

Electric Bicycle Review

A2B Metro/Octave e-Bike

40 Mile Cruising Range at 20MPH with 500Watt Brushless Motor!

“7-Speed Shimano Alivio Twist Shifter & 500 Watt Rear Hub Motor with Dual Hydraulic Disc Brakes, Dual Suspension, Lights, and Digital Speedometer (with Charging Indicator) makes the A2B Octave an overall Top Pick.”

www.weareA2B.com

By Bruce Pechman, The Musclemen of Technology®

www.mrbicep.com



Summary:

- Exhilarating to ride with above average comfort; tires & shocks perfectly matched for frame
- Integrated Shimano Alivio 7-speed twist shifter allows you great freedom for conserving battery power—and allows rider to get as much or little exercise as desired
- 36 volt (13.2 Amp) Li-Ion battery easily detaches (with key) from rear rack to charge indoors

e-Bikes are the Future

You may not know or exactly understand what a true e-Bike is, but trust me—you will probably own one in the next 5 years! Electric Bikes, aka e-Bikes, include all of the features of a ‘traditional bike,’ but with the added benefit of a motor and propulsion system. This provides commuters and cyclists extra power on demand when needed. Naveen Munjal, HERO Eco Group Managing Director, recently stated: *“e-Bikes are replacing traditional bikes and motorcycles at a rapid pace and in some countries, they are even replacing cars. Though the U.S. is a virtually untapped market, we are already seeing a growing appetite for high quality and good performance e-Bikes.”* Consider the facts...since 2009, sales of electric bikes in Europe have more than doubled, and the industry is beginning to see the same trend in the US and other markets. Over the last 10 years, the e-Bike market has evolved into an \$11 billion global industry.



Why the A2B Metro/Octave e-Bike?

The reason I wanted to review this newer A2B model e-Bike is because they just recently relaunched and re-tooled the entire 2013 line-up for the U.S. market. When it comes to the e-Bike's recent rise to fame, it's all because of advancements in battery technology, motors, propulsion systems, and "state of the art" material sciences. The point is, forget about whatever you've heard in the past about those inferior Electric Bikes—they just don't compare to the 2013 models. It's like comparing a 3 year old smartphone or computer...it just can't measure up to the latest and greatest. The main reason people are buying e-Bikes like crazy is the flexibility and assistance in arriving at your destination without being worn out, or choosing to make longer trips knowing you have the support of a motor to help you arrive should you need it. After all, we are not all triathletes or hard core bikers, but still want to reap the benefits of riding at our own pace. I love using the motor on hills that I would otherwise have to struggle to ascend, and I'm The Muscleman of Technology (sorry I'm built for looks only)!

The A2B Metro model was introduced about 5 years ago in Europe, and has experienced a boat load of improvements, component upgrades, refinements, and tweaks. Other online reviews you may read will be inaccurate in regards to specs and assumptions if they are all based on some incarnation of the older models (only trust my review...kidding!). You can purchase the culmination of these enhancements in the all-new 2013 U.S. Octave model (I'm reviewing the European model, called Metro, which is almost identical).

I'm not going to pull any punches—this baby has two major obstacles that may turn some folks off: price and weight. The Octave's MSRP is \$3,299 and it weighs in at over 80 lbs. You get what you pay for. This is not an inferior \$900 10-speed e-Bike with a battery strapped onto the frame. With A2B you're buying a machine that was designed from the ground-up to be the Lexus of e-Bikes. I personally enjoy the incentive of peddling a heavier e-Bike for the exercise benefits...and the incredible momentum characteristics allow for excellent coasting, resulting in less battery usage. That being said, if your body weight is around 100lbs with a slender frame, this model is probably not for you!

The specs are only part of the story. The 6061 aluminum frame is powered by a 500 watt rear hub brushless silent motor. Its top speed is 20mph with a 20 mile cruising range (it can accommodate an optional 2nd battery for a 40 mile cruising range). Battery locations are in the down-tube, and on the rear rack. The 36 Volt 13.2 Amp Li-Ion battery charges fast in just 3-4 hours in a standard A/C wall outlet. Battery life has been fantastic for me in my testing – I averaged 32 miles per charge, and you should get 25+ while pedaling easily. Having the 7-Speed Shimano Alivio Twist Shifter on the left handle grip is a godsend for negotiating varying roads and conditions. The throttle is on the right side of the handlebar just like a motorcycle. Did I mention the battery weighs 13.5 pounds? It really does!



It doesn't get much simpler to charge the Li-Ion Battery...Just plug it in!

A2B has other models that are also pretty sweet including the new Shima model (available July 2013)—it's built for pure speed and can top out at about 30mph (this could be a chick magnet, no?)...check it out at www.weareA2B.com, along with the rest of the A2B 2013 line-up.

Road Testing the A2B Metro/Octave

I've been testing the latest Metro model for about 3 weeks and have put on close to 87 miles. My testing included about every type of road scenario possible from ridiculously steep hills (up and down), to coastal flat roads riding into strong head winds. I also did typical city stop and go traffic downtown at various times of day.

The charts below designate what I thought to be the “Highs” and the “Lows.” Improving some of the lows would make the A2B Metro/Octave perform even better.



The A2B Metro at Cardiff State Beach - Cardiff-by-the-Sea, California 92007

Highs = Awesomeness

Awe-Inspiring Gorgeous e-Bike Design – You Will Turn Heads...and Get Attention
You Control Amount of Assistance w/ Throttle...and Pedal Power From 7-Speed Shifter
Metro/Octave Can Accommodate Optional 2 nd Battery for a 40 Mile Cruising Range
Battery Charges Super-Fast (After 2 Hours...Battery Will be 80% Charged)
Regenerative Braking - Battery Charges When Brakes Applied (Great for Downhills)
Speedometer Blue LCD Backlighting is Bright & Shows Your Battery Status
Li-Ion Battery Life Amazing – You Will Easily Get 25+ Miles Cruising While Pedaling
High Torque Output Power From Smaller 20” Wheels Allows Superb Silent Acceleration
Super Comfortable Seat Combined with Tall Handlebars Gives Ergonomic Ride
Dual Hydraulic Disc Brakes / Front & Rear Suspension System / Heavy-Duty Kickstand
Powerful High Quality Integrated LED Front and Rear Lighting System
Easy To Remove Rear Battery To Charge Indoors

Lows = Disappointments

Lose Some Weight - Rides Like a Dream...But Could Shed 10 Pounds
Due To Heavy Weight Not So Easy to Transport In Vehicle
Can Be Noisy While Pedaling When Chain Contacts Metal
Pedals Need Better Gripping Surface – Foot Might Slip Off When Pedaling
Can Be Difficult To Lift Bike Onto Kickstand
Speedometer Shows Only Total Mileage & Current Trip – No Date/Time/Avg. Speed etc.

I have to tell you that reviewing this e-Bike has been a nothing short of a total blast. After spending a month with it, I have some inside secrets and tips that will help you get the most out of your A2B Octave riding experience.

1. Nothing puts more of a load on the battery than using it from a standing stop— or flooring the throttle up a steep hill (although it's really tempting to do just that on those steep inclines - LOL).
2. Speaking of batteries and hills, you will notice that the battery indicator will tick down rapidly under full throttle load...only to regenerate and stabilize when returning to normal cruising. Don't be lulled into a false sense of security—if you're planning a big trip, charge the battery if the indicator shows 50% charge.
3. For maximum efficiency and enjoyment riding e-Bikes, learn to find your sweet spot of comfortable pedaling gear while giving just enough acceleration to find your own speed. In other words don't go full-throttle just because you can...get a little exercise in as well!
4. By the way, the super fat 20" x 3" "Kenda Kraze" road tires are puncture resistant with casing added protection, and should be filled to 40 PSI (that's more than your car tire) and they really give the Octave a solid sweet ride combined with the shock-absorbing front & rear suspension system.



Left shows the powerful 500 watt rear hub brushless silent motor – these Kraze tires can handle!

A2B

The Control Center & Speedometer Explained



A – Reset Button

B – Mode Button

C – Charge Indicator

(represented by small black rectangular boxes around top of display)

D – Speedometer (displays mph or km/h)

E – Odometer / Tripometer

What You Should Know About the A2B Company

A2B has been building, designing, and researching e-Bikes since 2003. If you've never heard of the company A2B, you should know they are the global leader in the Electric Bike (e-Bike) market. Like I mentioned at the beginning of this review, they are just re-launching in the United States, but in India (world headquarters) along with the UK, they are huge. Their local U.S. headquarters are based in San Francisco. I know this may sound confusing, but here it goes: In 2011, HERO Eco, part of the HERO Eco Group, bought the A2B brand from Ultra Motor. What this means is buying an e-Bike from A2B means you are going to get great service and support, and a company that makes their own motors and components (engineered in-house) for maximum performance. In fact, A2B has subsidiaries in the UK, USA and Germany and is present in more than 30 countries through its network of distributors in Europe, Asia, Africa and America.



Conclusion & Warranty

There is no doubt in my mind anybody would love to ride the new 2013 A2B Octave! The question is—is it the right kind of e-Bike for you? The only way to determine that is based on your level of conditioning, experience riding bikes, the type of commute you will primary use the bike for, and budget. First check their site to see if you have an A2B dealer in close proximity...then go down to take a test drive. By the way the warranty is pretty inclusive; the Metro/Octave comes with a five year frame warranty, a two year warranty covering electronics and motor, and a one year warranty on the Li-Ion battery.



If there were one thing I could add to this model, it would be Regenerative Pedaling added to the feature list—and it wouldn't surprise me if A2B is already working on it for their 2014 models!

For more information about either the A2B Company or the 2013 A2B Metro/Octave e-Bike, as well as other models, authorized bike dealers, and accessories, be sure to visit their site at www.weareA2B.com.

Bruce Pechman, The Musclemen of Technology® (Musclemen of Technology, LLC), is a Consumer Technology and Fitness Personality appearing regularly on "Good Morning San Diego" (KUSI-TV) and the KTLA Morning Show in Los Angeles. Bruce's moniker reflects his 20 years of industry technology expertise, and 35 years of fitness training. He has made over 300 live TV appearances on major network television. But, whether his bicep peaks are 18" or 19" still remains a mystery. Visit him at www.mrbicep.com