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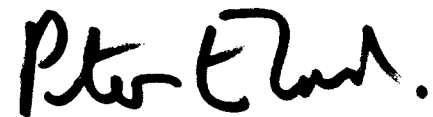
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I hope you enjoy the read.



Peter Eland  
Editor and Publisher,  
*Velo Vision*

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VELO VISION AND VELO-VISION  
We weren't first with the name. *Velo-Vision* is a bike shop in Körten, near Bergisch-Gladbach, Germany. *Velo Vision* magazine exists in friendly harmony with *Velo-Vision* in Germany.

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### THERE AND BACK

It's been rather longer than it should have been since last issue, for which apologies. Various factors conspired to make this issue late: particularly a nasty lurgy which struck me down shortly after returning from Eurobike. We'll be back on track for next issue, which will reach UK readers before Christmas as usual.

Before all of that, I did manage to actually go cycling for a few weeks in July, as you'll see from the photo opposite and other items throughout this issue. Getting

away for a few weeks by bike is a real tonic, in a way that everyday riding and weekend outings can't quite match. We took a leisurely ride westwards along the coast from Dieppe in northern France, striking it lucky with the weather and a series of spectacular cliff-top campsites.

I hope many of you managed to get away cycling over the summer, too – if you did, why not send a picture? We'll publish a selection next issue to help banish the winter gloom!

**Peter Eland**

# FOLDING ON A BUDGET

The Downtube FS9 is a full-suspension folder which sells in the UK for just £359. Is it any good, or have corners been cut to hit the price-point?



## BACKGROUND

Just over a year ago I started to hear reports about the Downtube, a budget folder rather better than the price might suggest. A report on the Folding Society website ([www.foldsoc.org.uk](http://www.foldsoc.org.uk)) renewed my interest, and a review bike was arranged via the US manufacturer. After a spate of rather expensive bike reviews recently, a bit of affordability seemed like a very good idea.

Downtube are an American company, but have had a UK distributor for some time, currently VeloChocolate in Southampton. Purchasers could until recently snap up the last few UK stocks of the 2007/8 model, very similar to our review bike, for just £199 – which really did seem low, and it was that which sparked much interest. It's now sold out.

For the new 2008/9 model, prices have risen somewhat to £359, to include airmail shipping to any address in the UK, on a three/four day service direct from the States, as stocks won't be held in the UK. Duty and customs charges will be included in the price, so there won't be any extras to pay. US readers will of course save on both shipping and import

tax, and the price over there is currently \$369 for the model we're reviewing.

As well as the FS9 (full suspension, nine-speed derailleur gearing) the bike is available as the £399 FS8, using the Sturmey-Archer 8-speed hub gear. Both gearing options are also available with front suspension only, for £324 and £385 respectively. They also have a smaller 16"-wheeled bike, the Mini, for £420, again with the Sturmey 8-speed.

As the bikes are direct-shipped, Downtube do recommend getting them checked out by a bike shop after assembly if you're not a competent mechanic.

There's no specific luggage-carrying system or other options available for the FS9, but the manufacturer's website does show how some customers have modified it for touring.



## FIRST IMPRESSIONS

The Downtube is an angular sort of bike, and quite striking in our chosen orange colour scheme (white is also available). It certainly doesn't look cheap, with a chunky aluminium frame and shiny alloy components. Perhaps this is what sets it apart from the cheap folders of the past – they would normally have a steel frame with pressed steel components, perhaps those nasty caliper brakes. None of that here.

There is perhaps something about the styling which looks less purposeful and sporty than, for example, the superficially similar old-style Birdy frame. I think it may be the way the stem just follows the line of the steerer straight up, rather than sloping forwards. But maybe that's just me. Generally the bike drew admiring comments.

Starting with the frame, it's welded with the typical far east neatness, just like many frames on more expensive bikes. Cables run smoothly along the bottom of the main beam through welded-on guides, and it's great to see a pair of bottle cage bosses just in front of the main hinge – omitted on many folding bikes.

The main hinge is a heavily-built affair, and while not as smoothly-styled as those on many Dahons or others, it is solid, with thick alloy plates forming each half. The quick-release which holds it together incorporates a safety lock: once it's released, you also need to lift it up to disengage the safety pin before the bike will fold. When folded, an alloy loop under the bottom bracket helps the bike stand up. It was fitted with a snap-on plastic 'bash plate'

– perhaps packing for transport, but I left it on to preserve the paintwork.

Just above the bottom bracket is the pivot for the rear suspension – it looks robust and of a large diameter. The rear swingarm is again strongly built out of welded aluminium. On the right there's a replaceable derailleur hanger (of which more later) and on the left the frame has disk brake mounts ready for a future upgrade. There is one threaded hole which looks like it might be useful for fitting mudguards, on the left-side dropout, but nothing on the right and nothing on the 'bridge'. So attaching a rear mudguard might be tricky without reaching for the drill (although Downtube are working on a set to be attached via P-clips).

Connecting swingarm to frame is a simple coil shock unit. The preload is adjustable by the usual threaded collar arrangement.

Seatpost and clamp are alloy units, and a plain but effective quick-release collar secures seat height. No little luxuries here like an engraved scale on the seatpost, but no big deal.

On to the front of the bike, and the front wheel is supported by a 'Swift' suspension fork with what looks to be about 50 mm of travel. Again, preload is adjustable, over quite a wide range. As supplied it was set 'very soft', which might suit lighter riders. I tightened it up a bit, until my static weight compressed the system 20% or so. The fork looks well made, with wiper seals around the fork stanchions to keep dirt out from the innards. But as with all such designs, play will eventually develop between the two parts. The fork does have threaded holes for mudguard mounting.

The front wheel is built around a disk brake hub, and as the fork also

has disk mounts, upgrading to disks would be a simple bolt-on job. As it is, both front and back wheels have unbranded alloy V-brakes, which look chunky enough to do a good solid job.

The wheels, by the way, are built with stainless steel spokes (24 front, 28 rear) and aero-section, alloy rims. They were nice and true, and the rim join was smooth, so no grabbing of the brakes. The rear hub didn't have a disk brake mount like the front, incidentally. Tyres fitted are Kenda Kwest, rated at 65 psi, with a certain amount of tread but with a wide smooth central strip. Not bad tyres at all.

The forks are supported in the frame by a conventional threaded headset, and the stem hinge is fitted above this. To release it, you need to press in a little safety button on the side after undoing the quick release.

Unfortunately, even with the quick release fully tightened, the stem hinge had a certain amount of play, and investigation showed that it was in the fixed pivot. The result was around 5 mm of free movement at the bars.

Checking with Downtube, they said this is not normal for the bike, but in any case they've changed the stem design for current production, and it now has tighter tolerances.

The stem itself is telescopic, offering around 3" of length adjustment. There's also an angle-adjustable stem which according to the instructions can even be reversed to point backwards, so overall there's a vast range of adjustment available. Perhaps the only position not well catered for is a sporty, leaned-over posture – but you could always fit a longer stem yourself, or even saw two inches or so off the bottom of the upper stem so that it drops down fully.

The bars are riser-type, gaining an extra few inches in height, and they're ready-fitted with short bar ends. Not the most comfortable, perhaps, but great to see an extra hand position. The hand grips are foam, and the brake levers are alloy-bodied and have proper alloy levers, for a nice solid feel. They're much better than the ones Brompton fits to bikes five times the price!

So to the transmission: it's a single-chainring derailleur system. I was impressed to see a proper alloy chainset, with replaceable chainrings, and some effective chain plastic guards each side to keep the chain in place and trousers clean. At the back, a 'Juju M90' rear derailleur in fake carbon weave paint looks workmanlike and chunky, and there's a matching nine-speed twist shifter on the bars. With 20" wheels, 46T chainring and 11 to 32 cassette, the gear ratios are a useful 29" to 84".

Finally, the cranks are fitted with 'Stomp' alloy folding pedals, which push in towards the crank to release and fold up. They provided secure footing while riding, but leaning the bike against things for parking did have a tendency to fold the pedals unintentionally on occasion.

Weight as tested was 13.93 kg. Rider and luggage weight limit for the bike is 109 kg (245 lb).

**THE RIDE**

Before taking a ride we had to sort out an issue with the gears – in transit, the rear derailleur had been bashed and the hanger plate was noticeably bent. Downtube suggested simply bending it back, which I did without any problem at all using an adjustable spanner. Like they say, the metal is very soft – and it had done its job well in protecting the less easily-fixed frame.

On the road at last, and first impressions were favourable. With the tyres well pumped up, the bike rolls well, and the frame feels rigid and solid. Only the stem play detracts somewhat from the secure feeling of the ride.

That aside, the wide, high bars make this one of the most stable folding bikes I've ridden – it's certainly very easy to steer with one hand off the bars for indicating. The bars did feel wide, sometimes, when threading through traffic, but you can't have it both ways.

Brakes were really excellent – the front one in particular was powerful and controllable. The rear felt a little more mushy, perhaps because of the longer cable run. The rear brake blocks are also set at quite a severe angle to the brake arms, as



they were on some early Birdys, and this can make for rather frequent adjustment as the blocks wear. For mostly fair-weather users, it may not be an issue.

On our bike, direct from the USA, the brakes were set up the wrong way round (left hand for front brake), and UK users should really swap these round for consistency with other UK bikes.

The suspension was a really pleasant surprise: conventional wisdom has it to avoid cheap suspension bikes, reasoning that the money would be better spent on the basics. But in this case, I think the 'Moulton' formula works. The suspension lets you use full tyre pressure for easy rolling, but cushions the resulting harshness. The rear was set fairly hard from the factory, and I noticed little if any bob: it probably helps that travel is very limited both front and rear. Hard braking does of course result in a little dive, but hardly enough to irritate.

A long-term Birdy rider who tried it was also impressed. The more expensive bike certainly has the edge, mainly thanks to lower weight perhaps, but he thought the suspension delivered perhaps 80%

of the Birdy's ride quality.

The gears have a fairly light action, and a positive 'click' between gears. The feel is somehow a tiny bit less solid than some of the much more expensive SRAM or Shimano twist grips I've tried – perhaps a tiny bit of 'give' in the plastic of the shifter? But functionally, the shifting is really very good. And the gear range seemed very well chosen for a town bike, even somewhere reasonably hilly.

The Downtube won a lot of fans amongst the cyclists and non-cyclists who tried it. Several female riders in particular liked the upright riding position, the suspended ride and the smart appearance. The only repeated criticism was of the stem play affecting handling.

**THE FOLD**

The fold is very simple, and fairly foolproof. Just undo the main hinge, fold the bike in half, then undo the stem hinge and drop the handlebars. Lower the seatpost and you're done. You can fold the pedals at any stage – they end up on the outside of the folded package. Doing things in the wrong order isn't likely to do any particular damage, and there's no need to put it into any particular gear before you start. Unfolding

is similarly straightforward, but the cables did need to be pushed through their guides by hand occasionally before setting off.

Unfortunately the bike, when folded, isn't a particularly robust package – in fact, it'll barely stand up without flopping apart. So some sort of strap or bungee to hold it together is near essential – even just for lifting it into a train or car boot. That said, with such a bungee in place it stands up quite well.

It's not exactly tiny when folded – around 90 x 65 x 45 cm, so noticeably larger than a Birdy, and a little bigger than many 20"-wheeled Dahons. As you see on the pictures, the stem and bar ends stick out rather to the side. You'll also note that the rear derailleur and transmission are exposed to the outside of the package, rather than tucked away inside. The folded bike will roll along reasonably well (strapped together), avoiding the need for heavy lifting

It might be an idea to add some protective self-adhesive velcro or similar patches to the paintwork if you plan on a lot of folding and unfolding. When folded, various tubes bump up against each other metal-to-metal, and a little padding would be welcome to save the paint.

**CONCLUSIONS**

The Downtube does a pretty good job for the money, combining full suspension with a quality of frame and components which is perfectly acceptable and functional. The ride is good, too, with an upright position which many riders will find easy-going and relaxing.

Of course there are limitations – it's not particularly light, luggage capacity is limited, and the fairly large folded package needs an additional strap to hold it together. But my only really significant criticism is the play in the stem hinge, and the manufacturers apparently have that in hand.

At £359, the Downtube is up against a good number of decent Dahon folders (and rebadged ones too from Dawes etc) and the Giant Halfway is also not much above it in price: all are available through dealers, and some come with rack and mudguards ready fitted. But none offer full suspension...

Overall, the Downtube does win my recommendation, mainly for the ride quality and good components. The 'direct shipping from the USA' idea may seem a bit scary (and not, perhaps, as environmentally friendly as sea-transported alternatives), but they do have UK backup (and the chance to try a demo bike if you can get to Southampton) from VeloChocolate in case of any problems. It's not quite the 'no brainer' bargain the previous model was at £199, but still it has a lot to offer anyone looking for a relatively affordable folding bike.

**Peter Eland**

**AVAILABILITY**

Manufacturer: Downtube, USA. Tel +1 215 245 4032 or see [www.downtube.com](http://www.downtube.com) UK distributor: Velo Chocolat. Web only – see [www.velochocolate.co.uk](http://www.velochocolate.co.uk)



**Components on the Downtube are generally of good quality. They say the stem has been improved to eliminate the play present on our sample. Having bar ends fitted as standard is a pleasant surprise.**



**ABOVE: Without a strap to hold the folded package together, the stem tends to swing out sideways.**

**BELOW: A solid main hinge.**

