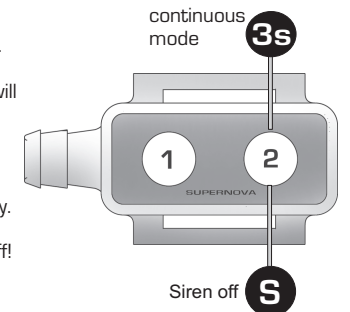
SIREN

Press button 2 to activate the 115 db siren.

Pressing the button longer than 3 seconds will lock it and the signal will sound continuously.

To switch off the siren, press button 2 shortly.

The siren will work with the lights switched off!



BATTERY FUEL GAUGE

A microprocessor in the Supernova battery monitors the energy flowing into the battery when charging, and leaving the battery when it is in use. The battery re-calibrates itself each time it is completely charged. The microprocessor receives the capacity information directly from the battery and computes the lighting time remaining in conjunction with current energy usage. The remote control casing will illuminate in different colors, to display directly how much energy remains. Color coding is as follows:

| | |
|--------------|---------|
| BLUE: | 75-100% |
| GREEN: | 50-75% |
| YELLOW: | 25-50% |
| RED: | 5-25% |
| RED FLASHES: | 0-5% |

BURN TIME INDICATOR

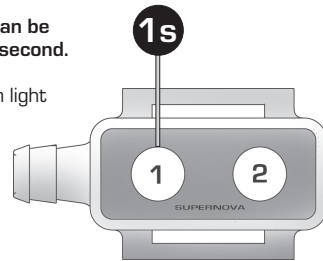
Time remaining at a particular power setting can be displayed by pushing button # 1 for one whole second.

Flashing white light displays hours, flashing green light displays minutes in 15 minute increments.

Example:

The light flashes white twice then green three times:
Time remaining is 2 hours, 45 minutes

The Microprocessor requires about 20 seconds to compute time remaining, after changing the lamp to a different power setting.



The technology measuring the battery capacity is the most highly advanced and most exact for calculating the remaining burn time today. Extreme cold can influence the measurements, however, and only a burn time of up to nine hours can be maximally indicated.

Please note! The lamp should be disconnected from the battery when stored because the battery gauge will be de-calibrated by the very low standby power consumption which cannot be measured. Over a period of several weeks, the burn time indication may become falsified.



Calibrating the battery gauge:

The battery gauge needs to be calibrated from time to time to ensure exact measurements. This is especially recommended after the lighting system has been stored for a long time or before its first usage. To calibrate, just leave the light switched on in a cool place (ideally in front of a fan) until the battery is depleted, then re-charge the battery for at least six hours.

SERVICE AND MAINTENANCE

REFLECTOR REPLACEMENT

1. Clean the lamp housing with a clean, moist cotton rag so that no dirt can enter the housing.
2. Turn the front section of the lamp counter-clockwise until it can be removed. Check that the reflector itself is not turning with it (push against the glass).
3. After unscrewing, pull the front ring from the reflector.
4. Carefully pull the reflector from its socket.
5. With clean, grease-free hands, push the new reflector carefully into the socket, being mindful of the fitting groove.
6. Before screwing the front section back onto the housing, clean the threads on both pieces with a cotton cloth.
7. While screwing the front section back onto the housing, check that the reflector is not turning with it.

HEADLIGHT

The headlight can be cleaned with warm soapy water. Never use high pressure cleaners! To dry the light, just turn it on for about 10 minutes. Do not leave light on for more than 15 minutes without riding to prevent overheating. (The airstream assists in the cooling of your lighting system).

CONNECTORS

The connectors of Supernova Lighting Systems are absolutely waterproof and do not need any maintenance. Please do not use contact sprays or contact greases.

FAQ

Can I use the lighting system also without a cooling airstream ?

The lamp will become very hot during use! Do not allow the lamp to burn for extended periods of time without riding - max. 15 minutes! Airstream is essential for the cooling of your lighting system. To avoid burn injuries, the lamp housing should only be touched after it has been allowed to cool sufficiently. The lamp's ballast can be damaged if overheated.

Is the lighting system waterproof ?

The lamp housings and the battery have been sealed to resist water during normal weather conditions such as rain and snow. Never intentionally submerge your lighting system in water. The battery is sealed and should never be opened!

...More at www.supernova-lights.com

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TIPS TO MAKE YOUR BATTERY LAST LONGER

The Supernova lithium ion battery is extremely low-maintenance. The revolutionary charging technology with its intelligent temperature monitoring system, always charges the battery perfectly. Two electronic safety systems ensure an excellent deep discharge protection. There are, however, some additional points to consider if you want to optimize the life span of your battery:

1. If you do not use your battery for several months, discharge the battery until the remote turns yellow. This capacity status is perfect to store the battery. Make sure to store the battery in a cool and dry place at about 10-15°Celsius (50-60° Fahrenheit). We recommend that you recharge the battery after 6 months. It is very important to disconnect the light from the battery before storage!
2. Never expose your battery to extreme heat. Don't leave it in your car, especially in the summer.

SUPERNOVA TAIL LIGHT - (optional) - Article # E808

No tools are required to mount the Supernova tail light.

1. Mount the tail light on the back of the seat post, cable pointing downward. Fasten it with the sturdy rubber band provided.
2. A separate battery is NOT needed. Simply attach the special plug between battery and lamp.
3. The tail light will light up automatically when the front light is turned on.
4. You can choose between a continuous or flashing light.

FLASHING LIGHT: remove the key-lock (press buttons # 1 and then 2 in rapid succession). Press button # 2 for about a second. The tail light will flash.

! TROUBLE SHOOTING

BURN TIME IS TOO LOW

Possible reason # 1: The charger did not charge the battery because the battery temperature was outside its functional range of 0 degrees Centigrade to 45 degrees Centigrade (32 degrees Fahrenheit to 113 degrees Fahrenheit).

Solution: Charge the battery at temperatures between 0 degrees Centigrade to 45 degrees Centigrade (32 degrees Fahrenheit to 113 degrees Fahrenheit).

Possible reason # 2: The battery was used during extremely low temperatures. Lower temperatures will shorten burn times.

Solution: Leave Siberia.

LAMP CANNOT BE TURNED ON

Possible reason # 2: The safety protection is on. The battery was short-circuited.
Solution: Connect battery to the charger to remove the safety protection. Then ensure that no pointy metal objects reach the battery plug.

Possible reason # 3: Halogen / LED illuminant is defective.
Solution: Change Xenon reflectors. See page 6.

REMOTE FLASHES RED AND BLUE

Possible reason: optional tail light is not properly connected or has turned off.
Solution: examine plug connections.

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OVERVIEW OF THE MOST IMPORTANT RULES

1. SUPERNOVA lighting systems are extremely bright. NEVER look directly into the lamp, when in use or while turning it on or off. Particularly when mounted on the helmet, consider the glare to others.
2. NEVER open or twist the battery lid. This may damage the seal.
3. NEVER transport the lamp with the battery attached.
4. When unplugging the cable from the battery, always pull the connector - not the cable.
5. The light beam is extremely hot and the lamp casing can become very hot, too. Keep the lamp away from flammable materials to avoid setting them aflame. Do not allow the lamp to burn longer than 15 minutes without riding to prevent overheating.

REGISTRATION AND WARRANTY

Please register your lighting system at www.supernova-lights.com, so that we can confirm your full warranty. This lighting system was carefully inspected and tested before delivery. We guarantee that the system shall be free of material defects, which happen during normal usage for 2 years from the date of purchase. Damage due to crashes or improper care are not covered under this warranty. Not included in the warranty are the battery and the light bulb. Warranty does not cover improper use, for example allowing the lamp to overheat or attempts to change the technical aspects of the lamp.

RETURNING PRODUCTS

Should your lighting system malfunction for any reason, please contact the Supernova Service Center at info@supernova-lights.com or the Supernova distributor for your country to receive an RMA number to return the system to us.

Please make sure to unplug the battery before shipping!
Always include the proof of purchase and the warranty form.

SERVICE / CONTACT

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