ALTEREGOBIKES.COM

SIDEKICK TRAIL V2

USER MANUAL

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2. INTRODUCTION

Welcome!

Thank you for purchasing an Electric Bike from Alter Ego. We take pride in bringing you a quality product that will offer you years of enjoyment.

Alter Ego Electric Bikes are lithium ion battery powered, and feature zero emissions and overall advanced performance. Alter Ego Electric Bikes offer a safe and fun experience for the rider, while also protecting the environment.

Using this manual

This manual contains details of the product, it's equipment, and information on it's operation and maintenance. Read it carefully and familiarize yourself with the Electric Bike, before using it, in order to ensure safe use and prevent accidents or injury. Be sure to retain this manual as reference for product knowledge and safe riding.

The manual includes cautions concerning the safe operation, and consequences if safe operation is not performed, in respect to operation and maintenance of this product. All information in the manual should be carefully studied, and if you have any questions, you should contact Alter Ego Electric Bikes, toll free, at 1-888-561-5330. The notes, warnings, and cautions included within the dotted red boxes, as shown to the left, should be given special care when reviewing, as they are directly related to hazardous or dangerous situations, if not avoided.

While this manual acts as a guide for proper use, it is impossible to anticipate every situation or condition which can occur while riding. This manual makes no representation about the safe use of the Electric Bikes under all possible conditions. There are risks associated with the use of a bicycle which cannot be predicted or avoided, and which are the sole responsibility of the rider. Please save this manual, along with any other documents that were included with your Electric Bike, for future reference, however, all content in this manual is subject to change or withdrawal without notice. Alter Ego makes every effort to ensure the accuracy of this document and assumes no responsibility or liability for any errors or inaccuracies that may appear herein.

PARTS DESCRIPTION

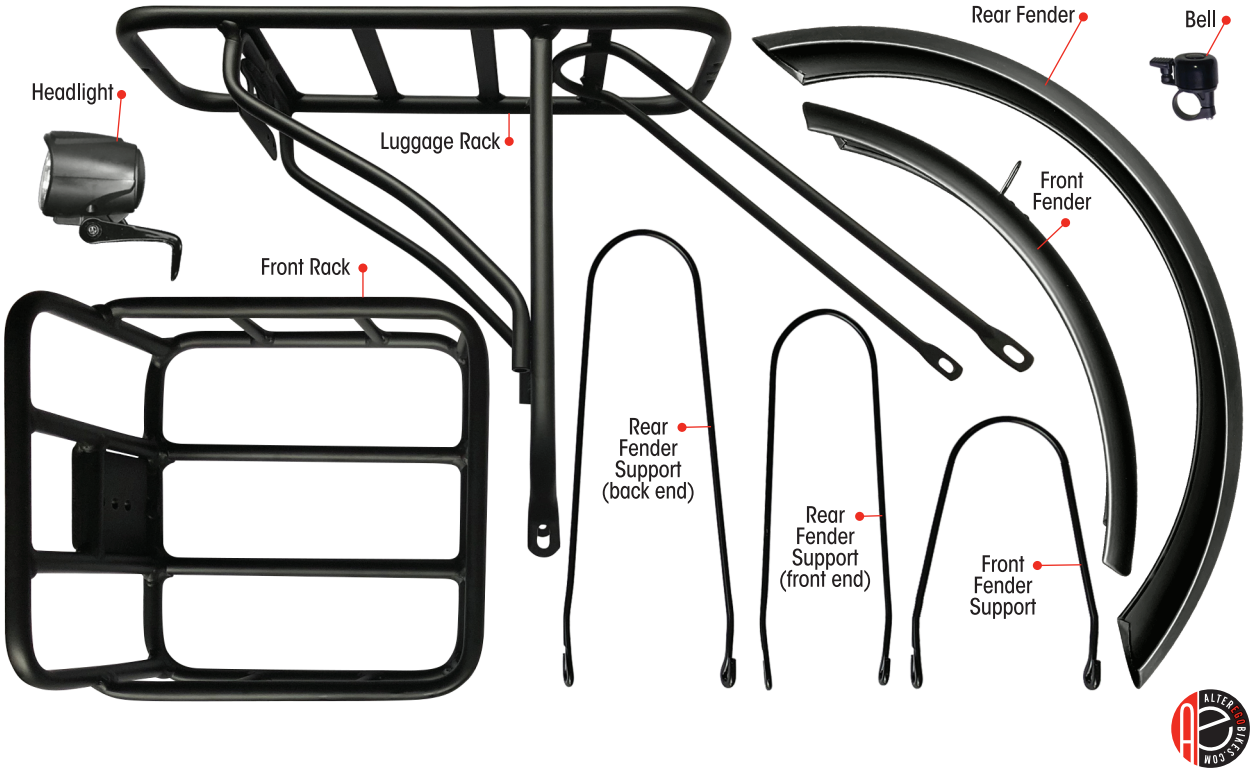
SIDEKICK TRAIL V2

COLOR OPTIONS: Super Blue | Matte Red | Matte White | Matte Black

1. MXUS 500W Brushless Geared Rear Hub
2. Samsung 48V Lithium Ion Battery (Seat Post)
3. 160mm NUTT/JAC Mechanical disc brakes
4. 20" Alloy Sport Wheels (Black)
5. CST Operative 20" x 2.4" Tires
6. Folding pedals
7. Shimano 7-speed Derailleur
8. Kunteng LCD display with 5 level iPAS & Cruise Control
9. Adjustable, foldable Stem
10. Weibo WB800 Air Suspension Fork
11. Battery charging port
12. Front LED headlight
13. Thumb Throttle
14. Speed Sensor
15. KMC rust-resistant chain
16. Aviation Grade 6061 Aluminum Alloy foldable frame

4. ASSEMBLY INSTRUCTIONS

Parts List (continued...)



Parts List

A-Bolts

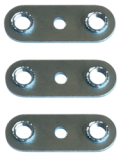
Small Washers

C-Bolts

Large Washers

Brackets

Bolt Plates



B-Bolts

E-Bolt

D-Bolts

Acorn Nut

NOTE: Hardware provided in your box will vary, depending upon which accessories were purchased. Unnecessary hardware will NOT be included.

6. ASSEMBLY INSTRUCTIONS

Handlebar & Stem

Open the height adjustment clamp on the top of the stem (stem is folded down in transport). Slide the handlebar tube into the folded stem, being sure to index the notch in the tube. tighten the clamp.

Raise the handlebar to the upright position and secure in place by raising up the locking lever.

NOTE: Locking Lever must first be in down position when straightening up the stem, and then raised up to tighten.

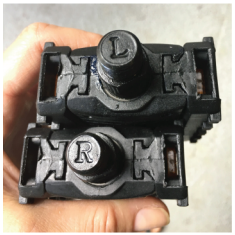
Secure the locking lever by rotating the locking ring until it locks around the outside edge of the locking lever.

Attaching Front Rack & Headlight

Mount the **Front Rack** by inserting three **C-Bolts**, fitted with **Large Washers**, through the **Front Rack** bracket holes, and screwing into the bolt holes on the front of the bike.

Attach the **Headlight** to the **Front Rack** by inserting an **E-Bolt** through the **Headlight** bracket and the **Front Rack** mounting hole, and affixing a **Large Washer** and **Acorn Nut** to the end of the bolt. Tighten with tools provided.

Pedal Assembly



Unwrap the pedals, and take note of the indication of left (L) and right (R) on the threaded end. Left side pedal screws in counterclockwise. Right pedal screws in clockwise.

NOTE: It is recommended that you brush the pedal screw threads with an Anti-Seize lubricator.

Attaching the Front Fender & Headlight

To attach the **Front Fender**, you will first need to attach the fender support to the fender itself. Align the **Front Fender Support** between the two holes on the fender. Slide two **D-Bolts** through a **Bracket**, and then through holes in fender.

Slide **Bolt Plate** behind fender, aligning with fender holes, and hold in place as you screw bolts into plate. Tighten with appropriate hex key, provided.

Attach the fender bracket to the back side of the top arch of the front fork. Use a **C-Bolt** and **Large Washer**. The **Headlight** can be mounted in this position, along with the fender. If a **Front Rack** is being installed, the Healight will be mounted to the front of that rack.

Use **A-Bolts** and **Small Washers** to affix the fender support arms to the sides of the front fork, as shown.

8. ASSEMBLY INSTRUCTIONS

Attaching the Rear Fender

Attach **Rear Fender Supports** to the **Rear Fender**, in the same way as shown for the **Front Fender** (page 7).

NOTE: The front end of the **Rear Fender** has the **Fender Support** holes closer to the end of the fender. The **Fender Support** that goes in this position is the shorter of the two.

Affix the **Rear Fender Support (back end)** to the bolt holes on the bike frame as shown, using **A-Bolts** and **Small Washers**. If NO **Luggage Rack** will be mounted, Use **A-Bolts** and **Small Washers** to affix the **Rear Fender Support (front end)** to the remaining bolt holes on the bike frame. If a **Luggage Rack** is being installed, leave the **Rear Fender Support (front end)** unattached for now.

Attaching the Luggage Rack

Using two **A-Bolts**, and two **Small Washers**, attach the two front arms of the **Luggage Rack**, to the two bolt holes in the bike frame, located at the base of the seat post. See image above for reference.

Affix **Luggage Rack** to the bike frame by sliding a **Small washer** onto a **B-Bolt**, and using it to screw the **Luggage Rack** and **Rear Fender Support (front end)** into the bolt hole on the bike frame. Repeat on other side. Take note of the placement of the **Luggage Rack** support on the left side of the bike (as shown).

Seat Post Battery

The Battery is contained within the seat post of your Sidekick Trail. To connect the battery to the bike, screw the end of the coiled cord, protruding from the bottom of the seat post, onto the connection on the underside of the bicycle frame.

SEAT POST BATTERY LOCK

Seat post Lock

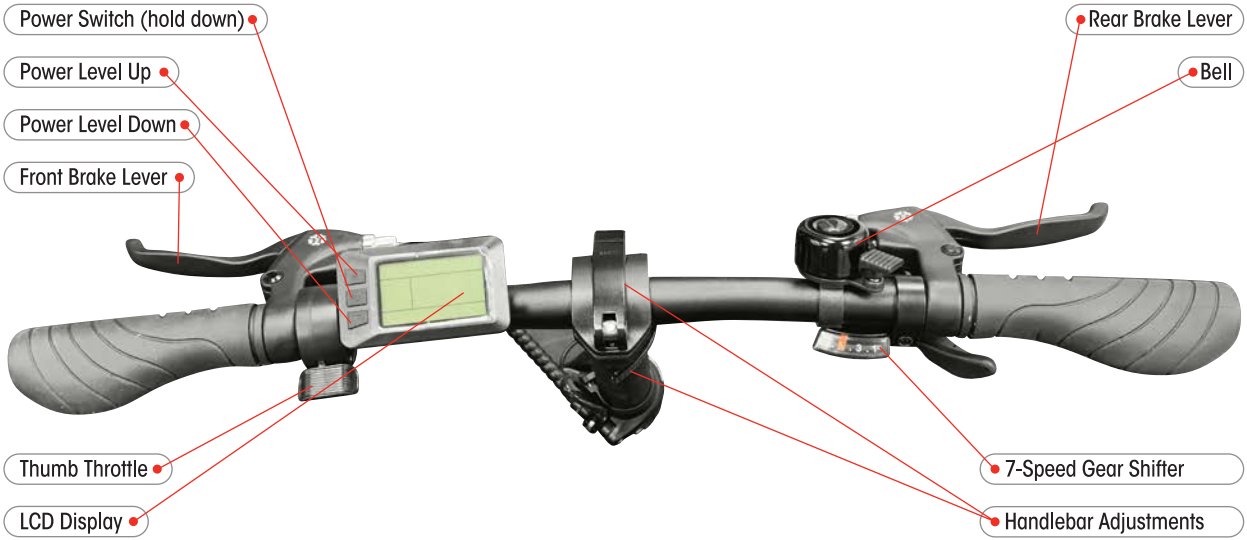
The Lever on the top of the Seat Post tube is used to adjust the seating position. This lever also has a lock incorporated into it, to protect your battery from theft. To adjust the seat height, simply open the lever, slide seat post up or down, and close lever.

To lock the lever in place, simply press down the pin on the top of the lever (as shown).

To unlock, insert the key provided, indexing the tab on the key end with the notch in the key hole. Turn counter-clockwise a quarter turn, and back to starting position. Remove key. You will know the lever is unlocked when you see the pin has popped back up.

There is a wrench tool included on your key ring. This is used to adjust the tension on the lever, in case the lever is too loose or too tight. to adjust, first open the lever. Insert the wrench end in the back side of the lever, beside the hinge, and turn to tighten or loosen.

10. HANDLEBAR COMPONENTS



For more detailed information regarding the use of the Intelligent LCD Display, Please refer to the manual entitled "LCD Display Manual".

Important tips while riding

1. In order to reduce battery power consumption, increase control, and extend the lifespan of the motor, use the pedals during startups and uphill climbs.
2. Do not twist the throttle too fast. Then accelerate slowly, reducing battery power consumption, and risk of damage to the electrical system.
3. To increase security and reduce battery power consumption, it is advised to avoid sudden stops and startups by using the pedals.
4. While driving, avoid using the throttle as you brake, as this may damage the motor.
5. The maximum load is 136 kg (300 lb).

Important tips when parking

1. When pushing the vehicle manually, turn off the power, to avoid accidental acceleration, and accidents.
2. It is recommended to park indoors.
3. In a public place, the bike must be parked in accordance with local traffic rules.
4. Do not forget to switch off the power.

12. BATTERY CHARGING

Battery Charging

1. The battery can be recharged on or off the bike.
2. Remove the battery by unscrewing the coiled cable (on the base of the seat post) from the bike frame. Then loosen the seat clamp and slide the seat post out of the frame.
3. The charger will automatically stop once the battery pack is full.
4. Always charge in dry conditions, and indoors, away from direct sunlight.
5. Check charger cables, charger, and battery, for damage, before beginning each charge.
6. Do not store the battery for long periods of time without expelling and recharging. Lack of use could shorten the life of the battery.

When the battery is removed

1. When the battery is removed, do not touch the metal contacts, especially with wet hands or metallic objects.
2. Place the charger in a flat, secure place, and connect the outlet plug to the socket in the battery box.
3. Connect the input plug (110V/220V wall terminal) to the power outlet, and the charging will start.
4. After the charging has finished, first, unplug the input plug (110V/220V wall terminal), and then the output plug (socket in the battery box).

Charging tips

1. Keep the charger in a safe place, away from children.
2. Do not charge the battery with any other charger than that which was provided with the bike.
3. The charger works with 110V/220V.
4. Do not tamper with, or open, the charger unit.
5. Avoid charger contact with liquids and/or metal objects.
6. Always be sure the charger is safely stored/placed to avoid possible damage from a fall/impact.
7. When in use, the charger should not be covered, to prevent overheating, damage, or fire.
8. The charger is for indoor use only. Please keep it in a dry and well ventilated area.
9. If you notice a strange smell coming from the charger, or it is hot to the touch, stop charging IMMEDIATELY and contact Alter Ego Electric Bikes.

14. ADDITIONAL CHARGING INFO

When the battery is charging on the bike

1. The battery can be charged on or off the bike.
2. Plug the output lead of the charger into the socket of the battery case.
3. Plug the AC power input plug into the 110V/220V household power socket to start charging.
4. After charging, unplug from the wall outlet first, and then from the bike charger socket.

NOTE: Always charge your battery at temperatures between 50 and 80 degrees Fahrenheit (10 and 27 degrees Celsius), and ensure battery is not damaged before charging.

Duration of charging

1. When the battery is charged for the first time, it should be allowed to charge for 8-10 hours.
2. When the charger is plugged in, the indication light on the charger will be red, showing that the power is connected.
3. When the indication light on the charger turns green, it means that the battery is fully charged. At this point it will switch to trickle charge mode in order to ensure that over-charging will not occur. It takes 2-8 hours for normal charging.
4. Place the charger in a flat, secure place, and connect the outlet plug to the socket in the battery box.
5. Charging should not be more than 24 hours, in order to preserve the lifespan of the battery.

Basic maintenance checklist

To ensure safe riding conditions, you must properly maintain your bike. You should follow the basic maintenance checklist below, and see your certified local bike shop seasonally, to ensure your bike is safe for use.

1. Normal operation of the light, brake, and power cut system.
2. Tire pressure.
3. Condition of tires.
4. Tightening and correct operation of both wheels, frame, and front fork.
5. Battery charging level.
6. Braking system adjustment and correct operation.
7. Gearshift correct operation.
8. Bell and reflector conditions and correct operation.

Maintenance and cleaning tips

1. Do not wash with high pressure jets, to prevent water infiltration into the electrical system.
2. Dirt on painted surfaces should be removed with a neutral product, then wiped with a dry cloth.
3. Lubricate the bike (chain, pedal spindle, brake and derailleur cables, derailleur assemblies), with suitable lubricant, after washing.
4. Do not apply lubricant on the brakes, brake levers, rims, tires, battery, and controller.
5. If you do not use the bike for long periods of time, charge the battery at least once a month to avoid reducing it's lifespan.

16. EXTENDING YOUR RANGE

Saving battery power and extending your range

Frequent braking and starting, riding uphill, riding against strong wind, starting from a standstill, riding on rough or muddy roads, and carrying more than one person or heavy loads, will consume extra battery power and shorten the range. Here are a few tips for prolonging the life of the battery in these conditions:

1. Frequent braking: try to look ahead and coast, rather than stop and go frequently.
2. Riding uphill, or against a strong wind: pedal to supplement the battery power.
3. When starting from a standstill: use the pedals to help bring you up to speed.
4. When the battery meter indicates that the voltage is low, switch to manual power and avoid using the battery to preserve battery power.
5. If the battery is being stored, remove the battery from the bicycle and recharge it once a month.

	Problem	Possible causes	Most common solution
1	It doesn't work	1. Insufficient battery power 2. Faulty connections 3. Battery coiled cord not plugged in under frame	1. Charge the battery 2. Clean the connections 3. Plug in battery coiled cord
2	Irregular acceleration and/or reduced top speed	1. Insufficient battery power 2. Magnetic Speed Disc is out of range 3. Damaged throttle	1. Charge the battery 2. Move disc closer to Sensor 3. Contact an Authorized Service Center
3	When powered on, the motor doesn't respond	1. Loose wiring 2. Loose throttle magneto 3. Loose or damaged motor wiring plugs	1. Repair and/or reconnect 2. Contact an Authorized Service Center 3. Contact an Authorized Service Center
4	Reduced range	1. Low tire pressure 2. Low or faulty battery charge 3. Driving on too many hills, braking, departures, and/or excessive load haul 4. Battery discharged for long period of time without regular charges, aged or damaged	1. Adjust tire pressure 2. Check the connections and/or fully charge the battery 3. Help conserve power by pedaling 4. Replace the battery
5	The battery won't charge	1. Charger not well connected 2. Battery cases fuse blown 3. Battery wiring disconnected, or with bad contact	1. Adjust the connections 2. Replace the Charger 3. Replace the Charger

The load haul is related with road, road surface, times of start-up, times of braking, wind direction, atmospheric temperature, air pressure in the tire, and correct way of charging. Please note this while driving.

18. SPECIFICATIONS

Product name: Sidekick	Continuous output power: 500W	Brakes: 160mm NUTT/JAK disc brakes
Model name: Trail V2	Motor efficiency: ≤78%	Rims: 20" Aluminum Alloy SPORT
Size: 62.9"x23.3"x44.1"	Rated RPM: 310±10r/min	Tire: CST Operative 20" x 2.4"
Folded Size: 32.6"x18.9"x27.5"	Rated voltage: 48V	Chain wheel: Prowheel 52T
Wheelbase: 43.5"	Max. torque: 75N.m	Free wheel: Shimano 14-28T
Net weight: 48lb	Overcurrent protection: 15±1A	Derailleur: Shimano 7 Speed
Range: 50km (PAS)*	Low-voltage protection: 30±1V	Chain KMC Rust resistant
Max. load: 300lb	Kwh: ≤1.2Kw.h	Handle bar: Promax
Max. speed: 32kph	Modes: 5 levels	Display: Kunteng LCD
Charging time: 6 hrs (2A charger)	Tire diameter: 20"x2.4"	Controller: Kunteng Sine Wave 20A FOC
Battery type: Samsung lithium-ion	Frame: 6061 Aluminum Alloy Foldable	Brake levers: Aluminum Alloy e-bike lever
Battery capacity: 48V 10.5Ah	Front Fork: Weibo WB800 air suspension fork w/hydraulic lock-out/air lock-out (rebound adjust) 80-120mm travel.	Saddle: KNUS
Noise: ≤62 dB(A)		Pedals: Foldable pedals
Motor: MXUS brushless geared DC		Shipping box size: 64"x11"x27"
Max output power: 900W		

*Range quoted is based on estimated use at Level 1 PAS. Range will vary depending on terrain, weight of rider & cargo, weather conditions, etc.

Actual product may vary slightly from the pictures on our website.

When operating any bicycle, you expose yourself to some degree of risk; an electric bicycle is no exception. In order to ensure the best, and safest, riding experience, it is wise to learn all you can about product safety precautions, and determine to operate the bicycle in a safe manner.

The Alter Ego Sidekick Trail is a stylish way to meet your short-distance travel needs. Check your local laws and regulations in regards to the lawful operation of an electric bicycle, and be sure to obey them.

Safety warnings:

- Warning! Brakes will heat up while riding. Do not touch the brakes after use.
- Do not ride in crowded areas.
- Always pay attention to your own, and others', safety when riding.
- Use the electric bicycle for it's intended purpose only.
- Do not attempt to modify the Electric bicycle.
- Do not allow hands, feet, hair, or any other such body parts to touch rotating parts, such as wheels, brakes, motor, while riding.
- Please proceed with caution when riding on wet pavement and/or uneven road.
- Please refer to the user manual for information regarding the electric system specifications and services.
- It is not recommended to ride in dark places at night.

20. SAFE USAGE

Safety warnings (continued...)

- It is not recommended to ride on snow and/or ice.
- It is recommended to ride on flat, hard, dry, and clean cement or asphalt roads.
- Please avoid riding on water, sand, gravel, broken pavement, and rainy weather (which affects the brakes and visibility).
- Always wear helmet, gloves, kneepads, elbow pads, and any other safety equipment, to ensure maximum safety while riding.
- Always look the bike over, to check for maintenance issues or loose and/or broken parts, before riding.
- It is not recommended to climb or descend a grade of more than 15 degrees.
- User should stay aware of the performance of the brakes. Always begin braking earlier when riding downhill, or on slippery surfaces.
- User should avoid rapid acceleration or deceleration, so avoid excessively thrusting the body backward or forward.
- When battery power is running low, please operate the bike in low speed, and charge the bike as soon as possible.
- If you find yourself at risk of falling off the bike, focus on protecting yourself before the bike! Adhere to the "human safety priority" principle.
- Do not put your hands in your pockets while riding.
- Take initiative to understand, and comply with, local traffic laws and regulations in regards to electric bicycles in your area.
- Pay attention to the surrounding people and objects to avoid collision.

Safety warnings (continued...)

- Always operate at a safe speed for yourself, and for those around you.
- Respect the right of way of pedestrians. Do not frighten them, or risk running into them. Slow down and alert any pedestrians of your presence using your bell.
- Keep a safe distance from other bicycle riders. Do not ride side by side unless there is sufficient room to allow for pedestrians, and/or other traffic, to get around you.
- Do not ride in poor lighting conditions. If you must, slow down and exercise additional caution.
- Please avoid riding backwards as it is very dangerous. If you absolutely must move backwards to move out of the way of another vehicle or rider, limit yourself to walking the bike backwards only a couple of steps.

Active safety protection measures

- Before using, make sure that all locking parts are locked in place. (Follow the instructions to install, to avoid causing injury.)
- Check that all screws and nuts are tight before use, to avoid injury.
- Make sure tires are in good shape, are not worn down, and are inflated appropriately.
- Check that the axle protective cover, and all other protective equipment, are in correct position before use.

22. USEFUL TIPS AND WARNINGS

Useful tips

1. This user manual should be used only to reference use and functions, but should not be used as a reference for inspection.
2. The images shown may differ from the actual model purchased.
3. We reserve the right to change the model without prior notice.
4. The bicycle has a top speed limiter. For safety purposes, the removal of the top speed limiter is strictly prohibited.
5. Ensure pre-ride checks are performed before each and every ride.
6. Only allow others to ride who have been adequately trained on the use and operation of this product.

General warning

Like any sport, bicycling involves risk of injury and damage. By choosing to ride a bicycle, you assume the responsibility for that risk, so you need to know, and to practice, the rules of safe and responsible riding, and of proper use and maintenance. Proper use and maintenance of you bicycle reduces risk of injury. Your bicycle is designed for use by persons 16 years old and above. Riders must have the physical coordination, reaction time, and mental capacity, to ride and mag age traffic, road conditions, sudden situations, and also respect the laws governing bicycle use where they ride, regardless of age. If you have an impairment or disability, such as a visual impairment, hearing impairment, physical impairment, cognitive/language impairment, or a seizure disorder, consult your physician before riding any bicycle.

Your electric bicycle is for use by persons 16 years old and older only. Do not let a child younger than 16 years old ride the bicycle.

Note on helmets

Make sure that your child always wears an approved bicycle helmet when riding; but also make sure that your child understands that a bicycle helmet is for bicycling only, and must be removed when not riding. A helmet must not be worn while playing, in play areas, on playground equipment, while climbing trees, or at any time while not riding a bicycle. Failure to follow this warning could result in serious injury or death.

Additional notes for parents

As a parent or guardian, you are responsible for the activities and safety of your child, and that includes making sure that the bicycle is properly fitted to the child; that it is in good repair and safe operating conditions; that you and your child have learned and understand the safe operation of the bicycle; and that you and your child have learned, understand, and obey, not only the applicable local motor vehicle, bicycle, and traffic laws, but also the common sense rules of safe and responsible bicycling. As a parent, you should read this manual, as well as review it's warnings and the bicycle's functions and operating procedures with your child, before letting your child ride the bicycle.

24. WARRANTY INFORMATION

For warranty information, and to register your product, please visit www.alteregobikes.com.

WARNING: IT IS STRONGLY ADVISED THAT YOUR BIKE BE ASSEMBLED AND TUNED BY A PROFESSIONAL BIKE MECHANIC, TO ENSURE OPTIMAL SAFETY AND PERFORMANCE.

#RIDEITLOVEIT