

## the legal bit

If you're going to ride your bike after dark, then you'll need some bike lights - white at the front and red at the back. You're also legally required to have a red reflector at the back and amber-coloured pedal reflectors (front and rear).

While every new bike must be sold with a white reflector at the front and side-facing reflectors in the wheels, they're not legally required for use.

If you're caught by the police riding on the roads at night without legal lights and reflectors, then you could be liable for a £30 on-the-spot fine.

### types of bike light

**Dynamo** – There are several different kinds of dynamo available, including hub, bottle and spoke dynamos.

Hub dynamos are efficient, but are heavier and need specialist installation. Bottle dynamos use a rotating wheel that restsagainst the tyre, and can be flicked up when not in use. They are easy to fit, but are less efficient and can wear your tyre's side wall. Spoke dynamos are friction free, using magnets in the spokes to generate the power. They are light and simple to install.



The best dynamo lights are bright enough for riding on unlit roads and have stand lights that remain on when you stop at junctions. Some also have sensors so the lights come on automatically when it gets dark. The real advantages of dynamo lights are that they are always attached to your bike and you will never need to buy batteries. They are the ultimate 'fit and forget' lights.

**Price:** £20 to £200

**Use:** Regular commuting / touring / long-distance rides.



**'Blinkers'** - Basic LED lights are great for occasional use or as backup / extra lights, since the bulbs are not very bright. They are only really suitable for use in urban areas with street lights.

They usually have blinking or steady modes, although they are best used in blinking mode, which helps to get you noticed by passing motorists.

Cheaper models use coin cell batteries, which help to keep the lights small. However, these do not last as long as AA or AAA batteries and they are not rechargeable.

**Price:** £10 to £20 **Use:** Occasional / back-up lights lights on urban roads



**Torch Lights** – These are larger and more robust than the basic blinkers, but are still small enough to fit in your pocket or handbag.

Because they have higher powered, brighter LED bulbs they are fine for use as a main light in urban areas. However, they may struggle to light up the road in areas without street lights.

The cheaper ones use AA or AAA batteries, while the more expensive units have integrated rechargeable Lithium Ion batteries, which allow longer run times. This makes them more suited to regular use, such commuting trips.

**Price:** £20 to £50 **Use:** Commuting / urban cycling

**High Power, Rechargeable Lights** - If you regularly ride on unlit roads, then you will need a front light that is powerful enough to see by. If you venture off-road then you may need to think about having a head torch as well as a front light on your bike.

These lights will generally have a range of different brightness settings. The cheapest lights will emit around 300 lumens, with the brightest emitting in excess of 1,000 lumens. However run times at the brightest setting will be quite short.

These lights run off lithium ion batteries. The cheaper units have internal batteries, while the more expensive ones have, external battery packs that can be swapped over on longer rides.

**Price:** £50 to £750 **Use:** Rural roads / off-road rides



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# **ClOthing**

If you are going to be riding after dark on a regular basis, then you may want to invest in some hi-viz and reflective items.

While fluorescent clothing is great for getting you noticed during the day, reflective items are what's needed to be seen at night.

Fortunately much of the hi-viz cycling gear comes with reflecive patches giving you the best of both worlds.

As well as jackets and jerseys, you can also get rucksack covers. Even a reflective snap band around the wrist or ankle will help to get you noticed.

be bright - be seen - be safe

# top tips

- 1. Consider fitting a backup light in case you main lights fail or run out of battery.
- 2. Remember that Spokes members get **10% off lights and hi-viz clothing** at local bike shops including Banjo Cycles, Supernova Cycles and the Specialized Concept Store.