

LUPINE®

LIGHTING SYSTEMS



NIGHTMARE PRO

Instruction Manual

(Read before use!)



Content of package:

25 W Halogen Lighting System (HP-Bulb) with PCS V3.3 remote controller,
Li-Ion bottle battery 9 Ah / 7.2V,
Lupine Micro-Charger V1 2A
Velcro straps, O - ring for handlebars with 22mm diameter
Instruction Manual (this document)
Technical Information PCS v3.3

1.) READ BEFORE USE!

General:

Congratulations! You have just bought a state-of-the-art lighting system. Out of the box, the light and charger are ready to use! Please read this instruction manual fully, to familiarise yourself with all the functions. Try out the system at home first, before hitting the trails to prevent any surprises while riding. For further details about using the Nightmare Pro to individual settings please read "*Technical Informations PCS V3.3*".

As with any other electrical device, there is a slight chance of failure at any time. Be aware, and use with caution.

Lupine accepts no liability for any injuries or other damages arising from the use of this product.

Rechargeable Battery:

The battery is supplied with a little amount of charge. Before use **it must be fully charged** (see chapter 4 "Charging"). The rechargeable Li-Ion battery will reach its full power after 1 charge cycles.

It might become hot!

The Nightmare Pro is not a simple torch. The lamp housing can become very hot, if used without airflow. Do not touch the lamp during or immediately after use.

Dazzling:

The Nightmare Pro is a powerful lighting system. Always use it with care and with respect for others (especially when mounted to a helmet). Do not look directly into the light.

Waterproof?

All components of the Nightmare Pro are waterproof and will withstand even the most extreme conditions. However it is not a diving lamp and is not suitable for use under water.

Warranty:

The 2 year warranty covers only defects in materials or workmanship. Bulbs and batteries are not covered by this warranty. Modifications to the light or improper use also voids this warranty.

2.) MOUNTING

Lamp:

Mounting the lamp with the O - ring :

If you are feeling strong, use the finger hook method (see fig.1). For others, who prefer the less strenuous method, hold the O-ring with one finger, and push the lamp back until the O-ring can be secured on the hook of the lamp. (fig.2)



fig.1



fig.2

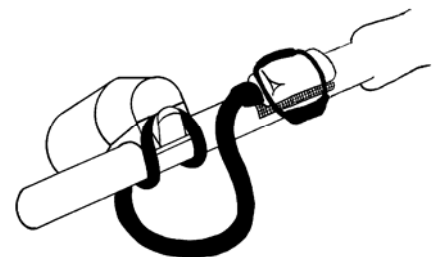


fig.3

PCS v3.3 switch :

The PCS v3.3 is designed for use on the right hand side of the lamp (see fig.3). Before attaching the velcro strip to the handle bar, ensure that the surface is free of dirt and oil. The velcro strip should be applied at room temperature, colder temperatures will cause the adhesive not to work.

For applying the O-Ring to fix the switch to the handlebar see the separate information sheet "*Technical Information PCS v3.3*".

An optional upgrade mounting bracket is also available for the switch (Peppi V3).

Battery:

Slide the battery bottle into the cage and loop the Velcro strap around the cage and bottle. Make sure that the battery cables are routed in such a way that they will not become tangled in any moving parts.

Now plug the rechargeable battery to the lamp and your Nightmare Pro is ready to go.

Adjusting the cable length:

Some spare length of cable is retained into the top of the battery bottle. Open the bottle (see "Opening the bottle" in chapter "Care and storage"), unscrew the cable inlet and adjust the cable length. Close the bottle and tighten the cable screw again.

Caution! Adjusting the length of the cable with the bottle closed might damage the cable connections at the battery!

3.) USING THE LIGHT

Initialising:

Plug the lamp to the fully charged battery. The software of the PCS remote controller will do a self test (signalled by 2 x short flashes of three of its LEDs).

The Nightmare Pro is ready to work now. (for more details see: "*Technical Information PCS v3.3*")

Switching on:

Pressing the switch turns the lamp on. It will operate on high beam. (signalled by the blue LED on the switch).

Dimming:

Pressing the button once, after the light has stabilised, will switch the light to econo mode (the blue LED is off). By pressing the button again the light will return to high beam mode.

Switching off:

Press and hold the button for 2 seconds until the light switches off.

Controlling the remaining light time:

The electronics of the PCS v3.3 not only control the high and low beam but also protect the rechargeable battery against over-discharge and includes a low battery indicator.

Low battery is signalled by the yellow and the red LEDs.

When the yellow LED lights:

Significant amount of the capacity is gone!

Red **and** yellow LEDs lights:

Light will automatically switch off
in a few minutes!

It is a matter of experience to interpret exactly how much time is left after the LEDs light up. Remaining burn time depends on the battery's age and capacity, the operating temperature and the capacity gauge program (Low, Middle, High; see "*Technical Information PCS v3.3*").

Hint: When the yellow and the red LEDs light up you can increase the remaining burn time with economical use of the high beam.

Reserve tank:

When the battery is almost empty (yellow **and** red LEDs have been lit for several minutes already) the lamp switches off automatically. By "double clicking" the switch it activates the reserve tank which provides some additional minutes of emergency light on low beam (9 Watts). A flashing red LED signals the reserve tank has been activated. Its duration also depends on the battery condition.

When the reserve tank is empty the light will switch off and should not be restarted.

Caution! Switching on is not possible at this point. If you unplug the battery and then re-attach it, you will damage the battery by over discharging it! Also, storing a discharged battery will cause over discharging. Recharge the battery as soon as possible!

Explanation of the LEDs:

Blue LED lights:	High beam (Maximum Power)
Green LED lights:	Low beam (Econo mode)
Green LED glows weakly	Ready to switch on again
Yellow LED lights:	Significant amount of burn time consumed
Yellow + Red LED light:	Rechargeable battery almost empty Caution! Light will switch off very soon without further notice – Stop!
Red LED flashes:	Reserve tank activated

Programming / Reset:

You can adapt the PCS of the switch to your needs. This programming is explained in detail in the "*Technical Information PCS v3.3*" and is done exclusively using the switch and LEDs. Although it is unlikely that the factory settings can be changed in normal use, the factory settings can easily be reset.

To reset the factory defaults do the following:

Switch off the light. Keep the switch held down for 25 seconds **until red, yellow and blue LEDs light simultaneously, then release the button.** The switch is now reset to factory settings.

4.) CHARGING THE RECHARGEABLE BATTERY

Components:

The charging system of the NightMare Pro consists of two components:

- AC/DC adaptor
- Micro-Charger

The Micro-Charger was developed for use with Lupine's high current Li-Ion rechargeable batteries from AC/DC adaptor or with additional available 12 V car adaptor.

Connection:

Plug the AC/DC adaptor into the mains. Plug the adaptor into the socket of the Micro-Charger. After a short green flash the Micro-Charger flashes orange and will be now ready to charge.

Charging:

Plug the rechargeable battery into the Micro-Charger's connector and charging will start automatically. The orange LED and the blue LED light.

Keep the rechargeable battery plugged into the Micro-Charger until the green LED lights.

Charging is now complete; the battery is full and is now ready for use.

Reading the charged capacity:

After disconnecting the battery the Micro-Charger will indicate the charged capacity as follows:

First, the orange LED will blink 1 time per complete ampere hour, then the green LED will blink 1 time per 1/10 ampere hour.

Example: The orange LED blinks 3 times and the green LED 5 times = the charged capacity is around 3,5 Ah. This information will help you to judge the actual condition of your rechargeable battery before use.

Hint: You don't have to wait for the whole voltage information to be shown in order to use your charger again. You can stop the charge information at any time by connecting the battery.

Open the bottle!:

We strongly recommend to open the battery bottle while charging (or even remove the battery from the hard foam if used in heavy rain) to allow all moisture to be removed during the charging process. This is to help prevent corrosion.

Caution!!

Micro-Charger is designed to charge only Li-Ion batteries!

You must not use this charger with Ni-MH batteries or unchargeable batteries!! They will explode!!

Micro-Charger should not be opened by the user as this will invalidate the warranty.

Explanation of the LEDs:

Orange: Charging
Green: Rechargeable battery full

5.) CARE AND STORAGE

Lamp:

All components should be cleaned with warm soapy water, but do not use a high pressure spray or hose to wash the system. To get out all water out of all areas of the housing etc. turn the light on for a few minutes.

The water bottle battery is water resistant. Unlike other lighting systems, it is easy to open. If used in very wet conditions, please open the bottle over night by squeezing and turning the top cap (snap mount).

If necessary, pull the battery out of the foam to remove all water. If you want to adjust the cable length, please open the bottle first.

Replacing the Bulb/Reflector:

Remove the stainless ring with your fingernail or a small flat screwdriver. Remove the glass (Warning, it is **real** glass!). Unscrew the bolt underneath the lamp holder with a screwdriver. Remove the handlebar holder and the O-ring. Push the wire into the lamp body and move the bulb-reflector out of the shell.



Pull the pins of the bulb-reflector out of the terminal block. Slide the pins of the new bulb carefully into place. Adjust the bulb-reflector as before and replace the glass and ring. Insert the holder and tighten the screw with moderate force. Your Lupine is now finished and ready to blaze the trails again.

Connectors:

In normal conditions, the connectors do not need special attention. However if you use the light in very humid and/or corrosive conditions they **should be greased with the included dutch grease**. **Do not** use contact-sprays or contact-greases! They contain corrosive ingredients that will damage the connectors.

Transport:

If you are transporting your light inside a bag or box, or in a situation where the button may accidentally be pressed: **Always unplug the battery from the lamp unit.**

Storage:

Store the battery for short periods of time in a fully charged state. **Disconnect it from the lamp unit.** Charge the battery fully before using the system again. If you intend not to use it for a long time (over 3 months), **we strongly recommend to store the battery on a cold place!** This will prevent against over discharge. It will need just 1 charge cycle to reach full power again!

6.) TROUBLESHOOTING

Failure	Caused by	Solution
Lamp does not light <u>and</u> the LEDs on the PCS <u>do not</u> flash during initialisation.	Over discharged battery.	Charge!
	Battery is not or not correctly plugged into the light.	Check all connections
Lamp does not light, LEDs of the PCS <u>do</u> flash during initialisation.	Bulb has blown	Replace bulb
Burn times are too short.	Battery was not in use for a long time and has become "lazy"	After 2-3 cycles the battery will operate correctly
	Battery is new.	
	Battery is very old	Replace with new battery
	Cold temperatures	Keep the battery warm
	Charger is defective	Replace charger

7.) TECHNICAL DATA

Lamp:

Weight complete with rechargeable battery:	580g
Capacity of rechargeable battery / Voltage:	9 Ah 7.2 V Li-Ion
Burn time 25 W:	2 hours 30 Minutes
Burn time 9 W:	5 hours 10 Minutes
Temperature range:	- 25°C - +70°C
Beam angle:	18°

Burn times may vary depending on battery's age, condition and temperature.

Charger:

Input:	100 – 240 V~, 50-60 Hz
Charging current:	2 A max.
Suitable batteries:	Li-Ion 2 cells 7,2 V
Display:	Control of charging by green and orange LED
Charge Time:	5 h

Use of this lighting system might be limited differently from country to country depending on the purpose you use it for. Please do inform yourself about possible restrictions in your country.

The mounting device and the design of the Nightmare as well as of the PCS are protected by worldwide patents.

**Lupine Lighting Systems
Altdorfer Str. 17
D-90559 Burgthann
Fon: 0049 91 83 902310
Fax: 0049 91 83 902315
e-mail: info@lupine.de
net: www.lupine.de**