Kit reviews

COMPONENTS, KIT AND MEDIA SELECTED AND REVIEWED BY SPECIALIST JOURNALISTS AND

CYCLING UK STAFF

Hilltrek GREENSPOT DOUBLE VENTILE From £235

hilltrek.co.uk

ILLTREK'S GREENSPOT Double Ventile cycling jacket is inspired by the Greenspot Nomad of the 1950s and '60s. It's made from Ventile®, a waterproof/breathable cotton fabric developed in the 1930s for the Royal Air Force.

Most waterproof/breathable fabrics are synthetic laminates that include a thin membrane with microscopic pores to keep out rain droplets but let water vapour escape. However, over time, water-repelling outer coatings wear off, the membrane can get dirty or damaged, seals fail, and performance declines. Ventile works differently. It's made of very fine, closely woven cotton fibres that expand when wet, closing the gaps in the weave but allowing vapour to escape.

Cotton gives the jacket an attractive look and feel and none of the crisp-packet rustle of synthetics. It is available in eight colours; the storm orange I tested was highly visible without being high-vis. Each garment is made

in Hilltrek's factory in Arboyne, Aberdeenshire to the customer's measurements. The cut is generous with room for a couple of lavers

CONS Price and weight

underneath, which makes it suitable for commuting or use as a winter walking jacket. The collar is higher and wider than most cycling jackets, but not unduly flappy.

An optional, removable, wire-brimmed hood comes in two sizes to fit helmeted or lidless riders. Hilltrek also offer a sportier, figurehugging cut with side tabs to cinch in the waist and additional details. Up to six (nonwaterproof) pockets and cuff fastenings (a choice of velcro or poppers) can be specified.

I found it to be supremely windproof and more breathable than any waterproof I've owned. Riding at a touring pace for extended periods in heavy rain, I stayed warm and

things never got clammy inside. Ventile stiffens when wet and takes a few hours to dry out, though it dries faster on the bike, in the wind. Hilltrek recommend dry cleaning or careful handwashing using specialist products.

An 800g+ jacket won't appeal to the weightconscious looking for something packable for the occasional shower, but in colder months, when worn all day like a softshell over a base laver, it worked well and meant I could leave the waterproof at home. The price is high but for a handsome, durable, made-to-measure weatherproof jacket, it's an investment well worth considering. Jack Thurston

OTHER OPTIONS



LANCASHIRE PIKE CLASSIC CYCLING JACKET £330

A modish take on the venerable Greenspot Nomad. Like the Hilltrek, it's Ventile and bespoke. lancashirepike.co.uk



PÁRAMO CICLO JACKET £200

Made from Nikwax Analogy fabric, it provides breathability and insulation through capillary action. Zipped vents allow more cooling. paramo-clothing.com

PROS + Durable natural fibres, UK made **Custom fit and** specification

Review requests Is there a product that you would like us to review? WRITE TO: Cycle, PO Box 313, Scarborough, Y012 6WZ EMAIL: cyclinguk@ jppublishing.co.uk

REVIEWS | GEAR



+ Lightweight

 Fitting requires some skill...



Jtek SHIFTMATE 6 £29.99 sjscycles.co.uk

F THE NUMBER of enquiries on the subject that land on Cycle's desk says anything, it is that building a derailleur transmission using components not originally designed to work together is a popular pastime. There are doubtless many reasons for this, ranging from the understandable desire to build, say, a range of gears not offered as standard by any manufacturer right through to a quixotic urge to construct some sort of Frankenshift. In any case, the process generally depends on the fact that many unexpected combinations of shift lever, rear mech and cassette do, in fact, work in harmony.

Some, however, do not, which is where Jtek's Shiftmate series comes in. The basic concept is the same as that of the classic Travel Agent linear-pull brake adaptor, which comprises a pulley wheel with two cable grooves of different diameters, in a housing that forms part of the cable's outer casing. The inner wire wraps around the pulley, entering on one groove and exiting on the other to alter the input:output cable-pull ratio according to the two-groove radii.

Accurate indexed derailleur actuation depends on the amount of cable pull required to make the rear mech align precisely with each sprocket in turn; if an incompatible shifter pulls, say, 10% less than needed, then compatibility can be achieved by having the inner wire exit the Shiftmate on a groove of 11% larger radius than the entry groove. Of course, the same principle works in reverse.

There are currently nine versions of the Shiftmate, each made for one or more specific combinations of shifter, rear mech and cassette; in other words, there is no universal solution, since any desired combination requires a specific ratio. Peruse the Shiftmate website compatibility chart – **jtekengineering.com/resources/shiftmatecompatibility/** – to find the right model. In most cases, the device works in either direction depending on the desired component combination. Some combinations are apparently impossible.

I paired a Shiftmate 6 with Shimano 10-speed Ultegra 6600 STI lever, 10 speed



Above: There are nine versions of the Shiftmate, each designed to convert one cable-pull measurement to another. There's a chart on the Shiftmate website

11-32 cassette and 10-speed Deore XT MTB rear mech. Despite sharing the same number of gears, the MTB mech is incompatible with the road shifters. The Shiftmate can, in principle, go anywhere in the outer casing run and is supplied with a small spacer tube that fits a standard frame cable stop.

Once an initial failure to note the offset of the outer casing stop holes had been overcome, I got the device cabled up nicely. The inner wire switches grooves via a flat in the intervening ridge; getting this snug proved the only real difficulty. Once all slack was removed, the Shiftmate worked! If not as slick as with the 'correct' rear mech, it was accurate right across the cassette. **Richard Hallett**

OTHER OPTIONS



1 BACK ISSUES OF CYCLE FREE (FOR LONGSTANDING MEMBERS)

Somewhere in there will be the answer to almost every derailleur compatibility query. See also bit.ly/cyclinguk-shimergo



2 DIA COMPE ENE CICLO SHIFTERS FROM £41.99 These friction-shift levers work with almost any mech and cassette up to 10-speed. Available as a down tube shifter or as a bar-top thumbshifter (£59.99), ison-distribution.com

PROS Powerful and versatile + Relatively

Magicshine EAGLE M22400 LUMENS £87.97 magicshine.co.uk

HIS IS A LOT of off-road light for your money. Not as much, lumen-per-penny, as those 6,000 lumen torches you can find on eBay for about £20. But here you deal with a UK importer if you have problems; the light has a 12-month warranty; and quality control seems good – there were no loose wires and the charger didn't smell of burning plastic. The figure of 2400 lumens is plausible too: it's very bright indeed.

My usual off-road light is an 850-lumen Gemini Xera. The Eagle M2 throws out significantly more light. It looks more like 'half again as bright' than 'three times as bright' because there's a cube or square relationship (experts disagree) between increases in brightness and what we perceive. But you can certainly see more of the trail, better.

The big benefit off-road is the spread of



Above: The quick-release bracket is secure but sits the lamp quite high, so it could be vulnerable in a fall

light. There are six high-power LEDs in the lamp, in two rows of three. The bottom row shines through a diffuser in the lens, giving a flood effect, while the top three are unfiltered and provide a strong central spot. Available lighting modes are: top row only, bottom row only, or both rows. I wanted depth *and* width off-road so used both rows all the time.

That drains the 7.4V 4.4Ah battery (four 18650 Lithium lons in a sealed case) fastest; you get about two hours like this. The other modes will give you nearly four hours. If you need to eke out power or ride on the road and not dazzle drivers, you can toggle down the intensity to 75%, 50%, 25% or 10%. I used a 10% 'spot' on road.

A wireless remote switch with big buttons makes it easy to switch between modes and intensities, even in gloves, although it took five or six presses to switch between my off-road and road settings. The switch doesn't fit a handlebar very securely; a better mount would help. I've no complaints about the bracket for the lamp or the rubberised straps that hold the battery case to the top tube; both are secure. A helmet mount was included but I didn't use it as the battery cable wasn't long enough to reach my jersey pocket. (A 1m extension cable is £6.95 plus £2.95 p&p.)

There are more suitable road lights than this (e.g. Magicshine's £60 Eagle 600, which has high and 'dipped' beams) but for off-road night riding, this is among the best sub-£100 lights available. It worked fine in the rain too, being IPX5 rated. It weighs 470g complete, the lamp and bracket accounting for 144g. Dan Joyce

OTHER OPTIONS

CONS

- Remote switch fits poorly MAGICSHING

M



GEMINI XERA LIGHT SET 950L (2 CELL) £119.99 'Only' 950 lumens but good build quality, reliable, weatherproof, and tiny; the lamp is 55g. A four-year-old Xera is my go-to helmet light off-road. i-ride.co.uk



EXPOSURE TORO MK8 £279.95

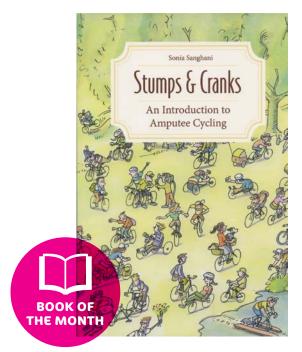
Up to 2400 lumens from a cable-free light that weighs only 236g. User-friendly, excellent build quality, and made in the UK, but not cheap. exposurelights.com

REVIEWS | BOOKS

Book reviews



A ROUND-UP OF THE LATEST CYCLING-RELATED BOOKS



Sonia Sanghani STUMPS AND CRANKS £23.95 stumpsandcranks.co.uk

WITH THE RECENT rise in the profile of the Paralympics, a book about amputee cycling seems timely. I was pleased to see this book doesn't just cover the sporting aspects of amputee cycling but all angles, including recent amputees wanting to get on a bike for the first time.

As a non-amputee, what the book brought home to me was that, as well as all as the myriad questions anyone faces about what bike and equipment to choose, an amputee has a second set of questions that require them to adapt themselves and their injury to their cycling. What kind of prosthetic limb is best? How do I control brakes and gear changing if I have only one or no arms? What happens if your leg starts to drop off whilst cycling?

Author and amputee Sanghani wanted more information on her new hobby of cycling but couldn't find enough and ended up writing this extremely informative and inspirational book. Interspersed amongst her own advice on everything, from the low down on different prosthetics to training and advanced riding techniques, are words of wisdom from amputees all over the world and what works for them. A truly helpful book. ISBN 97817825508804, Richard Peace



1 180 Days



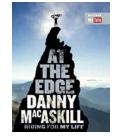
Tony Hadland & Mike Burrows FROM BICYCLE TO SUPERBIKE £25 hadland.wordpress.com

PART BIOGRAPHY, part bike-ography, this is an overview of the life and work of Mike Burrows, the maverick bike designer behind the Windcheetah recumbent, the Lotus track bike, the Giant TCR, and 71 others. Interviews with Mike's friends, notably Andy Pegg, give an insight into his acerbic character, while the arrangement of his bikes into chronological order creates a kind of family tree, with earlier bikes clearly influencing later designs. Well worth a read if you're interested in cycling technology in general or in recumbents in particular. ISBN 9780953617456. Dan Joyce

Richard Evans

LAID BACK AROUND THE WORLD IN 180 DAYS £6.95 laidbackaroundtheworld.blogspot.co.uk

NOT CONTENT with a simple cycle ride round the world, Richard Evans opted for the laid back approach. This book is a diary-format travelogue of his 2014 journey by recumbent bicycle across the deserts of Kazakhstan, the Australian Nullarbor, the Canadian Rockies, and many places in between. Richard includes a quote from playwright and cyclist George Bernard Shaw: 'We don't stop playing because we grow old; we grow old because we stop playing.' That quote gives an insight into the mindset of a 52-year-old taking six months out from his day job to see the world. ISBN 9781530136087, Duncan Dollimore



Danny MacAskill AT THE EDGE £14.99 penguin.co.uk

DANNY MACASKILL is a household name now thanks to jaw-dropping films such as 'Imaginate', 'The Ridge' and his latest, 'Wee Day Out'. This book tells how he channelled his boyhood riding exploits into a successful career. What shines through is that Danny does not seem driven by fame or money but by a passion for riding his bike to accomplish incredible things. The dedication and the pain to achieve these goals are revealed in this enjoyable book. ISBN 9780241206522. Julie Rand



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