

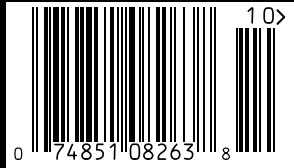
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IZIP VIARAPIDO

Tester Name: Karen Brooks

Age: 38

Height: 5'8"

Weight: 120lbs.

Inseam: 33"

Country of Origin: China

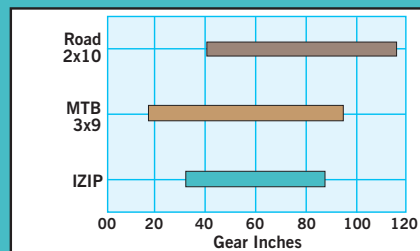
Price: \$1,300

Weight: 41.0lbs.

Sizes Available: 19"

diamond and "mixte" frames

Contact: www.currietechnology.com



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Electric bikes have somewhat of a bad reputation to overcome. The first round of electric motor bikes (introduced around ten years ago) had limited range, were heavy and unwieldy, and were not easy to service. Since then, great strides have been made in all areas of electric bike construction, and they are poised to become big players in the bicycle market.

Currie Technologies, parent company of the IZip brand, has been producing electric bikes since their first emergence; they've made the common mistakes and learned from them admirably. IZip is their performance-oriented brand, while eZip is the moniker of their recreational-oriented offerings. IZip bikes span a range from basic budget bikes to ultra-high end, sleek, and futuristic machines. We chose to test the Via Rapido because it falls in the middle of this range, and also offers both of the main types of e-bike transmission: throttle (also called e-bike) and pedelec.

You may recall from Karl's review of the BionX add-on electric motor system in issue #9 that throttle systems don't require pedaling input, while pedelec systems do.

IZip has models that offer both modes, in their case called TAG (Twist And Go) and PAS (Pedal Assist System). You can switch between modes with a button next to the on/off switch. In TAG mode, the throttle ramps up to 100% power whether you're pedaling or not. In PAS mode, 50% of available power assist kicks in when you start pedaling, and twisting the throttle adds more power, up to 100%. In either mode, sensors in the brake levers cut off the motor when the brakes are applied. There is also a sensor at the bottom bracket to detect pedaling input.

The Via Rapido's Electro-Drive 250-watt motor is housed in the rear hub, and in fact looks like nothing more than an internally geared hub, a far cry from the bulky motors of old. The lithium-ion battery is a thin rectangle that fits neatly in a slot in the rear rack. It can be charged on or off the bike, and locks in place with a small key. The battery's claimed range is 15-22 miles (given some pedaling input), and the motor's top speed is 20mph, above which it cuts out (as mandated by law). There's a battery gauge at the throttle: green for full power, yellow for half, and red for low. The gauge measures the line output, not



IZIP Via Rapido

the battery's actual life, so it tends to bounce around some as you accelerate, but it gives a fairly accurate reading when using 50% power at a steady pace. Recharging took around five hours, right in line with the claimed time.

From talking to various electric bike makers at the Interbike trade show last year, it seemed as though throttle systems are offered simply to give customers what they think they want—motorcycle-style engagement. Industry wisdom suggests that as riders gain electric experience, they tend to gravitate toward pedelecs for more seamless integration of the motor's help. The IZip manual also says that the PAS mode saves battery life. However, my experience differed. In the highest of the external derailleur's eight speeds, which I used frequently, I could barely feel the 50% power input from the motor. Instead, I tended to use TAG mode to give myself a boost at crucial times—starting at green lights, trying to get to a light before it turned yellow, up short but steep hills, etc.—and relied on the ol' legs the rest of the time. This way, I got more than the claimed range out of this system. Using PAS mode only when going slow, I could get a 25-mile round trip commute and then some, and with judicious use of the TAG mode, sometimes

even two trips. But I may pedal more than the average user, and a rider casually cruising in a lower gear would get more of a boost from the PAS mode.

The throttle in TAG mode engages slowly, which is good—it is possible, after all, to peel out, and tales of unintended wheelies still crop up in the electric world. At first I found having to hold down the throttle to go up extended hills kind of awkward, but I've gotten used to it. I did wish that the bike's eight external gears were higher overall, but my commute involves some suburban roads and highway-ish situations that call for speed; for shorter trips around town, they'd be passable. For riders just getting into it, the gear range would be fine.

I haven't said much about the bike's basic platform—that's because Currie is overhauling that aspect of the Via Rapido for 2012. Good thing, because that's where my complaints lie. My tester was built on a hybrid, with 700c wheels and an upright position, which is good. But it's also got an uncomfortably flat and straight handlebar, weak linear-pull brakes, and a suspension fork and seatpost that do little but add weight. The 2012 Via Rapido will be based on a more urban style of bike, with a "retro '70s appearance" and a host of other improvements. Notably, the "mixte" version will be a true step-through design and not the current half-dropped top tube frame, which will make mounting this still relatively heavy bike easier. It will also

sport fenders, a swept-back handlebar, disc brakes (hooray!), a lighter rigid fork, and a regular seatpost with a more comfortable seat—basically, all the changes I would have recommended. The electric drive system will be mostly the same, but will have a more intuitive toggle switch for PAS/TAG rather than the current push button version.

You can carry stuff on the Via Rapido's rear rack, although due to the battery's placement, panniers with hooks aren't compatible. A saddlebag, however, can be strapped to it relatively easily. IZip includes Slime innertubes on all their bikes to prevent most routine flats—a great idea since removing that rear motorized wheel isn't easy.

Before this test I assumed it would mostly be less-fit riders who would benefit from electric assistance—for instance, someone getting back into cycling after a long absence, or wanting to start an exercise routine. But I found that even with a good level of fitness, I had a lot to gain from riding the Via Rapido. I could arrive at work not drenched in sweat on the hottest, stickiest days. I could ride this bike on a lazy Monday instead of wimping out after a hard weekend of mountain biking. I could ride it when I was crunched for time. In short, it looks as if modern technology has made electric bikes a viable option for a wide range of cyclists. —Karen Brooks