



AN ELECTRIC BIKE IS MUCH MORE THAN A BICYCLE

It is primarily one that uses a battery-powered electric motor for assisted propulsion. Most E-Bikes are called "Pedelec" or pedal-assisted, which means they help the rider on any terrain when they pedal.



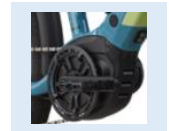
E-Bikes produce little noise and no exhaust fumes allowing you to focus on enjoying the ride while exploring 2, 3, or more times your typical riding distances. E-Bikes offer an incomparable riding experience and need to be test-driven to understand why there are over 300 million E-Bikes worldwide with a US market growth rate of over 200%.

Currently there are three primary E-Bike motor types you should consider:

Hub mounted direct drive brushless electric motor (lowest cost)



Hub mounted gear drive brushless electric motor (best all-around)



Mid-drive motor located at the bottom bracket/pedal crank (highest torque)

E-Bikes offer many advantages over standard bicycles; it assists the rider over hills and rough terrain while reducing stress on joints. You can ride with greater precision and power than a regular bike, translating to improved safety. Additionally, you can take much longer rides without physical exhaustion.

A rider does not have to give up riding with their friends if their physical prowess wains; they can now use an E-Bike to keep up with the traditional bike riding group. Everyone can achieve a great work-out with less effort.

E-Bikes are also a terrific low-carbon transportation method allowing commuters to ditch their car for an E-Bike while in many cases improving the quality of their life while receiving exercise and speeding up your commute to work!

The E-Bike revolution will continue to grow as people discover or re-discover their love of being outside and riding for exercise, exploration, performing errands, or commuting to work. The Federal Government and many states and towns are modifying their restrictions on E-Bikes, and soon we will be able to responsibly ride our E-Bike anywhere following the rules of the road.

We recommend all bicycle riders wear an approved helmet, proper shoes, and a 700+ lumen headlight and rear lights that can be selected to rapidly flash, which offers the highest visibility to oncoming drivers with who we all share the road. Reflectors located on the pedals and attached to the wheel spokes also are very effective in keeping you visible to others, especially at night. Sunrise and sunset are still the most dangerous times to be on the road for all vehicles due to shading and sun glare. If we are riding or driving our cars, we must remember to be vigilant and always consider sharing the road with walkers, runners, cyclists, and motorcyclists.



E-BIKE BATTERY TECHNOLOGIES:

Lead-acid battery technologies are still used in developing countries. They will soon be replaced with lithium-ion chemistries, with the standard becoming lithium iron phosphate due to their weight and safety. Voltages started with 24V to 36V now to mostly 48V with some 52V and as high as 72V. These new chemistries and voltages require state-of-the-art battery management systems, cadence, or preferred torque sensors that maximize performance (discharge speed and range) while maintaining battery/system life.

CYCLING FOR HEALTH AND FITNESS:

It only takes two to four hours a week to achieve a general improvement to your health. *Cycling can be:*

- ◇ Low impact – it causes less strain and injuries than most other forms of exercise.
- ◇ A good muscle workout– cycling uses all the major muscle groups as you pedal.
- ◇ Easy – unlike some other sports, cycling does not require high levels of physical skill. Most people know how to ride a bike and, once you learn, you don't forget.
- ◇ Good for strength and stamina– cycling increases stamina, strength, and aerobic fitness.
- ◇ As intense as you want– cycling can be done at very low intensity to begin with, if recovering from injury or illness, but can be built up to a demanding physical workout.
- ◇ A fun way to get fit– the adventure and buzz you get from coasting down hills and being outdoors means you are more likely to continue to cycle regularly, compared to other physical activities that keep you indoors or require special times or places.
- ◇ Time-efficient – as a mode of transport, cycling replaces sedentary (sitting) time spent driving motor vehicles or using trams, trains, or buses with healthy exercise.

HEALTH BENEFITS OF REGULAR CYCLING:

Cycling is mainly an aerobic activity, which means that your heart, blood vessels, and lungs all get a work-out. You will breathe deeper, perspire, and experience increased body temperature, which will improve your overall fitness level.

The health benefits of regular cycling include:

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| ◇ increased cardiovascular fitness | ◇ increased muscle strength and flexibility |
| ◇ improved joint mobility | ◇ decreased stress levels |
| ◇ improved posture and coordination | ◇ strengthened bones |
| ◇ decreased body fat levels | ◇ prevention or management of disease |
| ◇ reduced anxiety and depression | ◇ socialization |

Cycling may harm your lower back and doesn't work-out your upper body, as well as other exercises do. It is imperative to work with a qualified cycle shop to ensure you purchase a bicycle designed for your body type and size; it will be the desired bicycle type and within your budget.

Please consider visiting a local E-Bike dealer or manufacturer and schedule a test ride to confirm if an E-Bike can help you start or get back into cycling.