



RECHARGEABLE LI-ION LED LIGHTING SYSTEM

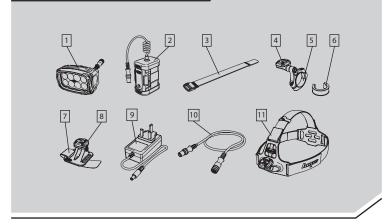




INSTRUCTION MANUAL

HLNR81478 - Standard

# **CONTENTS**



- 1. R8 lamp unit
- 2. Rechargeable Li-Ion ES battery pack
- Battery strap
   OR bayonet h
- 4. QR bayonet handlebar clamp5. 31.8 handlebar shim
- 6. 25.4 handlebar spacer
- 7. Helmet mount
- 8. QR bayonet mount adapter
- 9. Battery charger
- 10. Extension cable
- 11. Head Harness



**Light Source:** 8 x Cree XP-G2 LEDs

**Light Output:** 2200 measured lumens (3000 generated lumens)

**Beam:** Custom optic:  $4 \times \text{spot} (+/-5.5^\circ)$ ;  $2 \times \text{diffused} (+/-6.5^\circ)$ 

2 x elliptical (+/- 17° x +/- 7°)

**Mounting:** QR bayonet style

handlebar, helmet or head mount

**Battery:** 7.4v rechargeable Li-lon battery

Nom. capacity 7800mAh, Min. capacity 7650mAh

Charge Time: 7800mAh - 9hrs

Weight: 665g (with 7800mAh battery and handlebar mount)

**Power Levels:** 6 (two sequences of 3), including flash

**Burn Time:** 2:00 hrs - 35:00 hrs (7800mAh)

### WARRANTY

All Hope Technology lighting systems are covered for one year from original date of purchase against manufacturer defects in material and workmanship. Proof of purchase is required. Product must be returned to Hope Technology to process any warranty claim. This warranty does not cover any damage caused through mis-use or failing to comply by the recommendations given in this manual. This warranty does not affect your statutory rights.

# DISPOSAL

When the equipment has reached the end of its life please dispose of the components in accordance with your local waste regulations. Lamps and batteries should be recycled where possible and not disposed of with regular waste.



# IMPORTANT INFORMATION

We strongly advise you read the following recommendations in order to prevent injury or damage to the lighting system.

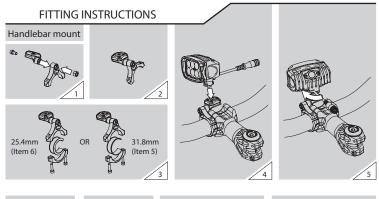


# WARNING

- This lighting system will withstand harsh wet weather conditions. However, it is not designed to be submersed in water. If the light is fitted to a bike, please ensure that the light unit and battery pack are removed from the bike before washing particularly if using a high pressure jet wash.
- Do not look directly at the beam, permanent eye damage could result. Consider other people when mounting the light on the head to avoid dazzling them.
- · Keep this light away from children.
- This light unit can get hot when in use in maximum power mode. This is normal and should not be mistaken as a malfunction. Please use with caution.
- Unlike unregulated LED lighting systems, this light unit will shut down suddenly after a period of time in low battery mode without any dimming of the light. Please bear this in mind when using at night.
- Only connect the lamp unit to a compatible Hope Vision 7.4 V battery pack. Any attempt to use or charge another battery pack may result in explosion and serious injury.
- Do not short-circuit the battery terminals. This causes the battery to overheat and could result in fire or explosion.
- $\cdot$   $\,$  The battery charger is designed for indoor use only and should not come into contact with water.
- The battery charger contains dangerous voltages and the cover should not be removed. Any attempt to open the charger will invalidate the warranty.
- This light unit conforms to the requirements of EC directive 2004/108/EC for electromagnetic compatibility.

# MAINTENANCE

If you find that the power connectors are becoming difficult to separate, we advise using a small amount of silicone lubricant on the battery connector to ease fitting. There are no serviceable parts inside either the light unit or battery pack. Please do not attempt to disassemble the units, as this will invalidate the warranty. If you find that there is a problem with the functioning of the lighting system please first check that the battery pack is fully charged (see Charging the Battery Pack section). If the light still fails to function please contact Hope Technology.

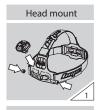






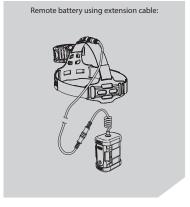




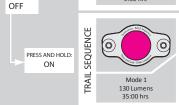








# ON Mode 1 850 Lumens Mode 2 1450 Lumens



OPERATION OF THE LAMP





2200 Lumens

1:30 hrs

PRESS AND HOLD AT ANY TIME TO TURN OFF

# Note:

The R8 lamp includes an 'energy preserve' feature whereby the power will automatically drop down from mode 3 to mode 2 towards the end of the battery discharge cycle (i.e. after approximately 1 hour 30 minutes in mode 3 with the 7800mAh battery, depending on conditions). The switch illumination will change from blue to green at this point. This is to prolong the remaining energy within the battery. If you attempt to re-select mode 3 during the energy preserve period the lamp will immediately fade back down to mode 2 and block the selection of mode 3 in order to maximise the remaining battery life. Operation of the lamp

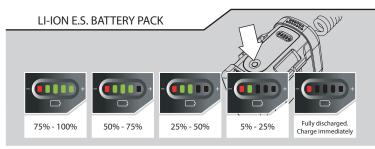


Low battery warning

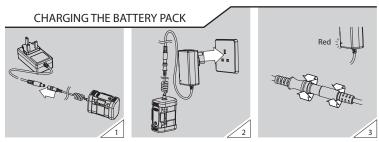
then continues with only modes 1 and 2 remaining active with each subsequent press of the power button. Mode 3 is no longer selectable. This is a deliberate characteristic of the drive circuit and should not be interpreted as a malfunction.

The R8 also features a low battery warning mode. When the battery is almost at the end of it's discharge cycle the lamp will drop down into low power mode, the switch will illuminate red, and the lamp will flash twice every 30 seconds to warn you that you are running low on battery life. Once the lamp unit has dropped into low battery mode, no other modes are selectable. Pressing the power button will only turn the lamp off or on.

\*Although every effort is made to state accurate burn times, battery life is dependant on various factors and environmental conditions. Therefore, actual burn times may vary from those shown.



The ES (Energy Status) battery pack features a 5 stage fuel gauge. Press and hold the 'TEST' button to activate the LED display. This gives a visual indication of the remaining capacity within the battery cells.



DANGER: Use only the 7.4v Li-lon battery pack supplied with the lighting system. Any attempt to use or charge another battery pack may result in explosion and serious injury.

The battery charger is designed for indoor use only and should not come into contact with water.

The mains socket should be easily accessible. In the event of any operational error the plug should be immediately removed from the mains supply. The battery charger contains dangerous voltages and the cover should not be removed. Any attempt to open the charger will invalidate the warranty.

**NOTE:** The rechargeable battery pack is supplied with a small charge for testing purposes only. Therefore, it is recommended that the battery pack be fully charged before first use. To correctly charge the battery pack, ensure these steps are followed in order:

- $\cdot$  Disconnect the battery pack from the light unit by pulling apart the two mating DC connectors. Always grip the connector heads when disconnecting, not the cables.
- · Plug the charger into the battery pack before connecting it to the mains supply(1).
- · Once the battery pack is connected to the charger it can then be plugged into the mains power supply (2). The charger's LED indicator will show as red during the charging process. We recommend that the two mating connectors are rotated at this point (3) to ensure that a good connection is made between the battery pack and charger, and that the LED indicator turns red.
- $\cdot$  When charging is complete, the charger's LED indicator will turn green. Disconnect from the mains power supply before disconnecting the battery pack from the charger.

**NOTE:** If you attempt to place the battery pack on charge after only a short period of use (ie. with the remaining capacity at around 75% or higher, with four indicators lit on the LED display), you may notice that the battery pack will not begin charging. This is not a fault. It is simply due to the software communication between the battery pack and charger. The charger is looking for a battery voltage of lower than 8v before it will begin the charge process.

If this happens, simply connect the battery pack to the lamp unit and run the lamp for a short while to further discharge the battery pack. It will then charge successfully.

**Charge Times:** A fully discharged 7800mAh battery should take approx 9 hours to fully recharge.

# STORAGE AND TRANSPORTATION

In order to prevent any malfunction within your Li-lon battery pack and to preserve the capacity as much as possible, there are a number of procedures which must be considered when storing your battery pack for long periods while not in use (ie. over the summer months).

**Storage and transportation:** Never carry the lighting system by the cable. This could result in damage to the electrical connections and will invalidate your warranty. Always disconnect the lamp unit from the battery pack when not in use. When the lamp unit and battery pack are connected there is a small amount of power constantly running through the circuit which could – over a period of time – over discharge the battery pack resulting in loss of battery function and capacity. This will also prevent the lamp unit accidentally switching on and potentially overheating, which could cause permanent damage to the lamp and battery. In extreme cases, overheating could cause fire and/or death

**Storage Temperature:** The battery pack should be stored within the temperature range of -20°C to 25°C in order to preserve cell capacity. Ideally in a cool, dry room such as a cellar or garage

**Over discharging:** As with most battery cells, Li-lon cells may discharge if they are not used for a long time. In order to prevent over discharging fully charge the battery pack before you store it. Also, charge the battery pack periodically (ie. once every 3-4 weeks) to maintain the voltage between 6.8V to 7.6V. Over discharging may cause loss of cell performance, or damage battery function.

If these few procedures are followed correctly, you can be sure that when the dark nights creep back in your HOPE VISION battery pack will be fit and raring to go!