



**EV3 Mobility Scooter**

**Model name ST096**

**Key parts indication**



## Specification:

	<b>Model name</b>	<b>ST096</b>
<b>1</b>	<b>Loading capacity</b>	<b>150kgs</b>
<b>2</b>	<b>Rear wheel size (inch)</b>	<b>14*3.2"</b>
<b>3</b>	<b>Front wheel size (inch)</b>	<b>14*3.2"</b>
<b>4</b>	<b>Anti-tip wheel size (inch)</b>	<b>50*25mm/2*1"</b>
<b>5</b>	<b>Battery: LEAD-ACID BATTERY</b>	<b>12V20Ah*4</b>
<b>6</b>	<b>Charger</b>	<b>AC100-240V50/60HZ; OUTPUT:48V 2.5A</b>
<b>7</b>	<b>Motor</b>	<b>48V/500W</b>
<b>8</b>	<b>Gross Weight</b>	<b>110kgs</b>
<b>9</b>	<b>Net Weight (With battery)</b>	<b>93kgs</b>
<b>10</b>	<b>Whole product size (unfolded)</b>	<b>1600*730*1100mm</b>
<b>11</b>	<b>Packing size</b>	<b>1620*750*1080mm ( scooter + battery )</b>
<b>12</b>	<b>Seat size</b>	<b>520*520*420mm</b>
<b>13</b>	<b>Running distance (One time full charge)</b>	<b>48KM</b>
<b>14</b>	<b>Charging time</b>	<b>6-8h</b>
<b>15</b>	<b>Spread of axles</b>	<b>1130mm</b>
<b>16</b>	<b>Distance between two rear wheels</b>	<b>505mm</b>
<b>17</b>	<b>Minimum ground clearance (non-load)</b>	<b>85mm</b>
<b>18</b>	<b>Controller's current</b>	<b>Max output 28A</b>
<b>19</b>	<b>Climbing ability</b>	<b>≥15°</b>

## Driving instructions:

Driving any electric scooter demands a special effort on your part for safety issues.

- An inspection of the scooter before starting off will insure safety – always check each tire's pressure.
- Never let an inexperienced driver drive your electric scooter.
- Wear bright color clothing while driving at night.
- Respect the laws of your state and local city or county.
- Respect the speed limits.
- Always signal before turning.
- Be very careful at intersections, parking exits, etc.
- Always ride with both hands on the handlebar hand-grips and feet on the floor.

## Protective Gear

- For your safety, always wear a helmet, glasses and protective clothing.
- Do not wear loose clothing with risk of getting it tangled on wheels, steering, or passing objects.

## Scooter Modification

Do not modify the electric bicycle. It could make riding very dangerous and would certainly void the warrant of the device.

## Quality Control

Thanks to the highest standards of quality control, the finest selection of components and assembly processes built on years of experience, this electric scooter is one of the best products in today's market.

- This device is equipped with a powerful motor which offers superior control while producing very little sound with the power to climb most hills and delivers the longest possible battery life.
- Applying the brakes automatically turns off the motor which adds an additional level of safety for the driver and more efficiently uses the brakes.
- Battery: Especially designed for your electric vehicle.
- Frame: High quality steel frame



### Important Safety Instructions



**Always wear a helmet when operating this device**

This manual contains the safety precautions and recommended operating instructions. Even if you are an experienced motorcycle user, it is in your own interest and safety to familiarize yourself with the latest rules and regulations regarding safe use of your motorcycle or electric scooter.

Please note that the illustrations show the step through motorcycle or electric pedal type series of scooters. Other motorcycle models may have different parts and controls. You should therefore always refer to the Owner's Manual of your particular motorcycle/scooter.

Because any powered cycle is a high-speed transportation device, some special safety precautions must be observed as with any other vehicle to reduce the risk of personal injury. Careless or improper use may cause serious or even fatal injury. Read and follow all safety precautions in the current Owner's Manual or Safety Manual. Always use two hands to operate the cycle.

Minors under the legal driving age should never be allowed to use a cycle. By standers, especially children, and animals should not be allowed too close to the area where the cycle is in use. Never let the scooter be in the run position while unattended. Store it in its locked position away from children. Do not lend or rent your cycle without the Owner's Manual. Be sure that anyone using your scooter reads and understands the information contained in this manual.

You must be in good physical condition and mental health and not under the influence of any substance

(drugs, alcohol) which might impair vision, dexterity or judgment. Do not operate a motorcycle/scooter when you are fatigued. Be alert – If you get tired while operating your cycle, take a break. Tiredness may result in loss of control. Driving any motor cycle can be strenuous. If you have any condition that might be aggravated by strenuous activity, check with your doctor before operating any cycle.

To reduce the risk of injury, the operator should wear proper apparel. Clothing must be sturdy and snug-fitting, but allow complete freedom of movement. Avoid loose fitting jackets, scarves, long neckties, jewelry, flared or cuffed pants, unconfined long hair or anything that could become entangled with the device or your clothing. Wearing overalls or jeans and protecting your hands with gloves is especially important in less than ideal conditions. Heavy duty, nonslip gloves improve your grip and protect your hands. To reduce the risk of injury to your eyes never operate a motorcycle unless wearing goggles, a helmet visor or properly fitted safety glasses with adequate top and side protection complying with your state's standard.

Never modify your scooter in any way. Only attachments and parts supplied by or expressly approved by for use with the specific models are authorized. Although certain unauthorized add-nos are use-able their use may, in fact, be extremely dangerous.

Take extreme care in wet and freezing weather (rain, snow, ice). Put off the riding when the weather is windy, stormy or rainfall is heavy.

Never operate a scooter that is damaged, has improperly inflated tires or not completely or securely assembled. Follow the maintenance and repair instructions in the appropriate section of your Owner's Manual.

Use only replacement parts for maintenance and repair. Use of parts manufactured by others may cause serious or fatal injury.

Know and observe all local traffic laws. Local traffic laws may differ so become aware and follow all laws pertaining to the use of your scooter. Consult your Department of Motor Vehicles for assistance understanding any rules that may govern the use of this device.

Never assume that a driver of another vehicle, or even a pedestrian can see you on your scooter – the size of device makes it imperative that you drive defensively at all times: Assume that everyone is going to hit you! And do not let them!!

Do not overload your scooter as it could damage components or cause an unstable and dangerous condition. Refer to the owner's manual for the specific weight restrictions of your Model.

Do not submerge scooter in water as this could short circuit and damage electrical equipment and or cause serious personal injury. Extra care should be done when riding in rain or snow conditions and should be avoided if possible.

Never plug in the charger if the connections are wet – remember that water is a conductor of electricity and grave danger can occur with any misuse or careless disregard for safety. Stand in a dry place – with non-conductive shoes on both feet. Follow the instructions in the Owners Manual and use common sense when handling any electrical device.

Use only the charger provided with your scooter. If there is any damage or compromise to the wiring call for repair or replacement unit.

Replacement batteries must match the exact AMP hours specified by the owner's manual for your model. It is important that the batteries are matched to the controller used in this device so adherence to the correct specification is very important for reliability.

Always handle batteries with a great deal of caution – they can be dangerous if any of the internal chemicals leak and come into contact with the scooter or a person. Never smoke or have any open flame near a battery as the chemical reaction that makes it work can produce flammable gas.

In the event of a significant battery leak cover the liquid with baking powder to neutralize the acid. The resulting salt is not dangerous.

An improperly connected battery can result in significant heat, possible fire or even an explosion of the battery – follow all instruction and when there are questions that are not crystal clear in this and other manuals; consult either a dealer or call Customer Service.

Remember that this is not a toy and that if properly used and maintained will give you years of reliable service. Please be careful and follow all safety instruction – enjoy the ride.

### **Before taking the road:**

- Check tire pressure
- Check battery power level.
- Check braking system efficiency and if motor shuts off when brakes are applied.

1) Insert the key and turn it to the symbol on , the dashboard lights up and the motor is ready to go



### **Driving**

The electric bicycle is easy to drive. A smooth ride can help the life of the battery and the duration of its charge.

Release the throttle to slow down - as the throttle goes back to its original position, the motor will shut off automatically.

In case of emergency press on both brakes front and rear, this will shut off motor and stop the scooter. Once the brakes are released the motor is ready to go again.

### **Locking the steering**

Put the steering towards the left and turn the key to the position of parking/lock and the steering column will be locked.

**Note:** To unlock perform the opposite operation.

### **Use and Maintenance of the battery**

Your electric bicycle is equipped with high quality batteries, which have these advantages:

- Low unattended discharge
- Leak resistant case
- Deep cycle discharge

Make sure to fully charge your battery before the first usage, or after long use. In case of prolonged non use, store the scooter in a dry place and make sure to charge it at least once a month to avoid crystallization of lead sulfates.

The original charger which was provided has to be used, as the use of a different charger could irreparably damage the battery.

**Battery indicator:**

The level indicated is actual when the electric bicycle is in motion. If the level is low, make sure to charge the battery as soon as possible.

**Attention:** Do not touch the battery terminals with wet hands. Do not cause a short circuit with metal objects across the terminals. Battery's are extremely hazardous if mishandled!

**Use of the battery charger:**

How to charge the battery:

1. Connect the exit of the charger onto the battery plug to charge
2. Connect the plug of the charger to an regular electrical socket
3. The red light is on while charging
4. The light will become green when the battery becomes fully charged
5. Unplug the charger from the scooter and from the AC power source

**Attention:** BE SAFE! Remove the key from the ignition while charging the battery

**Attention:** In case the charger overheats ( $\geq 65^{\circ}\text{C}$ ), stop immediately the charging.

**State of charge:**

The charge is automatically controlled and stops as soon as the battery is fully charged and the red light of the charger turns off.

Note: A shorter charge is acceptable as this type of battery has no "memory" and can be charged without concern for changed in capacity due to cycle depth.

**Attention:** During the charging make certain the device and the charger is out of the reach of children at all times.

During the charging, the charger must exhaust some heat. Do not cover or put it next to flammable materials. If the charger doesn't stop charging after 10 hours, stop charging and call customer service.

Use only the original charger. Don't leave the charger in the electric bicycle; it could be damaged by the vibrations of the scooter.

**To preserve the life span of your motor, it is recommended that a complete check up of the electric bicycle be done.**

Don't ride on a road where the water submerges more than a third of the power assisted wheel, because water could penetrate into the motor and cause a malfunction to the motor.

## **Special Declaration: Concerning Lithium battery**

### **Attention:**

1. Do not connect the positive and negative terminals of this battery.
2. Do not expose this battery to high temperature such as on or beside heating appliances or in direct sunlight.
3. Do not submerge this battery in liquid of any kind.
4. Do not disassemble this battery unless you are a qualified electrician and then only after reading the technical guide. Disassemble of this battery voids all guarantees.
5. Store in a cool, dry area out of direct sunlight. If this battery is to be stored for more than two months please charge the battery for two hours every two months of storage.
6. Do not use any other charger except for the one supplied with this battery.
7. When this battery is no longer of use please dispose of properly by returning to a retailer or battery collection point. Do not dispose of this battery with your household waste.

## **Maintenance**

The following maintenance have to be done as regularly as possible, general rule, once a week:

- 1) Clean the surface of the motor and of the entire electric bicycle.
- 2) Verify the motor and the pod of connection.
- 3) Check the fixation of each element, re-tighten the screws if necessary.

### Regular maintenance:

Check up every 6 months:

- Check and adjust the braking system
- Check and tighten the fixation screws
- Check the wear and tear of tires
- The output of voltage from the charger
- The battery capacity
- Check and adjust the lights
- Check the control system

Every 6 months:

Greasing the front and back axles, the stand and the brake cable.

Be aware of the state of usage of the brake lining. If the cables get stuck, you must take apart, clean and grease and put back together.



## Troubleshooting Guide

Symptom	Possible causes	Solution
Ignition on ,and the display board doesn't turn on	1. The battery did not charged	1. Clean the battery terminal
	2. The fuse has melted	2. Change the fuse
	3. The display board is defective	3. Change the display board
	4. Wrong connection of dashboard	4. Observe and remedy
	5. Low battery charge	5. Charge the battery
Ignition on, the motor doesn't engage when throttle is activated	1. The motor is not activated	1. Check the connection
	2. The throttle not connected properly	2. Check the connection
	3. The controller out of service	3. Contact customer service
Throttle released and motor still engaged	1. Defective throttle	1. Contact customer service
	2. The controller out of service	
Lack of power	1. Low battery level	1. Charge the battery
	2. Brakes are applied	2. adjust the brakes
Speed unstable	1. Bad connection with the battery	1. Check the ignition
	2. Brake lever is defective	2. Check and change if need be
The charger does not function	1. Short circuit in wall socket Charger fuse is burned	1. Check and repair
	2. Battery fuse is burned	2. Change the fuse
	3. Charger is out of service	1. Change the fuse 2. Change the charger

### In case of a problem

#### The braking system becomes inefficient

A braking system that fails represents a grave danger of accident. It is strongly recommended to check the efficiency of the brakes and to do the necessary adjustments before taking the road.

In the case where, while on the road, you realize that the brakes are inefficient make sure to slow down and to stop immediately in order to adjust the brakes.

#### Temporary motor failure

The causes for a temporary motor failure are multiple, before calling customer services:

1. Dust and dirt build up on the battery terminal.
2. The main cable not connected to the battery terminal
3. The switch of the braking system that shuts motor off might be wet and is creating a short circuit, dry the switch if needed. Avoid prolonged exposures of the electric bicycle to the rain.
4. The switch of the braking system that shuts motor off should be at its original position, if it is not or if it is blocked by a foreign object. Place back to its original and remove blocking object