

Beauty and the Beast

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Two well-made lights from across the pond, with contrasting styling - 'tactical flashlight' vs 'techno bling'. I got the **Topeak** from Wiggle, the **Dinotte** is available from On-One. 3W and 5W LED lights use a single high-powered white LED which, being a single light source, can be shaped into a usable beam without the complication that you find in a multi-LED light such as the Cateye 5-LED front light. The 5W types do pose more problems to the manufacturer - power supply, optical design and heat management are all issues that tend to bump up the price, while for the long-distance cyclist runtime is bound to be a concern. The 3W types are a bit more manageable all round, and seem like a safer choice for the all-night rider. The light from a 3W LED is often noted as being 'equivalent to a 10W halogen' - it's not, it's similar to a good 5W halogen, to judge from the beamshots here.

The **Topeak** WhiteLite HP 3W is at the bottom end of all this exotica - even so, the price is about £75 and running costs can be very high as well. **Dinotte** make several versions of their light, all using the same tiny light head module - their basic 3W version is about £85 but the one I've got here is their 5W 'Ultra' which is £135 - all my comments below regarding build quality etc would apply across the board, but beam quality and runtime is specific to this 5W light. Both lights weigh the same - about 200g - which is similar to any typical 4-cell handlebar light. Both lights have high and low modes, and use of the low mode whenever possible will greatly increase runtime.

I'm reviewing these lights with possible PBP use in mind (they are both capable - just - of being run using primary AA cells) and I should say straight away that if you are a regular night rider but PBP is **not** in your plans, then you need to look at other lights for best performance allied with low running cost. I think the **USE Exposure Joystick** which is a neat, self-contained rechargeable 3W LED light (reviewed in CTC Cycle mag, Aug/Sep 06) would be high on your list. Alternatives mostly use external power packs, which you either love or hate. These include

several from **Dinotte** (all looking just like this one), **Blackburn** (good reviews), **Cateye**, and of course **Solidlights** and **Nightlighting** who both have proven track record with high-power LEDs. If you are prepared to adapt cavers' kit there are even more options, such as the ugly but useful Princeton Tec Apex. Prices soon escalate - Dinotte's very attractive dual-3W Li-ion system is £245 - but running costs are low.

Topeak bike components are known for their build quality and good finish, and first impressions with the WhiteLite HP 3W are excellent. It's just like a 2-cell torch, solid and purposeful with its rubberised casing, it does look 'the business'. A few problems with the weatherproofing soon became apparent - nothing that can't be solved with a bit of PVC tape applied in the right places, but disappointing at this price level. Much worse is that battery access is via a very finely-threaded front bezel - a bit of clumsiness while re-batting in the small hours and this would be cross-threaded in no time - given that runtime is short and so battery changes frequent, this is a serious problem. The QR mount looks a bit under-engineered - its the same mount as is used for other smaller lights in the WhiteLite range - but at least it points the right way, i.e. the light removes backwards and upwards, which is a very sensible fail-safe design that many handlebar mounts get wrong.



Dinotte are new to me, but the build quality seems very good with just a whiff of 'cottage industry' - which a lot of cyclists rather like. A small power pack on the end of 35cm of cable feeds the light head which is essentially a sealed unit, tiny and jewel-like. I have to say it's the prettiest thing I've ever had sitting on my handlebars. The machined aluminium case has enough metal to heat-sink the LED,



and no more - in my (stationary) runtime tests, the light got too hot to touch and even the handlebar got warm, but its not a problem on the road, might even be welcome on a frosty night! The mounting system is weird, unique, adaptable and completely effective. It has the great merit of taking up minimal handlebar space, in fact you could mount two lights one up, one underslung, on the same inch of bar, really neat. It has the great demerit that it renders the light highly nickable.



Beams:

The **Topeak** beam is focusable but you can forget that - there is only one good setting and that is how it comes out of the blister pack. The 3W beam has a decent hot spot with good penetration, surrounded by a wide smooth circle of dimmish light. Its a bit like riding by bright moonlight, but I found I could maintain a good speed on a dark winding lane with this light. The 1W beam is just a gentle wash - fine for riding in the bunch but not on the front, many cheaper 1W lights do better. The **Dinotte** lens is just 17mm across, which really isn't big enough for visibility purposes, the beam is brighter and more 'shaped' than the Topeak but with a slight hole in the middle. On a dark lane the difference between the high and low settings seems negligible and to be honest the beam though very bright lacked penetration and I couldn't ride so fast, and I was also worried about dazzling any oncoming traffic. This is due to the hole in the middle which is typical of 5W LEDs and I wouldn't necessarily expect 3W versions of this light to be the same.

The **Topeak** push-push switch cycles through 4 modes - 3W, 1W, flashing and off - if you are riding along lit roads, in 1W mode, and then plunge into a darkened section where you want to switch straight to 'high beam' - you can't, without 3 clicks and going through 'off'. This is just plain dangerous, but I do like the switch for being very chunky and positive in action. The switch on the **Dinotte** seems flimsy by comparison, but functionally its heaps better - it just cycles between 2 modes - full power, low power - requiring a prolonged press, mobile phone-style, to turn the light off. USE Exposure have a similar system on their lights.

As the batteries get old, the **Topeak** just drops out of regulation, then gradually dims and dies like any normal bike light. The **Dinotte** is cleverer. It has a 3rd lower-than-low power level, 'battery save'. Shortly after a very clear 'battery low' warning, this kicks in automatically and cannot be manually selected or deselected. It does what it's supposed to - it's still a usable light and it greatly extends runtime with what juice there is left. But I have to say I don't like this much - the warning is good but after that I'd prefer to stay in control. Really, I'd like all 3 levels to be manually selectable, at any time. Experience has shown, too, that in bike lights simple is usually good, and sophisticated electronics have to be viewed as a potential point of weakness by the all-weather cyclist. However all high-end LED lights rely on electronic regulation to function, so I suppose Dinotte have just made a virtue of necessity by adding a few extra bells and whistles.

Internal power:

Most high-power LED lights depend upon rechargeable batteries, and/or make use of an external power pack. The **Topeak** does neither, it runs internally off 2x CR123A lithium cells, for around **2h30** at full power. CR123As are more commonly used in cameras, and can cost up to £6 per cell in the high street - it could cost as much as £36 to run this light for a single night! Fortunately, you can bulk-buy them online for a fraction of the street price, I paid under £1.30 for Panasonic brand cells from 7dayshop. Rechargeable

