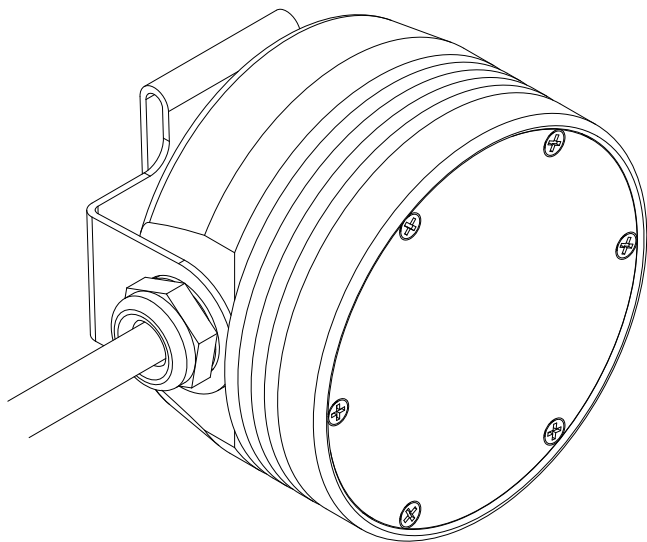




High performance caving light system



User's Manual

En

For your safety

To prevent damage to your Viper light or injury to yourself or others, read the following safety information in its entirety before using this equipment. Keep these instructions where all those who use the product will read them.



Observe proper precautions when handling batteries. If lithium ion batteries are misused they may catch fire or explode. Be sure to observe the following precautions:

- Never leave the battery charging when no one is around.
- Only use the supplied charger to charge the battery.
- Only use the supplied charger indoors.
- Use only batteries approved for use with this product.
- Do not short or disassemble the battery.
- Do not expose the battery to flame or excessive heat.
- Regularly check the battery casing for damage.
- Always disconnect the battery when not in use.



Do not disassemble. Touching the internal parts of the product could result in an injury. In the event of a malfunction the product should be repaired only by a qualified technician. Should the product break open as the result of an accident, disconnect the battery immediately. The warranty will be void if the product has been opened at any time.



Unplug immediately in the event of a malfunction. If you notice smoke or an unusual smell coming from the product or from the AC adaptor, unplug the adaptor and/or disconnect the battery pack immediately. Continued operation could result in an injury.



Keep out of reach of children. The product is not suitable for use by children under 14 years of age.



Avoid looking directly into the light. The light output of the product can be extremely high. Shining the light directly into your eyes or another persons eyes could result in an injury.

In the box

Before reading the rest of this manual, please ensure that there are no items missing from the box. If any items are missing please contact the retailer you purchased the product from immediately.

1 x Viper lamp unit
1 x Viper battery unit
1 x Smart charger
1 x UK mains adaptor

1 x Car charger adaptor
3 x M3 mounting bolts
6 x Rubber washers
2 x Cable ties

Introduction

Thank you for your purchase of a Viper high performance caving light system. This manual has been written to help you enjoy using your Viper light. Read this manual completely before using the product.

The Viper light was designed by Custom Idea Ltd to be a no-compromise high performance caving light utilising the latest LED and battery technology. During its development, the product was tested exhaustively by Warmbac Wetsuits, a specialist caving company in Somerset, and by numerous caving enthusiasts in the Mendip hills of the UK. The product you have purchased is the result of continued refinement during this process of testing and development.

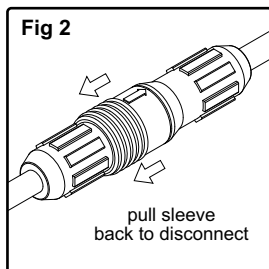
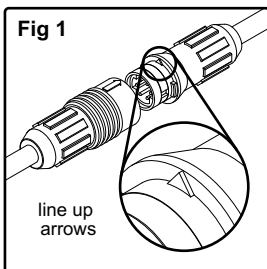
High quality precision CNC machining is used throughout and the unit is fully sealed against immersion in water. With four power settings and a patent pending fuel gauge indicator, the Viper light represents the cutting edge of the caving light market.

- **825 lumen output**
- **Lithium-ion battery**
- **CNC machined**
- **Four light settings**
- **Integral fuel gauge**
- **Upgradable LEDs**
- **Lasts up to two days**
- **Fully immersible**
- **Designed in the UK**

Connecting and disconnecting

The Viper connectors are industrial quality sealed connectors which operate with a push click locking action to prevent accidental disconnection. They are polarised to ensure that they only connect the correct way around.

To connect, line up the white arrows as shown in Figure 1 and push together until you hear a click. To disconnect, pull the sleeve back to release the locking mechanism and disconnect the connectors, as shown in Figure 2.

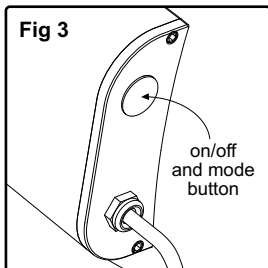


Basic operation

Connecting the battery to the lamp unit will power the electronics inside. When the Viper is plugged in but the light is off, you will notice a regular blue glow at the bottom of the lens. This is to remind you that although the light is off, the power is still connected. You should always disconnect the lamp unit when not in use.

A long press of the button shown in Figure 3 will turn the light on or off and a short press will cycle through the four available power settings: camp, low, mid and high.

Fig 3



The Viper always turns on set to the lowest power setting. Each power setting has a different light output and lasts for a different amount of time on a full charge. The approximate outputs and durations are shown in Figure 4.

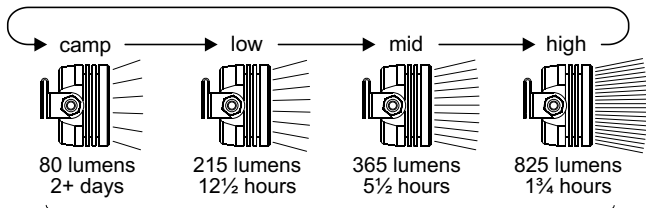


Fig 4

Light output and run times

Charging the battery



To avoid injury, read the safety information at the beginning of this manual before handling or attempting to charge the battery.

Only use the smart charger provided to charge the battery. You may use the charger with either the UK mains adaptor or the car adaptor lead provided.

Plug the charger into either the UK mains adaptor or the car adaptor lead. The red power light should come on and the charging light should flash red three times. Now plug the battery into the charger. The charging light will be lit red continuously during the charging cycle. The charging light will change to green when charging is complete.

Fuel gauge & thermal cut-out

A patent pending fuel gauge, shown in Figure 5, indicates battery status. Whenever the camp setting is entered, the fuel gauge will light up for a few seconds with a colour corresponding to the battery level. Figure 6 shows how the fuel gauge colour relates to the battery level .

When the battery is nearly empty, the main light will flash quickly a number of times and then change to the camp power setting. In order to conserve remaining battery power, the light will be limited to the camp or low power settings .

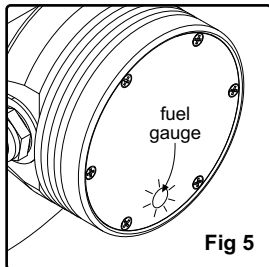


Fig 5

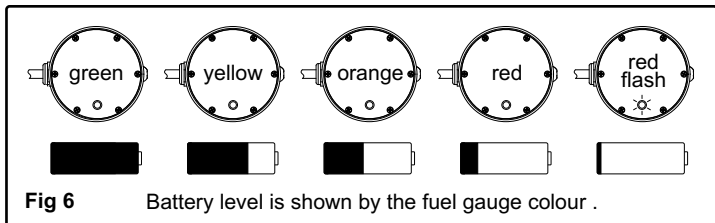


Fig 6

Battery level is shown by the fuel gauge colour .

In some cases, when using the high power setting, the Viper light can get very hot. To protect the LEDs and electronics inside, the Viper light automatically changes to the low power setting if it gets too hot. When this happens, the light will be limited to the camp and low power settings until it has cooled down.

Disabling the blue glow

The blue glowing light reminds you to unplug the Viper light when not in use. To disable this feature, hold the button down for around 15 seconds when you turn the light on. You will notice a succession of blue flashes confirming that the feature has been disabled. Repeat this procedure to re-enable the feature.

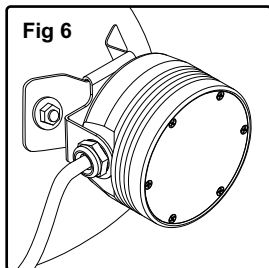
Warranty and support

We hope that you enjoy using the Viper light trouble free. All parts of the lighting system are guaranteed against faults in manufacture for a period of one year from the purchase date. If you have any support enquiries, suggestions or feedback then please contact sales@customidea.com or visit us at www.customidea.com or www.vipercave.com.

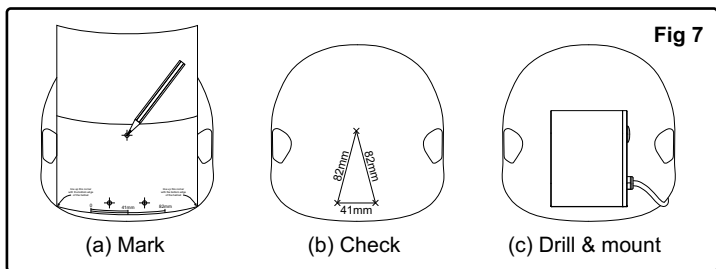
Mounting the lamp and battery

The lamp unit can be clipped on to most helmets as shown in Figure 6. The angle of the lamp unit can be adjusted to suit the individual.

To mount the battery unit it is necessary to drill three holes in precise locations on your helmet. For this purpose a drilling template is included on the next page. All three holes in the battery unit are already threaded and please be aware that cross-threaded holes are not covered under the warranty. The process for installing the battery on the helmet is as follows:



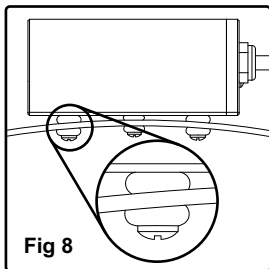
1) Make a small hole at each cross on the template. Stretch the template so it is central and the corners line up with the bottom of the back of your helmet as shown in Figure 7a. Mark the drilling positions with a pen through the holes.



2) As shown in Figure 7b, use the measure on the bottom of the template page to check that the bottom marks are exactly 41mm apart, and that the top mark is exactly 82mm from both the bottom marks following the curve of the helmet.

3) Drill the holes with a sharp 5mm drill bit and loosely mount the battery using the M3 bolts with one rubber washer each side of the helmet as shown in Figure 8. Do not force the bolts or you may risk cross-threading the holes. Once all the bolts are in place, tighten them gently one by one. Do not over-tighten.

5) To route the wires, simply pass the cables under and into the helmet and use the cable ties provided to attach them to a fixture underneath.





line up this corner
with the bottom edge
of the helmet

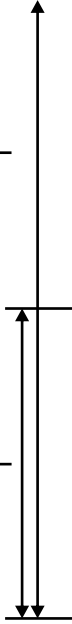
line up this corner
with the bottom edge
of the helmet



0

41mm

82mm



CUSTOM IDEA LTD
<http://www.vipercave.com>
<http://www.customidea.com>

VIPER The logo for VIPER features the word "VIPER" in a bold, sans-serif font. A horizontal line extends from the top of the letter "P" to the right, ending in a stylized starburst or sunburst graphic.