

HEADLITE MKII USER INSTRUCTIONS

The Headlite battery is designed to be mounted on the back of a caving helmet or, via an elastic headcradle directly on the head. An appropriate helmet should always be worn for caving or any activity where head injury may result. Figure 1 illustrates the method of attachment using either. Please note that the plug should be fully inserted into the socket before tightening the strap. The buckle should be against the lower half of the battery and the strap should be brought over the retaining grooves in the battery top, down through the security loop, into the buckle and back through the loop. The strap can then be tightened which will retain the plug on the battery and keep the the whole assembly in place on the head. The security loop is to ensure that a slightly slack strap will not result in the loss of the battery. In low risk situations where fast battery change is required the fixing strap can be passed over rather than through but care will have to be taken so that the strap does not become slack.

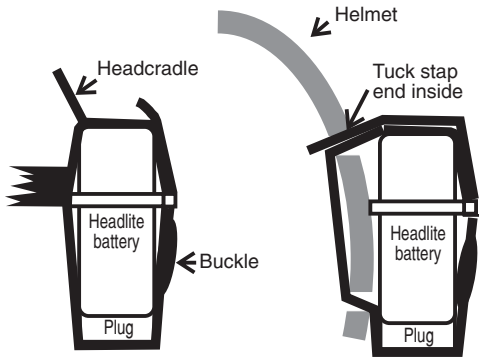


Fig 1

Figure 2 is a, full size, marking out template for drilling two 8mm holes on 50 mm centres. Position will depend on individual preference but the cable to the headlamp should be a little slack so that any blows to the battery do not tend to pull the plug from the socket. **VERY GREAT CARE SHOULD BE TAKEN THAT NONE OF THE INTERNAL FASTENINGS OF THE HELMET ARE DAMAGED.** If in any doubt use the specially made (UIAA appr.) helmet from Speleo Technics.

Difference between MKI and MKII Headlite Battery

The MKII Headlite Battery was introduced in 1998 using cells with a 50% capacity increase over the MKI. The MKII battery socket block and its charger output plug are green (see fig. 3) whereas the MKI is all orange. MKI chargers may be used with MKII batteries (see charging) but MKII chargers **MUST NOT** be used with MKI batteries

Bulbs

Two main bulbs are available for the Headlite:-

0.5A screw fitting which will give approx. 7.5 hours light from a full charge

0.85A screw fitting which will give approx. 4 hours light.

These are simply interchangeable and the 0.85 A bulb will give a brighter light if required

When used for any hazardous activity (caving etc.) not only spare bulbs but a separate, backup lighting system, should always be carried.

Focusing

With The Bezel ring unscrewed and the glass lens and reflector removed the bulb can be screwed in or out of the bulbholder a short distance to widen or tighten the beam pattern. A little experimentation should give the preferred pattern

CHARGING

TOP-UP CHARGING with an occasional full discharge cycle is the preferred charging regime.

Charging Times

	Headlite MKII Charger (green plug)	Headlite MKI Charger (orange plug)
Full Charge	16 hours	22 hours
Top-up 0.5 A bulb (time used multiplied by)	2	3
Top-up 0.85A bulb (Time used multiplied by)	3.5	5

This does not need to be precise and no harm will be done to the battery by occasional moderate overcharging so it is advisable to err on the overcharge side to avoid running out of light in the cave. If the lamp has not been used recently it is better to give a full 16 hour charge to be on the safe side. This particularly applies as your lamp gets older. However consistent heavy overcharging is one of the very few ways in which it is possible to damage NiCads.

DO NOT charge the battery below freezing point without prior consultation with Speleo Technics.

PLEASE IGNORE anything you may have heard about memory effects and NiCad batteries which suggests you totally discharge the battery every time it is used. This may be excellent advice where camcorders, portable computers etc. are concerned because they have problems all of their own. The simple charging methods above will give the longest possible service life for your battery.

Storage

Short-term storage of the Headlite battery is simple. Just disconnect the cable from the battery, clean the contacts with plain water if dirty, dry and forget!. For longer term storage a full charge is an advantage.

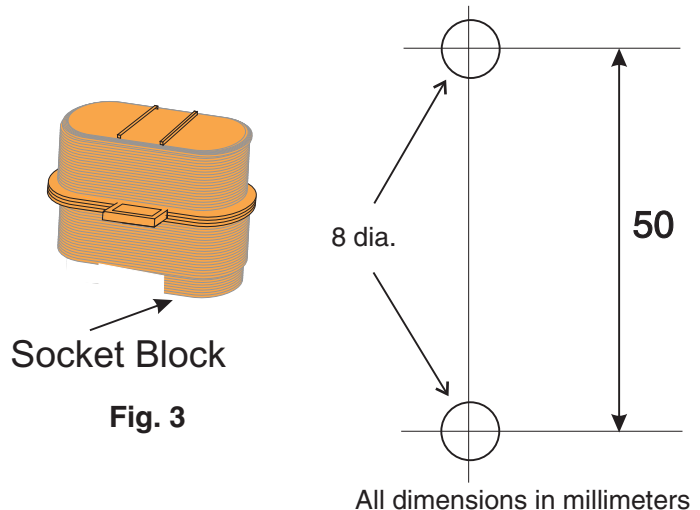


Fig. 3

Fig. 2