



'Electric assist Bicycles'

By Sebastian Conran



Part of the joy of cycling is the exercise you get whilst having the freedom of movement that public transport and cars do not offer, however on a sunny day it can be pretty hot & sweaty and hills can be a challenge especially after a long day.

Enter the electric assist bicycle, which gives your muscles more power when they most need by it sensing when you are pressing hard on the pedals and supplementing your efforts. It feels like human turbocharging. The only downside is that many of the electric bikes are what the Japanese call 'Mama bikes' in that they are a little on the utilitarian frumpy side, however there are some exceptions such as the amazing Gocycle with magic feeling automatic gears and a style that looks as if it has come straight from Apple's in house industrial design studio. But what if there was a simple system you could bolt onto your own, or your favourite design of bike? Well there are many, but they are often pretty ugly complicated to attach and of dubious quality – something that might be a problem with spare batteries and parts.

There is now a solution that allows you to have your bike and ride it, electrically: the ARCC ePod; created in the heart of rural Cambridgeshire this beautifully made device can be fairly simply attached to most bicycles by replacing the front hub with a motor and attaching a battery and power management module to the front stem just below the handlebars. Beautifully designed and engineered from black anodised digitally milled aluminium billet, this unit has all the quality and visual language of a Leica camera coupled to a heavy-duty Lithium Ion 36v 4ah Bosch battery. Not much bigger than a can of coke, the standard Bosch battery, which actually has the equivalent power of a 12v 12ah car battery. This can be quickly and simply recharged by detaching and using the Bosch mains charger, and each battery has a range of about 20 miles, but is small enough to carry a spare for longer journeys on the

elegantly crafted carrier that mounts to standard bottle rack lugs, or even two for a good days cycling. This means that you don't have to bring the bike indoors to charge it – useful if you live in a top-floor apartment.

The effect feels almost magic as if there is an invisible hand of Bradly Wiggins pushing you along away from the lights and up hills giving you that extra power and stamina just when you need it most. It turns Notting hill into Nothing Hill and Hamstead and Highgate are no longer the no-go areas of days of yore. You can simply control how much power you want whilst riding but otherwise the action is automatic and you hardly need to use the gears. But the best thing is that I can have my favourite city bike, a Moulton TSR, with all the convenience of not having to strip down in hot weather and arriving on time cool & collected – it really does take the sweat out of cycling.

In principle the Pod can be made to fit almost any bike, however the engineering required to do this means ARCC can only justify this cost for bikes which they sell in some volume. ARCC retro fit Moulton and Cinelli bikes, which accept the existing dock designs, but in future they might be able to offer a wider range of retro fit options.

A retro fit service to those that already have a Moulton or a Cinelli bike, leaving the gearing they have in place, and just add the drive system, the price to do this would be £1,500.

ARCC Innovations www.arccinnovations.com