



# GO WHERE THERE ARE NO LIMITS DO GOOD WHILE YOU GO

# ETR100C OWNER'S MANUAL

# ETRIKE USER'S MANUAL ETR100C

# **IMPORTANT:**

This manual contains important safety, performance and service information. Please read it before taking the firs ride on your eTrike.

# **NOTE:**

This manual is not intended as a comprehensive use, service, repair or maintenance manual. Please seek assistance from a qualified technician for service, repairs or maintenance.



1-844-874-5326 support@etrikecom.com www.etrikeco.com

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# INTRODUCTION

Congratulations on the purchase of your new eTrike. This manual is designed to give you the information that you need for the safe operation and maintenance of your eTrike. Please read it thoroughly before riding your eTrike.

Your eTrike's serial number is adhered underneath the VIN cap in the front interior panel. Please record it below in the event that your eTrike is lost or stolen. You may also want to register your serial number with your local police department. Please retain your sales receipt as proof of purchase and keep with the information below.

MODEL NO:
SERIAL NO:
COLOR:
DATE OF PURCHASE:

# **GENERAL WARNING**

Riding an eTrike involves risk of injury and damage. By choosing to ride an eTrike, you assume the responsibility for that risk, so it is important to know and practice the rules of safe and responsible riding, and of proper use and maintenance. Proper use and maintenance of your eTrike reduces risk of injury.

This manual makes no representation about the safe use of the eTrike under all conditions. There are risks associated with the use of an eTrike which cannot be predicted or avoided, and which are the sole responsibility of the rider. As with all vehicles, practice defensive riding to ensure your safety and the safety of others.

Electric tricycles are relatively new to the vehicle landscape. Riders are at present generally required to obey current state and local bicycle laws and regulations where they ride, in addition to relevant motor vehicle and traffic laws. These laws and regulations vary by jurisdiction. It is the responsibility of the rider to be aware of, understand and obey these laws and regulations and any changes therein as they affect the riding of your eTrike. For information on your state and local laws and regulations, contact the appropriate state and local government offices directly or visit their official websites.

Laws in your jurisdiction may not require wearing a helmet. For your safety, eTrikeCo recommends wearing a helmet and protective eye wear when operating your eTrike. Proper helmets must meet standards set by the Consumer Product Safety Commission (CPSC).

Also, for your safety and the maximum life service of your eTrike, ensure you understand and adhere to the capacities for your eTrike model including load, climbing ability and maximum range.

eTrikeCo further recommends the following resources for helpful information on riding your eTrike under current bicycle laws. (Note: eTrikeCo does not endorse or claim the information provided by these resources to be legally accurate. Please refer to your official state and local laws and regulations to ensure compliance when riding your eTrike.):

The League of American Bicyclists – www.bikeleague.org

People For Bikes - www.peopleforbikes.org

American Disability Act - www.ada.gov/opdmd.htm

# **ROUTINE INSPECTION BEFORE RIDING**

# **CAUTION**

To ensure optimal and safe performance of your eTrike, it is important to perform the following checks before every ride. Failure to do so could result in unsafe conditions, poor performance, and/or potential damage to your eTrike.

- Battery Check the battery life indicator and charge, if needed. Your eTrike can travel a
  max range of 65 miles on a full charge. To maximize use per trip, it is recommended you do
  not allow the battery capacity to decrease to less than 20%. When the battery is at 20% or
  lower, promptly charge the battery to full capacity.
  - FIRST RIDE: Charge the battery to full capacity before your first ride.
- 2. Front/rear brakes Make sure both the front and rear hand brakes engage effectively to bring the eTrike to a complete stop.
- 3. Tires Make sure all tires are at the recommended 36 psi, and that there is no damage or extreme wear that compromises their integrity.
  - NOTE: Improper tire inflation can lead to dangerous conditions including, but, not limited to abnormal tire wear, tire slippage and other compromises in vehicle performance.
- 4. Lights Make sure the headlight, front/rear turn signals, hazard lights, taillights including braking lights, function properly.
- 5. Instrument display Make sure the display for battery life, speedometer and odometer functions properly.
- 6. Horn Make sure the horn sounds when pushed.
- 7. Parking break Make sure the parking brake effectively locks and releases the brakes.
- 8. Mirrors Make sure both mirrors are properly adjusted for effective peripheral viewing on either side.
- 9. Steering control/alignment Make sure the steering column is stable and aligned, and turns properly to the left and right.

# **OPERATING YOUR ETRIKE**



Exercise due caution when operating your eTrike in inclement weather and where conditions on the road, sidewalk or other driving areas may be hazardous.

Although your eTrike is weather-resistant, prolonged exposure to moisture can potentially cause minor, temporary shut down in the vehicle's circuitry. This interruption will self-correct once the eTrike is allowed to sufficiently dry out.

AVOID taking turns sharply and at high speed. This can result in tipping the eTrike.

BOTH HANDS must be used on the steering handles at all times. Sudden and abrupt turns, not using both hands or riding in uneven terrain while operating can cause the eTrike to become unstable and tip over.

NEVER drive your eTrike through standing water! Immersion of the motor, battery or other electrical components can cause short circuits and/or serious damage to those components.

#### I. TURN ON/OFF ETRIKE

To engage the electric motor and enable the eTrike to be driven:

- **a**. Press the unlock button on the Key Fob.
- b. Hold the left hand brake and at the same time press the ENGINE START/STOP button. The eTrike will turn on.

To disengage the electric motor and turn off the eTrike:

a. Press the ENGINE START/STOP button. The eTrike will turn off.

#### II. FORWARD/REVERSE/NEUTRAL KNOB

- a. Forward Turn the knob to the DRIVE (D) position to allow the eTrike to drive forward when the throttle controller is engaged.
- b. Reverse Turn the knob to the REVERSE (R) position to allow the eTrike to drive in reverse when the throttle controller is engaged. For safety, this setting enables the reverse camera.
- c. Neutral Turn the knob to the NEUTRAL (N) position to allow the eTrike to be neutral.





Unlock.



# **OPERATING YOUR ETRIKE**

#### III. THROTTLE CONTROLLER - RIGHT HANDLE

The throttle controls the flow of electrical power to the motor which propels the eTrike.

 a. Grasp the throttle and roll it backwards/towards you to propel the eTrike.



b. Release the throttle to stop the eTrike from continuing to propel.



# **CAUTION**

Release of the throttle does NOT engage the braking system. In order to fully stop the eTrike from moving, you must engage the brakes.

**c.** The speed of the eTrike can be regulated by adjusting the amount of roll of the throttle. Full roll to the throttle's stopping point allows the eTrike to travel at the maximum speed.

#### IV. TURN SIGNAL/HAZARD LIGHTS

In the United States, bicyclists are required to use hand signals to alert surrounding traffic of their intention to turn or change lanes. Your eTrike is equipped with left and right turn signals and hazard lights which may be used in place of hand signals for this purpose. If you opt not to use the turn signals, you must instead use proper hand signals.



- a. Left Turn/Lane Change Before making a left turn or lane change, move the turn signal switch to the left. The front and rear left turn lights will blink. Press the white button in the middle of the switch to turn the light off once you have completed your turn or lane change.
- b. Right Turn/Lane Change Before making a right turn or lane change, move the turn signal switch to the right. The front and rear right turn lights will blink. Press the white button in the middle of the switch to turn the light off once you have completed your turn or lane change.



Avoid taking turns sharply and at high speed. This can result in tipping the eTrike.

c. Hazard Lights - Use the Switch located in the front panel beneath the steering wheel.



#### V. SPEED SWITCH

The eTrike comes with two (2) spped settings: Low and High. On setting Low it will reach a top speed of 18 miles per hour while on setting High it will reach the top speed of 28 miles per hour. Switch is located on the right handle controllers.



#### VI. SLOWING DOWN/BRAKING

In the United States, bicyclists are required to use a hand signal to alert surrounding traffic of their intention to slow down or stop. Your eTrike is equipped with rear braking lights which activate when you engage either hand brake, and which may be used in place of the hand signal. If the rear braking lights are not functional, you should have the eTrike serviced immediately for repair. The proper hand signal must be used if riding the eTrike without rear braking lights.

- **a.** Braking: Release the throttle and squeeze both the front and rear hand brakes with equal pressure until the eTrike comes to a full stop.
- b. Slow Down: Release the throttle and squeeze both the front and rear hand brakes with enough equal pressure to slow the eTrike down to the desired speed.

#### VII. INSTRUMENT DISPLAY

- a. Speedometer Displays your current speed.
- b. Battery Life Indicator Displays the current battery life graphically, in percentage and voltage.
- c. Trip Odometer Displays the mileage per trip/ignition.



#### VIII. HEADLIGHT

The headlight can be used whenever low visibility in natural light compromises the safe operation of your eTrike.







Headlight switch

- a. To turn the running light on, move the switch on the right hand to the middle position.
- b. To turn the headlight on, move the switch on the right hand to the far left.
- c. To adjust the brightness, move the switch on the left hand.

# **OPERATING YOUR ETRIKE**

#### IX. HORN

To sound the horn push down the horn button on the left handle.



#### X. PARKING/PARKING BRAKE



Parking Brake Stick

- a. To use the parking brake located next to the driver's seat:
  - Pull the handle up.
- b. To release it
  - Press the button and push it down to the original position.

#### XI. RADIO AND BLUETOOTH DEVICE



- a. The power button turns the device on/off. The mode button changes the mode to radio or bluetooth.
- b. To pair the bluetooth with a smartphone, go to the phone settings, turn on the bluetooth and select the device corresponding to the eTrike (the name vary per eTrike). If a pin is required, enter 0000. Once the pin is entered, it will be paired to the device for use.
- **c**. The back and forward buttons are used to change songs or radio station.
- d. The volume buttons increase and decrease the volume of the device. If a phone paired with bluetooth is being used, check the volume on the smartphone too.

#### XII. WINDSHIELD/WINDSHIELD WIPER

To activate the wiper blade, push the windshield wiper switch on the front panel.



# **OPERATING YOUR ETRIKE**

#### XIII. **HEATER AND FAN**

To activate the heater, push the switch on the front panel. For the fan, use the switch next on the side of the fan.





Heater Switch

Fan Switch

#### XIV. KEY FOB CONTROL

The key fob controller lock and unlock the eTrike's doors.

The panic button makes your eTrike to beep quickly for a few times.



# CHARGING YOUR ETRIKE/BATTERY INFORMATION



Take reasonable precautions when charging and NEVER use the charger in a damp environment or in the presence of combustible items.

The charger may become hot during the charging process. To prevent a potential fire hazard, NEVER cover the charger while charging to allow for the dissipation of heat.

If you encounter any difficulty charging your eTrike or experience unusual occurrences in the charging process, immediately shut off the power and contact eTrikeco or authorized service vendor for service.

Avoid getting any liquid around the battery as this can potentially cause leakage, overheating smoke and possible explosion.

Your eTrike comes with a battery charger. DO NOT use other chargers to charge your eTrike. Use the battery life indicator on the eTrike instrument display to gauge the battery life. To maximize use per trip, do not allow the battery life to decrease to less than 20%. When the battery life is at 20% or lower, promptly charge the battery to full capacity.

FIRST RIDE: Charge the battery to full capacity before you take your first ride.

#### I. CHARGING THE BATTERY

- a. Turn off the eTrike following the steps in section I (page 5).
- b. Locate the charging port on the back of the eTrike.





**c.** Plug the receptacle (female) end of the charger power cable into the eTrike's charging port.



# CHARGING YOUR ETRIKE/BATTERY INFORMATION

d. Plug the charger power cable into a standard household AC 110V outlet.



NOTE: To protect the eTrike from potential damage as a result of power surges, it is strongly recommended that a surge protective device is used when plugging into a standard household AC 110V outlet. Damage resulting from a power surge is not covered by the warranty.

#### II. CHARGER LIGHT INDICATORS

There are two (2) charging light indicators on the eTrike:

a. Light incorporated on the charger: When the charger is plugged into the household AC
 110V outlet, the light will turn on red. This indicates that the battery is not fully charged, but that there is a proper connection and the battery is receiving an electrical charge.



b. Light on driver's seat: There is an additional charging light indicator at the bottom left side of the driver's seat. When the charger is plugged into the charging port of the eTrike, the light indicator will turn red, indicating that the battery is not fully charged, but that there is a proper connection and the battery is receiving an electrical charge. An intermittent green light on this indicator means that the battery is between 80% to 99% charged. Once the battery is fully charged, the light will turn green.



# CHARGING YOUR ETRIKE/BATTERY INFORMATION

NOTE: Promptly unplug the charger once these lights are displayed. Full charge can take around 3 hours depending on the level of depletion in the battery.

#### III. BATTERY INFORMATION

The LifePo4 battery that comes with your eTrike can last approximately 3000 charge cycles or roughly 10 years with average use and proper care. Do not use the battery for any other purpose than to power your eTrike. Do not attempt to disassemble or modify the battery.

All vehicles experience some level of wear over the course of operation. In addition to performing the Routine Inspection listed in this manual, it is recommended that you perform preventative maintenance to further ensure the optimal performance and service life of your vehicle, and for your safety. If you are uncertain of how to perform any of the following preventative maintenance, seek professional service. Preventative maintenance should include the following:

#### I. GENERAL MAINTENANCE

- a. Keep the motor differential clean to insure proper acceleration and dynamic performance.
- b. Make sure the throttle rotates freely.
- **c**. Make sure the parking brake is operational.
- d. Inspect the front and rear shock absorbers for damage and insure both are functioning properly.
- e. Make sure all tires are properly inflated to the recommended psi of 36.
- f. Inspect all electrical components to make sure they are functioning properly.
- g. Make sure all fasteners and screws are tightly secured throughout the eTrike body.
- h. Keep your eTrike vehicle clean as a buildup of dirt and other substances can impair proper functioning.
- i. Make sure all lubrication points are well-oiled. Do not allow oil to leak onto the eTrike.
- j. Make sure the battery power cable and any attached wires within the battery compartment are secure.

#### II. BRAKE INSPECTION AND ADJUSTMENT

It is essential that the brake system, which is engaged by squeezing both brake handles, be properly adjusted to allow for adequate clearance while the eTrike is moving, but still allow for effective braking.

The disc brake system includes brake fluid/oil and is engaged by squeezing the brake handles, where the brake fluid/oil reservoir is also located. It can be inspected and maintained as follows:



a. Check the brake fluid/oil level in the reservoir. If the level falls below the bottom score line, add ONLY either DOT3 or DOT4 brake fluid/oil until it reaches the upper score line.

NOTE: A drop in the brake fluid/oil level indicates potential plate friction, brake disc wear or brake fluid leakage, and further inspection into these potential issues is needed.

- b. If the brake fluid/oil changes color, replace it with new braking fluid/oil.
- c. Check the friction plate and brake disc wear condition. When any of the friction plates is worn down to the marking line of 3mm or 3.5mm, it must be replaced in pairs. The disc brake thickness and wear limits may differ slightly from eTrike model to model.
- **d.** If the brake handles is spongy or has little resistance or effectiveness when squeezed, exhaust the brake system as follows:
  - i. Remove the main cylinder cover and add brake fluid/oil until the fluid level reaches the upper score line. Close the cover to prevent debris from entering.
  - ii. Use a hose with one end connected to the caliper oil drain screw and the other end to an appropriate container.
  - iii. Quickly squeeze and release the hand brake a few times, and then hold the hand brake in place on the last squeeze.
  - iv. While the hand brake is being held in place, loosen the air release screw by turning it counterclockwise one quarter inch. This will allow any foamed brake fluid/oil to be released through the hose and into the container.
  - v. Tighten the air release screw.
  - vi. Repeat steps 3 through 5 until all of the foaming brake fluid/oil is emptied and the brake handle is no longer spongy and has proper resistance and effectiveness.
  - vii. Tighten the drain screw and disconnect the drain pipe.
  - viii. Add brake fluid/oil to the main cylinder until it reaches the upper score line.
  - ix. Close the cover.



# **CAUTION**

Clean any spilled brake fluid/oil immediately as it can corrode painted surfaces, plastic, rubber parts, etc. Brake fluid/oil should always remain visible in the viewing window of the reservoir during the exhausting process. To insure this, add brake fluid/oil to the main cylinder at any time during the process.

#### III. SHOCK ABSORBERS

a. Front shock absorbers – Inspect the front shock absorbers regularly. Replace the shock absorbers immediately if damage or failure is found. Note: The front fork should be kept clean to insure proper functioning of the front shock absorbers.



b. Rear shock absorbers – Inspect the rear shock absorbers after every 125 miles of use. Replace the shock absorbers immediately if looseness or cracks are found.



#### **IV. TIRES AND WHEELS**

- a. Inspect the tires for cuts, embedded objects or other conditions/damage that can compromise the tires' performance.
- Inspect the tires for proper inflation. This inspection should always be performed while the tires are "cold" before driving the vehicle.
   Recommended tire pressure is 36 psi.



**c.** Inspect the wheel rims for dents or distortions that can adversely affect the tires' inflation or performance.

#### V. REAR AXLE

- a. Inspect the rear axle and differential every week for proper function. Gear oil in the axle should be changed approximately every 650 miles.
- b. Add gear oil, if needed for proper lubrication.
- c. For cold weather, use 80w/90 GL-3 gear oil. For warm weather, use 85w/90 GL-3 gear oil.



#### VI. BATTERY

- **a.** Check the battery wiring and cable regularly to insure they are secure; any looseness can cause potential damage to the circuit virtual access.
- b. It is recommended that you do not discharge the battery to less than 20%. Once the battery has been discharged, it should be promptly charged.
- c. If the battery shows signs of warping or becomes very hot, stop use immediately.

#### VII. STORAGE OF YOUR ETRIKE/CHARGER

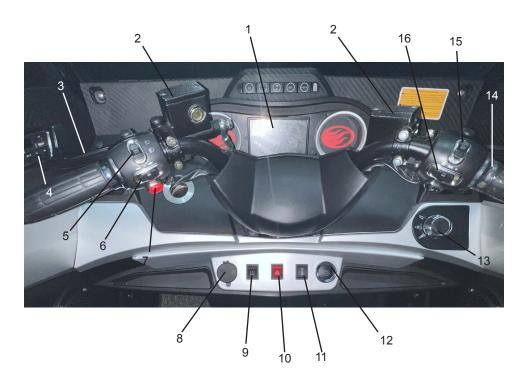
- a. Store under cover that protects the eTrike from prolonged exposure to the elements; such exposure can cause mechanical failure and decrease the service life of your eTrike.
- b. When storing your eTrike for an extended period, charge the battery at least once per month. The recommended storage temperature is 60 degrees Fahrenheit and at 40% battery capacity.

NOTE: Storing your battery in temperatures below 32 degrees Fahrenheit or above 97 degrees Fahrenheit can limit your battery life.

## c. Charger Storage

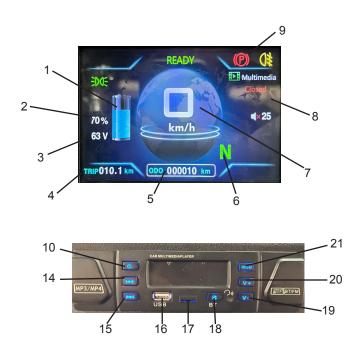
When not in use, store the charger in a dry, cool and clean place, taking care to insure the ventilation holes do not become clogged by dust or other debris.

# **ETR100C - OVERVIEW**



No.	Part Name	No.	Part Name
1	Instrument Display	9	Heater Switch
2	Brake Fluid Reservoir	10	Hazard Lights
3	Brake Handle	11	Windshield Wiper Switch
4	Media Player	12	Engine Start/Stop Button
5	Bright Light Switch	13	Reverse/Neutral/Drive Knob
6	Turn Signals	14	Throttle Handle
7	Horn	15	Speed Switch
8	Power Outlet	16	Headlight Switch

# **ETR100C - OVERVIEW**



No.	Part Name	No.	Part Name
1	Graphic Battery Indicator	10	Media On/Off Button
2	State of Charge in %	11	Media Previous Button
3	Voltage Indicator	12	Media Next Button
4	Trip Odometer	13	USB Port
5	Odometer	14	TF Card
6	Drive/Reverse/Neutral	15	Bluetooth Direct Access
7	Speedometer	16	Decrease Volume Button
8	Multimedia Indicator	17	Increase Volume Button
9	Break Indicator	18	Mode Button

# **ETR100C - MAIN TECHNICAL PARAMETERS**

# I. Main technical parameters of the eTrike

Product size: 7ft 6in x 4ft 2in x 5ft 7in

Weight: 795 Pounds

Tire specifications: Front: 120/70-R12 Tubeless

Rear: 135/70-R12 Tubeless

Maximum load: 500 Pounds

Design top speed: ≤ 28 Miles Per Hour

Range: Up to 65 Miles

Maximum climbing: ≤ 20°

Braking performance (12.5 miles per hour): Dry: ≤ 3 feet; Wet: ≤ 9 feet

# II. Main technical parameters of battery

Battery type: Lithium Ion LifePo4

Capacity: 105AH
Nominal voltage: 60V

# III. Main technical parameters of motor

Motor model: AC 60V
Rated power: 3000W

# IV. Main technical parameters of controller

Current limiting protection value:  $25 \pm 1A$ Under-voltage protection value:  $52 \pm 0.5V$ 

# V. Main technical parameters of charger

The input voltage (ac): AC-120V50Hz

The output voltage (dc): 73V 21A
Charging time: 3 hours

### WARRANTY

Your eTrike comes with a 2-year electric drivetrain non-transferable warranty from the date of purchase. This covers the most important and expensive parts including your motor, battery and controller. All other components aren't covered under warranty. If any component of the eTrike is defective or prevents safe and effective operation during the warranty period, please contact eTrikeCo immediately for service before operating the vehicle. Service and repair during the warranty period must be completed by eTrikeCo or an authorized party.

#### FOR SERVICE OR TECHNICAL SUPPORT

Email: support@etrikeco.com Phone: 1-844-874-5326 ext.702

The following actions render the warranty null and void:

- Damage caused when the operator fails to use and maintain the eTrike in full compliance with these instructions.
- Improper use of the eTrike, including but, not limited to collisions with other objects, overloading the eTrike, and chemical corrosions.
- Any and all damage caused by human factors.
- Damage as the result of unauthorized disassembly and/or modification of the eTrike or unregulated use.
- Damage caused by improper storage or accident, including as the result of a power surge while charging.

Does not include wearing parts like arm rests, seats, switches, brakes, rims, light bulbs and tire tread. Charger is not included in warranty.

# eTrikeCo o

- **(** (844) 874-5326
- support@etrikeco.com
- www.etrikeco.com

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