



## FULL BEAM FUSION SPEED LED

WORDS : MIKE BLEWITT

The arms race for higher output in lights might be plateauing – commuters are blinding each other, nocturnal marsupials are confused, and planes are being guided into singletrack and not runways. We have the power, we just need to control it.

Full Beam make a variety of lights, but the Fusion SpeedLED stands apart from much of their range, and much of the market. Designed, tested and built in Scotland – you can tell it's made to last through harsh winters and long nights. It's a solid package, at around 400grams, but it is one piece for the battery and light. None of this is exceptional, until you add the speed sensor. The cable to the fork mount and magnet seem a bit archaic, but the functionality is superb. The result is programmable, but the basic function is that as you speed up, the strength of the light increases, all the way to a full 3000 lumens. As you slow down, it backs off. The rate it changes, and the output it changes to is all customisable – that is, the responsiveness and the overall brightness.



Setup is easy, just make sure the magnet is close to the sensor, and thread the cable down your brake hose for the neatest route. The clamp on your handlebar is ok, but needs to be a bit tighter than you think. You can make an Exposure clamp work, which is a bit more set and forget, but very secure and neat.

Beyond increasing battery life to a claimed 4hrs the SpeedLED function creates a longer lasting product. The CREE LED's need to be cooled, and running at full output creates a hot light – the SpeedLED prevents this. A hot LED doesn't actually achieve it's full output either – so you are going to get a true 3000 lumens this way, not an LED just doing what it still can. Along with a smart charger, this light almost looks after itself.

The proof, as ever, is on the trail. Once up to speed, the light output was amazing. I haven't ridden with a light this bright, it throws a long way down the trail but isn't such a tight spot that you get 'tunnel vision'. Full Beam claim it's so bright, and the spread is so good that you can run handlebars alone. And I did, but I didn't like it. Too many times my handlebars were pointing away from where I wanted to see, or too high to see over a rock I was rolling over. Or, it was in my eyes with lunges onto taller rock shelves as I shifted my weight a long way forward. The next ride, with one of my own helmet mounted lights, was much better. If the speed function could be wireless, and the battery pack separate, this could make an amazing helmet light – and truly would be the only light you would need.

The light just runs one switch, and you can flick from the Speed mode to manual and different outputs – but there's not really any need. With the ability to program the rate the light ramps up, and at what speed, you can really tune it to your trails and your riding. It's a bit fiddly, and some sort of interface would make it easier – but you're unlikely to do it more than once.

This is a quality light that would suit many riders, but particularly those who like to tune things, and enjoy having good quality kit. The charge is a very fast 2hrs, so it could be brilliant for teams 24hr racing – or solo night time epics, with the huge run time and great light power. If you're not convinced, you could always try it on a trial scheme, contact Full Beam Australia for details.

HITS: Lots of quality output, great beam spread, quality engineering  
MISSES: Requires a cable based speed sensor, expensive

RRP: \$599  
From: [www.fullbeam.com.au](http://www.fullbeam.com.au)

## GROUND EFFECT SHE SHELL

WORDS AND PHOTOS : ANNA BECK

It seems like Ground Effect gear is manufactured by a bunch of riders that like to ride adventurous trails, escaping all day with supplies only to return at twilight for a session of large jugs of dark beer and plates of kumera chips (bro) and onion rings.

And what better piece of equipment to use to engage in such adventurous activities in such a damp climate like NZ than the She Shell?

As Ground Effects top of the line women's shell option, it features a zip-away hood, 'hazard' reflective piping, under-arm zips, thumb loops, reflective piping, 'whaletail' longer back section, rear pocket and full-length front zip with overlaid Velcro. This jacket has all the bells and whistles you could possibly need for scroggin-munching in inclement weather.

We tested the Azure Blue option, which was a lovely bright blue we could see would be very popular, however if blue isn't your thing it comes in 'Agent Orange', 'Bowling Green' and 'Red Hot'.

This is a pretty serious shell jacket, the type of jacket you would take on a multi-day trek with bikes or in torrential rain, not one you would use for a light sprinkle or in cold weather.

To be honest the local weather, despite dishing out the pain with 2-degree nights, wasn't as forthcoming with rain that would enable us to test out the claims of waterproofness. We managed a few chilly commutes and early sessions with the jacket that allowed us to assess the fit and functionality of the jacket without putting its '20,000mm

hydrostatic head with durable water-repellant finish' to the test (this is double the waterproof-ness of many manufacturer's products that claim they are waterproof).

The fit was true to size, perfect for a jersey and accessories underneath, or even to use over heavier garments for hiking or other outdoorsy-type activities. We felt the hood had limited use on the bike, however it opened up the functionality of this jacket to a myriad of other uses (anybody else been stuck feeding racer's bottles trackside in the torrential rain?), and it tucked away, discreetly, into the collar.

The underarm zips were a nice feature, especially when using the jacket as a wind-breaker; it definitely helped from overheating once we had warmed up on those chilly mornings. The 'hydrofoil' fabric itself claims to be more breathable than others on the market, though without side-by-side comparison it's hard to assess.

We can see the She Shell taking pride of place in our 'inclement weather attire' part of our wardrobe, to be dragged out when heading to races with confirmed downfalls, for protracted time at races in the feed-zone in the rain, on 'form finding' wet weather rides, or to take on holidays over the ditch in NZ, the place it's really designed for.

HITS: Hardcore waterproofness. Nice fit, utilitarian but has all bases covered. Colour.  
MISSES: Might be too full on for some

RRP: \$269  
From: [www.groundeffect.co.nz](http://www.groundeffect.co.nz)