

solidlights

User Manual

1103

1303



Introduction

Thank you for purchasing a Solidlights product. I hope it will give you many years of reliable, high performance service. Although the light is simple to install and use, this manual will help you get the most from it. Please read it carefully.

Solidlights are some of the most advanced lights available today, with features such as:

- High efficiency LED light source and optics, capable of doing the same job as halogen bulbs up to four times as powerful
- Three brightness settings
- Automatic low battery warning, battery saver and cut-off
- Rugged construction: no glass parts to break
- Weatherproof housing
- Versatile mounting options
- Lithium Ion rechargeable batteries

You can find additional information on the internet at

<http://www.solidlights.co.uk/>

including details of a comprehensive range of accessories and parts.

Getting Started

If your light was supplied in a kit with a battery, please note that the battery will need to be charged before first use. Refer to the 'Battery' section later in this manual for instructions.

While the battery is charging is a good time to read about fitting the light and operating it.

Specifications

Model 1103



Total power: 3 Watts

Beam type: spot

Dimensions: width 40mm, depth 62mm, height 37mm (without bracket)

Weight: 108g excluding battery

Run time (with Solidlights battery 10030): full power 3 hours 45 minutes + 10 minutes reserve

Model 1303



Total power: 10 Watts

Beam type: combined spot and flood

Dimensions: width 66mm, depth 62mm, height 37mm (without bracket)

Weight: 162g excluding battery

Run time (with Solidlights battery 10030): full power 1 hour 20 minutes + 20 minutes reserve

Fitting the Light

Handlebar mounting



Your light is supplied with a quick-release handlebar mounting bracket. Attach the bracket to the handlebars in a convenient location using the thumbscrew.

In choosing a location, you might want to leave space for strapping a battery pack on to the handlebars as well.

Make sure the thumbscrew is towards the front of the bike.

You can use the supplied rubber strips to get a good fit on the handlebars. Don't try to fix the bracket to a tapered section of the bars: it will tend to slide sideways and come loose. Aim for a snug fit, but not too tight. It's advisable for the bracket to be able to move slightly if the light gets knocked hard, to avoid the risk of damage.

Fitting the light to the bracket



To attach the light to the bracket, slide it on to the bracket from the front. It will click into place.

Each time you fit the light to the bracket, take a moment to check that the bracket's thumbscrew is properly tightened.

Fitting the Light



To remove the light from the bracket, hold the button underneath the front of the light and slide the whole light forwards. It should slide off the bracket easily.

Fitting the battery

Attach the battery you are using in a convenient location. The Solidlights battery pack is very small and light, so it will fit in a wide variety of places, depending on the frame and handlebar design. Some popular ones are:



Underneath the handlebars



Underneath, or on top of, the handlebar stem



Under the frame's top tube



On the front of the frame's head tube

Wherever you choose, make sure you loop any excess cable up so that it can't get tangled in other parts of you or the bike.

Helmet mounting

The 1103 is particularly suitable for helmet mounting, and is supplied with an adjustable helmet mounting bracket. This bracket is also available as an optional accessory for the larger 1303.



The angle at which the helmet mount holds the light is adjustable by loosening the thumbscrews at each side. Adjust it to the desired angle and tighten the screws again.

To fit the bracket to a helmet, thread the Velcro strap through some convenient vent holes in the helmet, being careful not to snag any of the helmet's pads. Put the end of the strap through the loop at the opposite side of the bracket, and pull it tight, fastening the Velcro to itself.



There are two ways of attaching the light to the helmet. Choose whichever is most convenient for you and your helmet.

Light and battery on helmet



The first is to mount the light towards the front of the helmet, using the adjustment in the bracket to aim the beam to a useful position. The weight of the light can then be counter-balanced by strapping the battery to the rear of the helmet using its Velcro strap. This leaves no trailing wires and keeps the profile of the helmet low, out of the way of overhanging branches and other hazards.

Light on helmet, battery elsewhere



The second method, which is useful if it's not convenient to attach the battery to the helmet, is to mount the light in a balanced position on the top of the helmet and keep the battery somewhere else, for example in the top of a rucksack or attached to a rucksack's shoulder strap.

Changing Brackets



The mounting bracket, either helmet or handlebar, is attached to the light using a single screw. To change brackets, simply remove the screw using a cross-head screwdriver, remove the old bracket, fit the new one, and replace the screw.

There may be a rubber pad under the handlebar bracket: take care not to lose it.

Do not operate the light with the bracket mounting screw removed for more than a few seconds. It is important for cooling the LED.

Using the Light

Wiring up



Attach the power cable from the battery to the light. The connector has a twist-lock action and will only fit one way round. Make sure the holes in the battery socket are lined up with the pins on the light. The connector should slide in quite easily – don't force it and risk bending the pins.



The barrel on the outside of the connector turns clockwise by just less than quarter of a turn to lock.

Switching on and off



The light has just one control: the red button on the side. It's designed to avoid accidentally getting switched on and running your batteries down, and avoid accidentally getting switched off and plunging you into darkness on the trail.

Using the Light

To switch the light on, press and hold the button once for about a second or so. The light will come on at maximum brightness.

When the light is on, momentary presses will cycle through the brightness settings: low – medium – high – low – medium – high and so on.

To switch the light off, press and hold the button once for about a second or so.

Long press to switch on or off

Short press to change brightness.

The standard brightness settings are:

Model 1103: 0.75W, 1.5W and 3W

Model 1303: 1W, 3W and 10W.

The run time will be much longer in the lower power settings than at full brightness, so using them will really help to conserve battery capacity on long rides.

If the battery gets disconnected while the light is on, the light will come back on at the same brightness when the battery is reconnected.

Battery Warnings

When the battery charge begins to get low, the light will flash brightly three times and then switch to its lowest brightness setting as a warning and to conserve the remaining battery power. By pressing the button, you can switch back to a higher brightness setting, but the low battery warning will probably happen again.

Once the low battery warning has happened, the light will continue to work at low power for 10-20 minutes depending on the model and battery type.

When the battery gets exhausted, the light will flash brightly three times and then switch off to protect the battery from excessive discharge.

Hints

To avoid flat-battery frustration, if you're not going to use the light for a few hours, disconnect it from the battery pack. Although the background current drain of the light is small, it will run the battery down over a period of a week or more.

Battery

Solidlights Battery Pack 10030



Capacity: 7.5V, 2.2Ah

Operating temperature: charge 0°C to +50°C, discharge -20°C to +60°C

Technology: Lithium Ion rechargeable

Dimensions: 90mm x 42mm x 26mm

Weight: 133g

Lead length: 500mm

The battery pack is designed to be simple to mount to many convenient places. The red part is a special non-slip silicone rubber pad which both helps to prevent damage to surfaces and stops the battery sliding around. The Velcro strap can be wrapped round objects up to around 70mm in diameter.

The special elastic battery bag is the ideal place to tuck in any spare cable length to avoid tangles.

Do not use the battery pack to power anything other than a Solidlights product.

If a single battery pack does not give enough run time for you, a cable (part number 40012) is available which will allow two batteries to be connected to the same light unit, roughly doubling the run time. This cable contains special safety features which balance the load on the batteries. Do not attempt to connect multiple batteries together in any other way: doing so could permanently damage the batteries or cause a fire.

Charging

Use only the correct Solidlights charger for this battery. Use of an incorrect charger could permanently damage the battery or the charger, or cause a fire.



The Solidlights battery charger is a small, light unit using the latest switch-mode technology for maximum energy efficiency. It is compatible with mains power from 100 to 240 Volts, and so will work all over the world. It is supplied with a mains cable suitable for your country, but its socket will accept a standard 2-pin mains cable of the type normally used with radios and cassette players (IEC 320-C7, often known as

'figure-of-eight') so obtaining a mains cable with the correct plug to be used safely when travelling in another country should be straightforward.

The charger is easy to use. To charge the battery:

1. Disconnect the charger from the mains supply
2. Wait a few seconds until the light goes out
3. Connect the battery to the charger
4. Connect the charger to the mains.

The indicator light on the charger will light up either red or green. Red means that the battery is charging. Green means that it is fully charged, and charging has stopped.

If the sequence of operations above is not followed, charging may not start correctly.

A full charge will take 3-4 hours. However, 80% charge will be reached in about 90 minutes, which is useful to know if you're in a hurry. There is no need to completely discharge the battery before charging it: the combination of the Lithium Ion technology and the intelligent charger will prevent any damage to the battery.

The battery pack contains a safety cut-out circuit. In certain rare circumstances, this may be activated, especially if the battery pack has been allowed to get very wet when not in use. To reset the cut-out, simply follow the charging procedure described above.

Storage

If the battery is going to be stored unused for more than a few weeks, discharge it to about half charge, for example by running an 1103 for about 2 hours or a 1303 for about 45 minutes. This will ensure optimum storage conditions for the battery and maximise its life. Charge the battery normally after storage.

Caring for the Light

The light is designed to be rugged and should withstand most outdoor conditions. It contains no glass parts, so it should not be damaged by accidental impacts such as being dropped on to rocks.

The light is not designed to be 100% waterproof, but will withstand continuous rain or brief immersion in water such as being dropped in a river.

If water does get into the light, it is normally detectable as condensation inside the clear front window. If the light is still operating normally, leave it switched on so that the heat it generates naturally can help to dry it out. In severe cases of water ingress, remove the four screws from the side panel without the button and remove it. Leave the light in a warm place such as an airing cupboard to dry. When reassembling the light, it is advisable to use a new sealing gasket available from Solidlights as part number 30009. Do not overtighten the screws.

It IS completely safe to operate the light off the bike or indoors. Although the light may get very warm to the touch, the 1303 contains an automatic temperature regulator to prevent overheating.

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