



Light Source:	4 x Cree XPG LEDs
Light Output:	1000 measured lumens 1446 generated lumens
Beam:	Diffused uniform beam (+/- 12.5°)
Distance:	105m
Mounting:	QR bayonet mount Handlebar, helmet or head
Battery:	7.4v Li-Ion 2600/5200mAh
Charge Time:	5200mAh - 6hrs; 2600mAh - 3hrs
Weight:	338g (std) 235g (lightweight)
Power Levels:	6 (two sequences of 3), including flash
Burn Time:	1:15 hrs - 25:00 hrs (2600mAh) 2:30 hrs - 50:00 hrs (5200mAh)



Zapp here with your dog 'n' bone for further information on the R4 lamp.

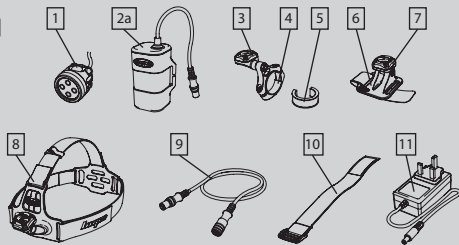
WARRANTY

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.

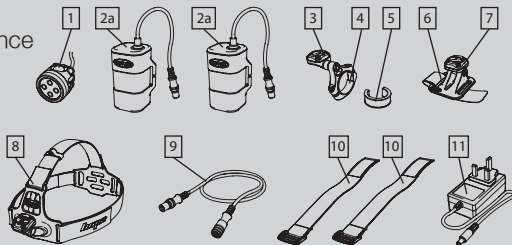
INSTRUCTION MANUAL

CONTENTS

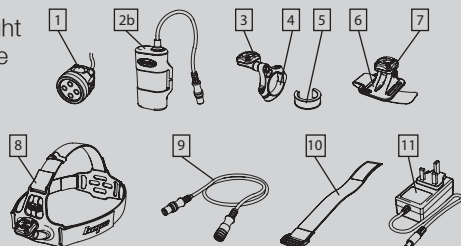
Standard



Endurance



Lightweight Adventure



- | | |
|---------------------------------------|-----------------------------|
| 1. R4 lamp unit | 6. Helmet mount |
| 2a. Rechargeable 5200mAh battery pack | 7. QR bayonet mount adapter |
| 2b. Rechargeable 2600mAh battery pack | 8. Head harness |
| 3. QR bayonet handlebar clamp | 9. Extension cable |
| 4. 31.8 handlebar shim | 10. Battery strap |
| 5. 25.4 handlebar spacer | 11. Battery charger |

IMPORTANT INFORMATION

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



- **This lighting system will withstand harsh wet weather conditions. However, it is not designed to be submersed in water. 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 riding at night.**
- **Only connect the R4 lamp 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.**
- **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.**

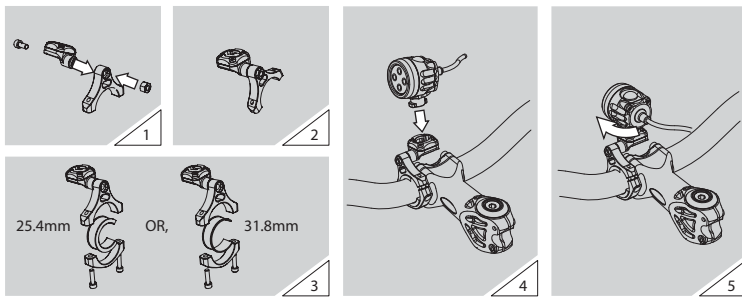
DISPOSAL

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.

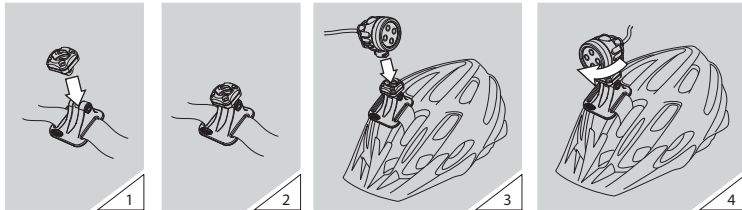


FITTING INSTRUCTIONS

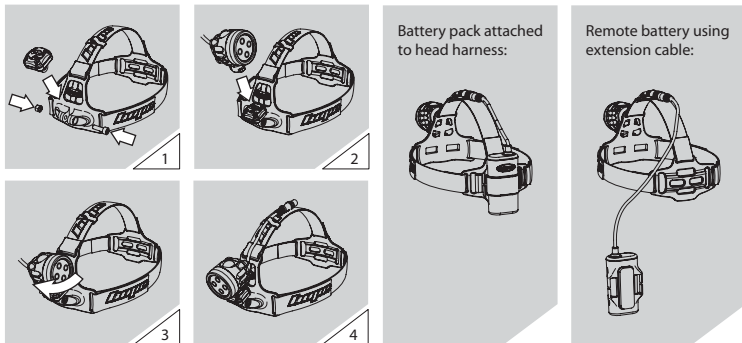
Handlebar mount:



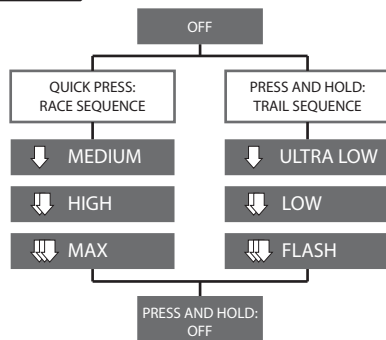
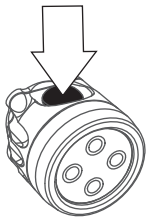
Helmet mount:



Head mount:



OPERATION OF THE LAMP

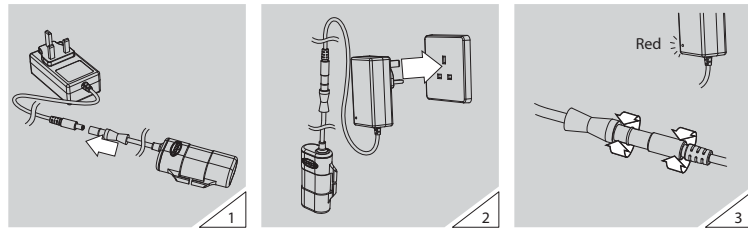


MODE	SEQUENCE 1 (RACE)				SEQUENCE 2 (TRAIL)					
	Measured Lumens	Generated Lumens	Burn Time 2600mAh (2 Cell)	Burn Time 5200mAh (4 Cell)	Measured Lumens	Generated Lumens	Burn Time 2600mAh (2 Cell)	Burn Time 5200mAh (4 Cell)		
1	MEDIUM	330	556	3:30 HRS	7:00 HRS	ULTRA LOW	50	85	25:00 HRS	50:00 HRS
2	HIGH	630	1000	2:00 HRS	4:00 HRS	LOW	120	190	10:00 HRS	20:00 HRS
3	MAX	1000	1446	1:15 HRS	2:30 HRS	FLASH	N/A	N/A	8:00 HRS (Approx)	16:00 HRS (Approx)

Note:

The R4 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 2 hours 30 minutes in mode 3 with the 5200mAh battery, depending on conditions). This is to prolong the remaining 20-25% of energy within the battery. If you attempt to 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 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 R4 also features a low battery warning mode. When the battery is almost at the end of its discharge cycle the lamp will drop down into low power mode and flash twice every 15 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.

CHARGING THE BATTERY PACK



DANGER: Use only the 7.4v Li-Ion 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:

- Disconnect from the light unit by pulling apart the two mating dc connectors. Never disconnect the battery from the light unit by pulling the cables. Always use the connector strain relief for grip when disconnecting.
- Before connecting the charger to the mains supply, plug the charger into the battery pack (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 when a discharged battery is connected. 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.
- 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.

Charge Times: A fully discharged 5200mAh battery should take approx 6 hours to fully recharge. The 2600mAh battery pack takes approx 3 hours to fully recharge.

STORAGE AND TRANSPORTATION

In order to prevent any malfunction within your Li-Ion 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-Ion 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!

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.