

# ET4-RIO

## *ELECTRIC SCOOTER USER GUIDE*

*(English version)*



Read this manual in full before using your Scooter.

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## FOREWORD

Le ET4-RIO is a vehicle for personal transportation of attractive design, environmental friendly, powered without fossil fuels and integrating these cutting-edge design components powered without fossil fuels and integrating these cutting-edge design components:

- ⇒ Powerful high torque motor.
- ⇒ Controller with battery indicator and against frenzy and under voltage protection.
- ⇒ Brake system with current or magnetic switch for safe rides.
- ⇒ High efficiency battery, for more current and extended route.

## SECURITY FOR THE WALKS

As in any sport, There is the risk of injury and damage. By choosing the ET4-RIO, You assume all responsibility for these risks. You must know and practice safe and responsible ride rules.

YOUR INSURANCE COVER - POSSIBLE LIE WITH THIS TYPE OF VEHICLE ACCIDENTS. TO DETERMINE IF THIS COVERAGE IS PROVIDED, PLEASE CONTACT YOUR INSURER OR AGENT.

### **Basic safety principles: do and Don'ts**

#### To do:

- Always perform a security check before a ride with you ET4-RIO . Familiarize yourself with the controls of your ET4-LIBERTY.

- Always maintain the parts of the body and other objects away from the rotating wheels of your ET4-RIO .
- Always wear well-fitted shoes at your feet and who will adhere well to the floor of the vehicle.
- Wear bright, coloured clothing that is sufficiently adjusted not to be snagged by moving parts of the ET4-RIO or by objects along the road or trail.

Think about your speed and keep it consistent with safe operating conditions.

To avoid:

- Never use headphones while strolling. Traffic noises are less audible and the headphones can distract you from your surroundings. The wires can become entangled in the moving parts of the ET4-RIO, causing a loss of control.
- Never carry a passenger. The maximum load is 300 lbs.
- Never climb aboard barefoot or in sandals.
- Do not jump with vous ET4-RIO. This made exceed the maximum tolerances of the chassis, the forks and the transmission. Drivers who continue to blow their ET4-RIO risk of seRIO us damage to the vehicle and to themselves.
- Never carry items which are likely to obstruct the vision or your complete control of the ET4-RIO, or which could become entangled in the moving parts of the ET4-RIO.
- Never cling to another vehicle (hitchhiking).
- Never operate your ET4-RIO under the influence of alcohol or other substances.

- If possible, do not use in bad weather, when your visibility is uncertain, at dusk or at night, or when very tired. All of these conditions increase the risk of accidents.
- Never allow children to operate the vehicle.
- Never allow others to drive without having read and understood these instructions.

### **Reminders and suggestions of operation**

- Read all the instructions carefully before driving the ET4-RIO.
- Comply with any laws and regulations in your area regarding the operation of a motor vehicle. Comply with the same laws as for any other vehicle on the road, including giving way to pedestrians and stopping at traffic lights and stops. Drive in a predictable and straight line. Never drive in the wrong direction.
- Adopt a defensive driver. You are possibly not very visible to other drivers.
- Concentrate on the floor in front. Avoid potholes, the gravel and dirt, wet roadways, oil, chains, road retarders, sewer screens and other obstacles.
- Be alert to the unexpected, such as the sudden opening of car doors or cars receding from hidden entrances.
- Be more vigilant at intersections and when you plan to overtake another vehicle.
- Familiarize yourself with all the elements of the bicycle. Practice the use of the flashing lights, brakes and the use of the horn.
- Do not carry parcels or passengers that will adversely affect the visibility or control of the bicycle. Do not use items that will harm your hearing.

- Maintain a comfortable stopping distance from any other vehicle and object. Safe braking forces and distances are subject to current climatic and road conditions.

## **Riding in the rain**

Rain conditions affect traction, braking and visibility for the driver and for other vehicles that share the road. The risk of an accident increases dramatically with the rain. Under these conditions it is important to be more vigilant. On a wet roadway, the stopping power of the brakes (as much as the brakes of other vehicles that share the road) is dramatically reduced. So it's harder to control the speed and easier to lose it. To ensure that you can slow down and stop safely under rain conditions, press the brakes earlier and more gradually than under normal and dry conditions.

Reduce your speed, avoid braking suddenly and pay more attention to intersectional turns.

Be aware that there is a direct, but inverse, relationship between speed and control.

Be more visible on the road. Wear reflective clothing and use reflective lights. Potholes and slippery surfaces where track tracing and railroad tracks are more dangerous to rain.

## **Travel at night**

Car drivers hardly see scooter drivers at dusk, at night or at other times of reduced visibility. If a trip under these conditions is necessary, be sure to comply with any local regulations applicable to night shifts; Follow the road code, and take the following precautions:

Make sure your ET4-RIO is equipped with well-mounted and located reflectors. Make sure that no clothing or baggage

obstructs a reflector or light. Make sure the front headlights are working.

Wear pale reflective clothing and accessories; Any reflector or mobile light item will help attract the attention of drivers, pedestrians and other traffic.

Drive slowly. Avoid hazards such as potholes and chains. Avoid major traffic areas, poorly lit areas, and roads that allow a speed greater than 35 MPH. If possible, take the known roads. Run at night only if necessary. Slow down and take the known and well-lit roads if possible.

## **Other reminders**

The ET4-RIO operates in an optimum way on level terrain. Be vigilant in descent, such as a hill or ramp. The ribs and frequent acceleration/braking repetition deplete the battery more quickly.

The ET4-RIO is equipped with an electrical switch system for the brakes. When one of the brakes is used, the throttle lever is non-functional. Release the throttle lever before braking. Do not "surf" the brakes.

It is not necessary to perform a discharge for the battery. When you storage your ET4-RIO, you just charge the battery every 30 days.

Do not store your ET4-RIO in direct sunlight for an extended period of time. Store your ET4-RIO in a dry place. Exposing your ET4-RIO to snow, rain or other precipitation can damage it.

## **EMI warning (electromagnetic interference)**

The scooter may be subject to electromagnetic interference (EMI), these sources of interference may be emitted from radio stations, television stations, amateur radio sets (HAM), two-way radio and cell phones. Interference (from radio waves) may cause the brakes to release, start up or change direction unexpectedly.

It can also damage the control system permanently. EMI emission sources can be classified into three genera:

- 1.** Hand transmitter (transmitter-receiver) with antennas installed directly on the transmission unit. Examples: Band Radio (CB), walkie-talkie, police and fire transmitter, cell phones and other personal communication devices. Note! Some cell phones and similar utilities transmit signals when in 'ON' mode even if they are not in use.
- 2.** Transmitter range average of the kind of those used even police vehicles, firefighters, ambulance taxis. The antenna of these devices is usually installed outside the vehicle.
- 3.** Long range transmitter, such as radio and television commercial transmitters (towers) and amateur radio (HAM). Note! Other types of handheld devices such as cordless telephones, laptops, AM-FM radios, televisions, CD-tapes and small appliances such as electric razors, hair dryers hair, can not according to our current knowledge, cause electromagnetic interference problems with your scooter.



## SPECIFICATIONS

- \* 60V 1000W DC brushless MOTOR
- \* Rear wheel drive with differential
- \* 60V 20A battery Lithium 2 years
- \* Total weight 140kg including battery
- \* Dimension 1830/1710\*730\*1300MM
- \* 2600mm turning radius
- \* 175mm minimum road clearance
- \* Autonomy ≤60km
- \* Max speed 32km
- \* 60V charger
- \* Charging time 6-8 hours
- \* 15° climbing capacity

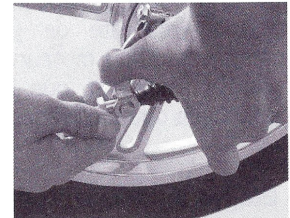
## COMPONENTS

- \* "10x 3" tires Tubeless
- \* Forward / reverse selector button
- \* Front disk brake, rear drum brake
- \* Honk
- \* Left / right turn signals
- \* Mirrors
- \* Front / rear suspension
- \* Front LED Light | Energy saving
- \* Alarm system and remote starter
- \* Circuit breaker with brake lever
- \* Parking brake
- \* Load capacity 150kg
- \* Rear storage box and space under the seat
- \* Adjustable seat and backrest

## ASSEMBLY AND SETUP

If your ET-4 RIO was removed from its carton and "set up" by retail store personnel, there is no guarantee it was properly set up. Please observe and follow this checklist, even if your ET-4 was out of its carton when you purchased it. This will ensure its safe and reliable operation.

- 1) Remove your ET-4 RIO from its shipping carton. The ET-4 RIO weighs about 150 kg, so get help, and use care. Cut away any residual packing materials with a sharp knife Or scissors.
- 2) Inflate the front and rear tires to 35 psi.
- 3) To make sure the alignment is correct, stand in front of the vehicle, using both legs to hold the front wheel in straight-forward position. Use both hands to grab the handle bar and turn it into normal driving position (90 degree angle from the front wheel).
- 4) Attach the Rear View Mirrors to the mounting holes. A wrench can be used to tighten the lock-nuts at the base of each mirror.
- 5) Check if the brakes are properly adjusted. The brake handles should stop short of touching the hand-grip, when fully engaged. The rear brake cable can be adjusted in two places:
  - At the cable end bracket, just before the lever, with 8 and 10 mm wrench adjustments, and
  - At the end of the lever, with a 10 mm nut fastener.



## NORMAL OPERATIONS

### A) Verification before ride

1) Make sure the tires are well inflated. An under-inflated tire can cause rim jamming (tube failure) and reduce the possible travel distance (per load).2) Make sure the battery is fully charged. Insufficient charging can shorten the travel distance and damage the battery.3) Check the adjustment and operation of the brakes.4) Make sure the ET4-RIO is in good mechanical working order. Inspect your vehicle visually and by hand and adjust any bolts, screws or other attachments as needed.5) With the ET4-RIO inspected visually, turn the starter and activate the throttle to check that the engine is running properly. Activate the brake to stop the engine. Check that the throttle is inoperative when one of the brakes is activated.

### B) Startup steps

- 1) Adjust the mirrors to see well behind.
- 2) Insert the key into the switch and turn OFF to ON.
- 3) The ET4-RIO is equipped with a voltmeter that indicates the level of charge to the battery. A drop in this level during acceleration is normal. An excessive drop, on the other hand, indicates a weak or defective battery. If you require a supply of an exhausted battery, it will be seriously damaged. The low voltage protector will therefore shut off the power automatically to protect the battery from further damage.

- 4) Hold the handlebars with both hands. Position yourself in a well balanced position. The right hand controls the throttle. Turn the handle slowly to avoid sudden advance. The speed will increase the more you turn the throttle. Release the throttle and apply the brakes to stop. The speed is controlled by the throttle and the brakes. When the brake lever is pressed, the throttle is turned off. For Magnetic Model just release the throttle grip to brake automatically.
- 5) Increase the acceleration and speed of the ET4-RIO by first activating the throttle gently. Try not to accelerate or brake without cause.
- 6) Return the key to the OFF position and remove it after the ride to secure your vehicle and to save the battery.

## **CARE AND MAINTENANCE OF THE BATTERY**

### **What to expect from his battery, ideally**

The battery is Lithium. With normal use, its life expectancy can reach more than 800 cycles. charge / discharge.

It is therefore advisable to charge the battery after each use. Partial discharge will require less time on chargers.

### **What to expect from his drums, actually**

The battery can maintain its performance for about 800 cycles of charge / discharge, high voltage and strong (80%) discharge. The storage capacity of the battery will decrease after 200 refills. If you charge the battery before it runs out, the battery cycles life will be dramatically prolonged.

## **In conclusion**

Always try to recharge the battery within 24 hours after use to maximize cycle life and prevent damage to the battery

## **What is inside your battery ET4-RIO**

Consisting of batteries of 60V capacity, 20 AMP-hour.

There are three points to remember, however, for battery maintenance

## **Sensitivity to battery temperature**

The ambient temperature will have an effect on any type of battery. In general, the battery discharges better at a higher ambient temperature. When the air temperature is below 0 ° F, the battery capacity will decrease by more than a third.

It is therefore natural that the ET4-RIO will not reach its normal mileage in winter or cold weather. When the ambient temperature reaches 68 ° F, the ET4-RIO will reach its normal travel capacity.

When the ambient temperature exceeds 110 ° F (for example, when exposed to the summer sun for a long time), batteries and other electrical components tend to operate abnormally.

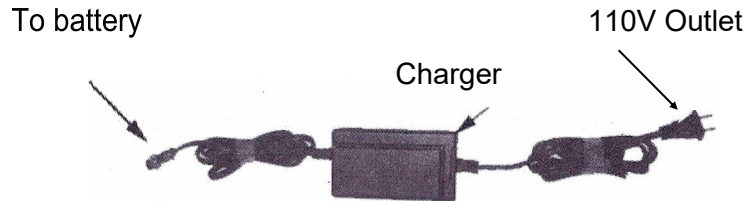
## **What does "Maximum course" mean?**

To determine the maximum path per charge of the ET4-RIO, the verification parameters were:

- Driver weight: 300 lbs.
- Air temperature: 77 ° F.
- No wind, smooth and level road, Under these conditions, the maximum course of the ET4-RIO is up to 80km.
- Frequent braking and acceleration, driving against the wind, climbing slopes or with loads, consume a lot of battery power. Under these conditions, the ET4-RIO will not reach its normal course.

## Charge the battery

- Charge the battery well if you will not use it for a long time. Ideally, it should be charged every 30 days. Even a battery in good working order will slowly discharge. The battery charge of the ET4-RIO will gradually decrease over time even if the power is turned off.
- Remember to charge the battery fully before starting your first ride. This can be low when receiving your new ET4-RIO .



- 1) When charging the battery, hold the key switch to OFF.
- 2) Check that you are using the correct charger for your vehicle, and that the power supplying your charger is compatible with the domestic power in your area.
- 3) Keep the charger and battery away from water to prevent electric shock and short circuit. The charger is designed for indoor use only.

- 4) Connect the charger cord to the adapter bracket first. Then connect the adapter to the ET4-RIO (the charger access point is located at the rear of the body). Then connect the AC cables from the charger to the wall outlet.
- 5) Read the charger label to learn about the charger LEDs and their meanings.
- 6) In general, a short course will require a short period of time to recharge, and a longer course will require more time. A full discharge (90%) may require 6 hours to recharge. To prevent electrolysis (loss of battery fluid by hydrogen generation), do not charge longer than eighteen hours.
- 7) Always connect the charger when charging.

Before making your first ride with your electric vehicle, charge the batteries for 4-6 hours. To charge, remove the protective cover from the charging access points. Then connect the charger to the charging ports, and plug the chargers into the wall outlet.

## **Important**

The electric vehicle is powered by 60V / 20Ah batteries in Lithium battery. You should charge your ET4-RIO after each use. You should charge your ET4-RIO if it has not been used for 30 days or more.

## **Warning**

Do not place the battery near a source of heat or fire. Do not expose the chargers to water.



## OTHER MAINTENANCE

Your ET4-RIO should be returned to your service dealer or your bicycle / scooter mechanic once per year for full verification and adjustment. This will ensure comfort, safety and operation life of the ET4-RIO .

### **Front and rear brakes**

The adjustment of your front brake is the same as for a regular motorcycle. It is very important to be able to brake effectively and to make sure that the battery shutter is in good working order. When the brake lever is released, the wheel should roll without resistance. If there is resistance, this will result in a loss of electrical power. You should change the brake pads when only one third of their original thickness remains.

The rear drum brake looks a lot like those installed on electric scooters. When this brake is exhausted, you hear a squeak when applying the brake.

### **Front and rear tires**

The method of replacing the front tire is the same as for the regular bicycle. The rear tire is more complex to replace due to engine and brake assemblies with associated wiring and wiring. If you are uncomfortable with this procedure, ask your service dealer or mechanic to change it.

## **Lubrication**

You should inspect and maintain your ET4-RIO and lubricate the mechanical transmission components. Brake cables may also need lubricant. Lubricate the brake cables with a silicone or graphite lubricant. Period of maintenance: one month.

Lubricate fork tube, axle edge, and axle ball bearing with SH / T0386 lithium grease for bicycle, Service interval: one year.

Lubricate fork tube, axle edge, and axle ball bearing with SH / T0386 lithium grease for bicycle, Service interval: one year.

## **Cleaning**

- 1) Never wash with a jet of high pressure water as this will damage the finish.
- 2) Never use a lubricant to clean the metal parts of the vehicle and never apply lubricant to the brake drum or the tire.

## Maintenance chart

ET4-RIO should be checked from time to time. Refer to the maintenance schedule in the following table:

Check ● Adjust ◆ Change ▲ Lubricate ■

Parts	Days	30 days	180 days
Bolts, nuts, screws etc. - to make sure everything is tight	●	● ◆	● ■
Foot support - to ensure that it is not worn	●	● ■	● ■
Tire pressure - to ensure proper tire pressure	●		
Train equipment - to ensure good position: neither too much of [eu, nor too tight	●	● ◆	● ■
Brake pads - to check wear		● ◆	● ◆
Wheel edge - to ensure there is no distortion			
Steering Assembly - to ensure there is no distortion			● ■
Headlight and housing - to ensure smooth operation	●	●	
Brake - to ensure smooth operation	●	● ◆	● ◆
Throttle - to ensure smooth operation	●		
Steering system - to ensure a normal operation	●	■	
Wheel axle - to check the game	●		■
Engine - to check the proper functioning	●	■	

If you find problems that you can not solve yourself during your inspection and maintenance, please send the vehicle to your service dealer for assistance. Never dismantle or repair the bicycle yourself. If there is a problem that will void the warranty, you will be charged a service charge.

## TROUBLESHOOTING GUIDE

Problem	Cause	Solution
Battery gauge does not signal anything when the vehicle is in operation	<ul style="list-style-type: none"> <li>a) Unfit contact near the starter switch or battery</li> <li>b) Battery is completely discharged</li> </ul>	<ul style="list-style-type: none"> <li>1) Check contacts, connect if necessary.</li> <li>2) Charge battery.</li> </ul>
Battery meter displays a signal but vehicle does not work anyway	<ul style="list-style-type: none"> <li>a) Motor wire is disconnected or needs adjustment.</li> <li>b) Defective accelerator</li> <li>c) Defective controller</li> </ul>	<ul style="list-style-type: none"> <li>1. Send to service to repair wiring</li> <li>2. Replace the accelerator</li> <li>3. Replace controller</li> </ul>
Noise of engine slamming	Magnets in the motor need adjustment	Send to customer service to replace with a new engine
Vehicle does not stop when the accelerator does not return to the original position	Defective controller or accelerator	Replace controller or accelerator. Customer service will help with the diagnosis.
Vehicle loses speed	<ul style="list-style-type: none"> <li>a) Low battery.</li> <li>b) Defective battery.</li> <li>c) Defective accelerator</li> </ul>	<ul style="list-style-type: none"> <li>1. Charge the battery</li> <li>2. Replace the battery</li> <li>3. Replace the accelerator</li> </ul>
Course per charge is reduced	<ul style="list-style-type: none"> <li>a) Low tire pressure</li> <li>b) Battery is not fully charged</li> <li>c) Damaged battery</li> <li>d) Contrevent, ribs, surcharges etc</li> </ul>	<ul style="list-style-type: none"> <li>1. Increase the tire pressure</li> <li>2. Charge battery for 6-8 hours</li> <li>3. Replace battery. 4. Reduce these factors.</li> </ul>
Battery could not be charged	<ul style="list-style-type: none"> <li>a) Filming loosened near the pointload access</li> <li>b) Filming unmatched in battery</li> <li>c) Defective charger</li> </ul>	<ul style="list-style-type: none"> <li>1. Check wiring, adjust contacts.</li> <li>2. Send to a qualified service technician.</li> <li>3. Replace charger</li> </ul>

**NOTE:** If other problems occur, do not attempt to dismantle the vehicle yourself, but rather contact the retailer or call Customer Service.

## **GUARANTEE**

The ET4-RIO is covered by a one-year warranty. This warranty covers parts and, in some cases, labor for manufacturer's defects. Breakage caused by delivery damage, accident or abuse is not covered by warranty.



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