

# MOTRIKE

## TRIKE USER MANUAL



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This manual contains important safety, operation and maintenance information. Read it before you take the first ride on your new trike, and keep it for reference.

# Assembly Instruction

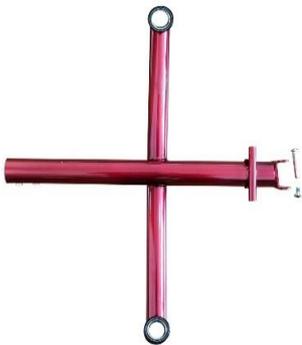
## 1. Fitting frame

Remove the big sliver bolt on the frame. Connect the frame and rear fork with the bolt.



## 2. Fitting the beam

Remove the bolt on the beam. Connect the beam and frame with the bolt. Tighten the quick release bolt under the beam.



### 3. Fitting two front wheels

Remove the headsets on the king posts. Slide the king post into the beam and fit the headsets.



Connect left and right king post with the track rod. Please note the cup washer is between the rod and tapped hole on the king post.



### 4. Fitting handlebars

Fit the front fenders the two handlebars with the bolts and cup washers provided.



Fit the handlebars on the king post, tighten the bolt and fit headset cover.

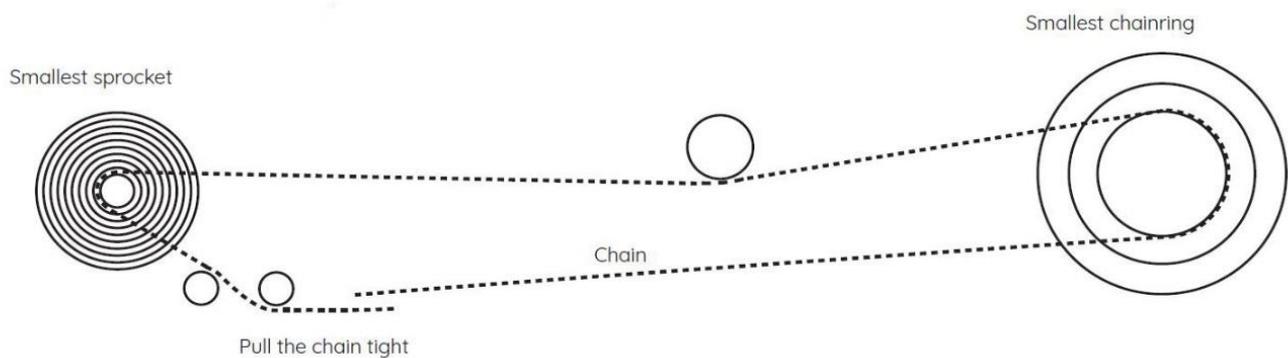


### 5. Fitting chain tube

The short tube is located at the top. The long tube is located at the bottom.



### 6. Fitting the chain



You will need a chain rivet tool for this job. Before you connect your chain you must have your boom length set correctly.

Check the top chain tube, which is the chain tube coming directly from the pulley at the front, is not touching the front derailleur. This can happen with shorter boom lengths. If it does touch, cut the top chain tube so it stops approximately 25mm away from the derailleur cage.

Make sure your gears are set to the smallest sprocket at the back and the smallest chainring at the front.

At the front of the trike, pull the top chain through the top chain tube.

Pass the chain through the front derailleur cage, around the small chainring and then connect it to the lower return chain at the front.

Pull the top chain through the chain tubes at the back so the unconnected end of the top chain is longer than the return chain.

Thread the chain around the smallest cassette sprocket and down through the derailleur making sure the chain is the correct side of the tab between the two jockey wheels.

Bring the two loose ends of the chain together and pull the chain to slowly put the rear derailleur under tension until it is no longer collapsed on itself. Keep pulling until you match the narrow end chain link to the first wide chain link and then split the chain here.

Now turn the cranks by hand and change gear up to the largest/top chainring at the front. Then, one gear at a time, change up the sprockets at the back stopping one cog before the top.

Check the rear derailleur cage still has movement forwards/upwards. If it does you can change gears up to the top sprocket and your chain length is now set. If it has no more movement the chain is too tight and needs a link replacing.

## 7. Fitting the boom



Carefully slide the boom into the beam. Take care not to damage the frame shim located inside the frame. Adjust the boom by twisting and pushing or pulling. Fasten the boom by the bolts under the beam.

## 8. Fitting the rear derailleur.



Fit the rear derailleur on the rear dropout.

## 9. Fitting derailleur and brake cables.



Pass the front derailleur cable through the cable guide hole under the beam. While holding the cable taut, turn the shifter through its range of movement to check the cables moves smoothly and that the cable is properly seating inside the shifter.

Feed the cable and housing into the socket on the brake caliper, and attach the end of the inner cable to the brake caliper arm, making sure that the lever is in the full 'off' (anticlockwise) position.



## 9. Fixing the cables



Fasten the cables on the track rod with the Velc



Check that the cable does not foul the seat or the track rod anywhere within the full range of steering movement.

## 10. Fitting the seat.

Fit the seat on the frame with the long bolt.



### 11. Fitting headrest.



### 12. Fitting review mirrors.



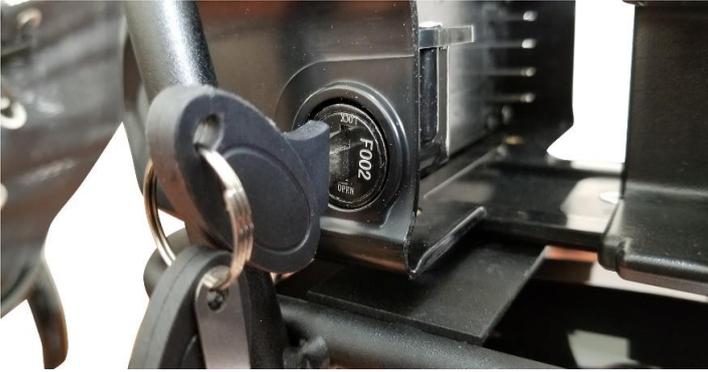
### 13. Fitting pedals



The left and right pedals are marked with an "L" or "R".

## 14. Fitting battery on etrike

Put the key on open position. Slide the battery into the rear rack and lock it.



## 15. Fitting flagpole



## 16. Finish assembling



**Congratulations** on being a new trike owner. We hope it brings you many years of enjoyment.

This manual has been written to help you set up and use your trike. Recumbent trike may be a little different from the cycles you are familiar with, so please take a moment to read through this document.

Throughout the manual, we have included some Tips, which have been learned from over 10 years of experience building trikes. They are well worth taking special note of. We hope you enjoy owning and riding your trike.

## **Safety Notes and Cautions**

This section describes ways to keep safe while cycling. Always think “safety” and cycle according to your ability and experience.

### **Cycling Laws and Regulations**

Most countries have special laws and regulations for bicycles and cyclists, and these may apply to you as a trike rider. Know the local cycling laws and obey them.

### **Pinch Points, Moving Parts and Hot Spots**

Some parts of your trike can injure you if mishandled. For example, the chainring teeth are sharp and brakes get hot during use. Moving parts, including brake levers and the fold mechanism can pinch, cut or crush. When you sit on the trike your hands will be close to the wheels. Touching the wheels when they are moving can cause friction burns. Before you ride your trike, ensure that the wheels cannot touch the handlebars or your hands when the steering is in full lock.

### **Check List for Every Ride**

Before you ride your trike make sure it is in a safe operating condition. If any part of your trike does not function correctly, do not ride it until it is fixed.

- Visual inspection: check the trike and accessories for damage
- Brakes: ensure the front brakes and parking brake (if fitted) work correctly
- Gears: ensure the gear system works correctly
- Wheels and tires: ensure the tyres are correctly inflated and wheels are fitted correctly
- Seat: ensure the seat is secure and cannot move
- Mounting bolts: ensure the bolts on main hinge, seat, steering, and wheels are tight
- Reflectors: ensure reflectors are clean, in position, and unobstructed

### **Wear a Helmet**

It is good practice to wear a cycling helmet that complies with the latest safety standards. Choose a helmet that is comfortable and fits well.

## **Visibility**

Make sure other road users and pedestrians can see you. Ensure your reflectors and lights are clean, correctly positioned and not obstructed by clothing or accessories. Check that your lights are working correctly before you ride, even if you don't anticipate using them. Wear bright colored clothing with reflective areas. Attach a flag to your trike.

## **Suitable Clothing**

Wear clothing that is suitable for conditions you will ride in. Wear glasses to protect your eyes from dust, dirt, and bugs. Wear appropriate shoes that will stay on your feet and can grip the pedals. Use pedal straps or "clipless" pedals to prevent your shoes slipping off the pedals while cycling.

## **Cycling with Care**

You can help prevent accidents by using common sense, cycling with care, and thinking about your safety. You need to think about what other cyclists, vehicles, and pedestrians may do, and react accordingly. Anticipate potential hazards, such as car doors opening or children running in front of you. Cycle at an appropriate speed, stay back from other cyclists and vehicles, and avoid cycling on the inside of traffic queues. A rear view mirror is helpful to see what is happening behind you. Help other road users understand what you are going to do next by staying visible, maintaining a clear position on the road and using clear hand signals. Using a horn or bell will help other people know that you are near.

## **Cycling in Bad Weather**

Take extra care when the weather is wet, foggy, windy, or icy. Ride with extra care and brake early, as your trike will take longer to stop. Sudden braking could lead to skidding and loss of control.

## **Cycling in Poor Visibility**

Take extra care when the weather is wet, foggy, windy, or icy. Ride with extra care and brake early, as your trike will take longer to stop. Sudden braking could lead to skidding and loss of control.

# Adjusting Your Trike

## Tire Pressure

Tire pressure is important for comfort and safety. Ensure your tires are correctly inflated before every ride. The recommended pressure range is given on the side wall of the tire.

## Adjusting the recline

The mesh seat can be reclined to one of three positions. Release the seat brackets, lift the bracket off the skewer, move the seat brackets so that the seat fits into your chosen notch and re-tighten the bolts.

## Adjusting the front boom

If you decide to adjust the boom, the chain will also need to be lengthened or shortened two inches for every inch the boom is moved. For this reason we recommend taking it to your local dealer or bike shop to make sure it's done correctly.

1. Change gear to the smallest front chainring and rear sprocket.
2. Loosen the two clamp bolts under the front boom with a 5mm Allen wrench.
3. Adjust the boom by twisting and pulling or pushing. Take care not to damage the frame shim located inside.
4. Ensure that boom is not extended past the MIN INSERT 10cm.
5. Ensure that the boom is vertical.
6. Tighten the two front boom clamp bolts to 8-10Nm.

It is important that your leg is not fully straightened when the crank is in the foremost position. If the distance is too long it is difficult to overcome this dead point, pedalling becomes uncomfortable and there is too much strain on the sinews of your feet and legs. If the distance is too short you may suffer from knee pain.

## Adjusting the headrest

The mesh seat can be equipped with a headrest. Its height and inclination is adjustable at the mounting clamp.

## Adjusting the display

Please display user manual.

# How to Ride

## Entering and Exiting the trike

Before sitting down on the Trike, make sure that it cannot roll away from you by using the parking brake.

Straddle the boom and begin lowering yourself into the seat while supporting yourself using the tires or the sides of the seat frame. Do not to put weight on the handlebars as they are not load bearing members of the trike and can be damaged by doing so.

When exiting the trike, lock the parking brake and use the tires, boom stub tube, or seat frame to provide assistance when standing up from the seated position.

## Turning

Lean your body into the center of your turns or you risk lifting the inside tire and possibly rolling your trike. The faster you are riding, the more critical this becomes. This leaning counteracts the lifting force (caused by fun things like your center of gravity, instantaneous velocity and centrifugal force) and encourages the inside tire to stay on the ground. Since trikes cannot lean like regular bikes, you have to counter these forces with your body movement.

## Braking

We use disc brakes on our trike and they are very efficient. To stop, squeeze both brake levers smoothly and with equal pressure. Each brake lever activates a corresponding brake on the front wheels. You will experience "brake steer" (pulling) if you brake only one side or if you use unequal pressure on the brake levers. It is possible to tip the trike forward by trying to stop too fast.

## Parking

When your trike has stopped you can use a parking brake to keep it stationary. Use the parking brake lever down under the seat.

## Shifting

Shifting allows you to maintain a comfortable pedaling cadence while riding over varied terrain.

Your trike is equipped with trigger shifters. There are two triggers on each shifter. The big trigger is operated by your thumb. The smaller trigger is operated by your index finger.

The left shifter changes the front gears, and the right shifter changes the rear gears. When you shift using derailleur gears the chain must be moving clockwise under gentle tension; you can only change gear when you are pedalling and moving forward.

## How to Fold the Trike

- 1). Make sure the battery is locked on the rear rack or remove the battery
- 2). Remove the seat and flagpole.
- 3). Open quick release at the folding hinge. Push the quick release bolt outward. When the clasp is out from the hole, slightly press down the frame to separate the folding hinge.



- 4). Carefully lift the rear part, turn it sideways and fold it.



# Maintenance

## Wear and Tear Items

Items such as steering bushings, brake pads, tires, hinges, drivetrain, etc. are all parts on your trike that will slowly wear out over time. It is important to keep an eye on these parts from a safety and functionality standpoint. If an issue creeps up over time it may be a sign that one of these items is ready to be adjusted or replaced. Some drivetrain noise is normal; loud, grinding noises are not and can indicate the need for service, adjustment, or part replacement. Contact your local dealer or bike shop for proper service.

## Lubrication

Your chain and cables need regular lubrication with a good quality bike lube to reduce wear and maintain proper operation. Keep these parts clean and lubricated.

## Brake and Shifter Cables

Brake cables and shift cables will stretch during the initial break-in period of your trike. To compensate for this, you can make minor adjustments by turning the barrel adjusters near the ends of the cable housing. Make small adjustments, rechecking the functionality with each rotation so you do not overcompensate for the cable stretch. We strongly recommend taking your trike to your local dealer or bike shop to make sure these adjustments are done correctly.

## How to Clean Your Trike

Wash your trike with soap and water occasionally, but especially after riding in inclement weather. It's important to dry and lubricate it right after cleaning. Wash the seat mesh separately (by hand or on a gentle cycle in your washing machine) and let it air dry if needed. Do NOT put the mesh in your dryer. Road salt is very hard on all trike components, including the frame. Clean it off immediately! Likewise, salty air can corrode your Trike over time. It's a good idea to wax the frame (only glossy finished areas) occasionally with a good quality car wax.

## How to Store Your Trike

Before storing your bicycle over a longer period of time, e.g. during winter, please take care of the following steps:

- Clean your bicycle and protect it from corrosion as described in the chapter on "Cleaning".
- Store your bicycle in a dry and warm place.
- Avoid direct sunlight and storage close to the heating since it affects the rubber of your tires.
- Choose the smallest sprocket and the smallest chain ring. That way the cables are in the most relaxed position.

- The tubes of your tires lose air when standing over a longer period of time. If the bicycle then rests on flat tires, the tires may be damaged. Therefore, hang up your bicycle or check the air pressure regularly.

The winter months are a convenient period of time for the annual service since then you won't have to wait long for an appointment.

### **Transport in the Car**

The best way to transport your trike is inside the car. Take care that it does not lie on the derailleur.

If you want to transport it outside the car we recommend a roof-rack or a rear carrier. Take care to fasten your tricycle at the frame only.

Please remove any parts that could come loose during transport (seat cushion, water bottles, luggage bags, pumps, pennants, etc.).

## **Inspection**

The following service schedule is a guide based on cycling up to 30 miles (50km) per week in good weather conditions. If you ride your trike more often, or in poor weather, you will need to do maintenance more frequently.

### **Before every ride:**

- Visual inspection: check the trike and accessories for damage
- Brakes: ensure the front brakes and parking brake (if fitted) work correctly
- Gears: ensure the gear system works correctly
- Wheels and tires: ensure the tyres are correctly inflated and wheels are fitted correctly
- Seat: ensure the seat is secure and cannot move
- Mounting bolts: ensure the bolts on main hinge, seat, steering, and wheels are tight
- Reflectors: ensure reflectors are clean, in position, and unobstructed

### **Monthly Check:**

Every month check that all accessories are all still fitted correctly and are not damaged.

After a long ride and at least every three months of regular use:

- The 'Before Every Ride' checks.
- Clean, degrease and lubricate your Trike.
- Inspect the Trike and accessories for damage.
- Ensure bolts are tightened to the correct torque.
- Ensure the hubs turn smoothly.
- Ensure there are no loose or broken spokes.
- Ensure tires are not badly worn or damaged.
- Ensure the chain moves smoothly through the chain tube and pulley.
- Ensure the seat is still securely attached.

### Every 6 months:

- Check the steering assembly.
- Inspect drivetrain for damage.

### Every 12 months:

In addition to the regular maintenance, we recommend that your trike is given a full service every year. Unless you are experienced in trike mechanics, we recommend that you ask your dealer to do this for you:

- Ensure wheels are true.
- Change brake and gear cables if necessary.
- Inspect chainring and sprockets for wear and replace if necessary.
- Check chain for wear and stiff links, clean and lubricate or replace the chain if necessary.
- Ensure the headset move smoothly.
- Check bearings in front suspension unit for wear.
- Check rear suspension back end for lateral movement and loose vertical movement.
- Ensure the pedals are still tight.

If in doubt, ask your dealer for help.

## Warranty Policy

Motrike warrants all its new recumbent cycles against defects in materials and workmanship for limited period.

Item	Warranty Time
Frame and Fork	5 years
Motor, controller and display	2 years
Battery	1 year
Components	1 year

This warranty does NOT cover the following:

- Damage caused by wear and tear, corrosion or damage at the surface coating.
- Damage caused by inappropriate use, inadequate care and maintenance, falls, crashes, overloading through excess weight, incorrect assembly or modifications.
- Using the bicycle for commercial purpose, such as rental or leasing.

This warranty applies only to the original purchaser.

The warranty starts with the date of purchase (receipt of the dealer) of a new bicycle. The warranty is processed via the dealer who ordered the bicycle from us.

Warranty is only valid for original parts from Trike. In case of warranty we will replace or repair the damaged part with a part of our choice or a new part equal to the old one (warranty obligation). We do not cover any transport, labour or any secondary costs.

In case of damage the dealer has to send the damaged frame to us so that we can check it, if asked to do so by us.

In the event of any action that falls under warranty the original warranty period will not be prolonged and no new warranty will be given. If the trike refuses to count a repair as warranty case we will only carry out a repair with costs after having talked to the customer or his representative, the respective dealer.

In the event of any warranty, the warranty pass together with a copy of the proof of purchase has to be sent to trike through your dealer

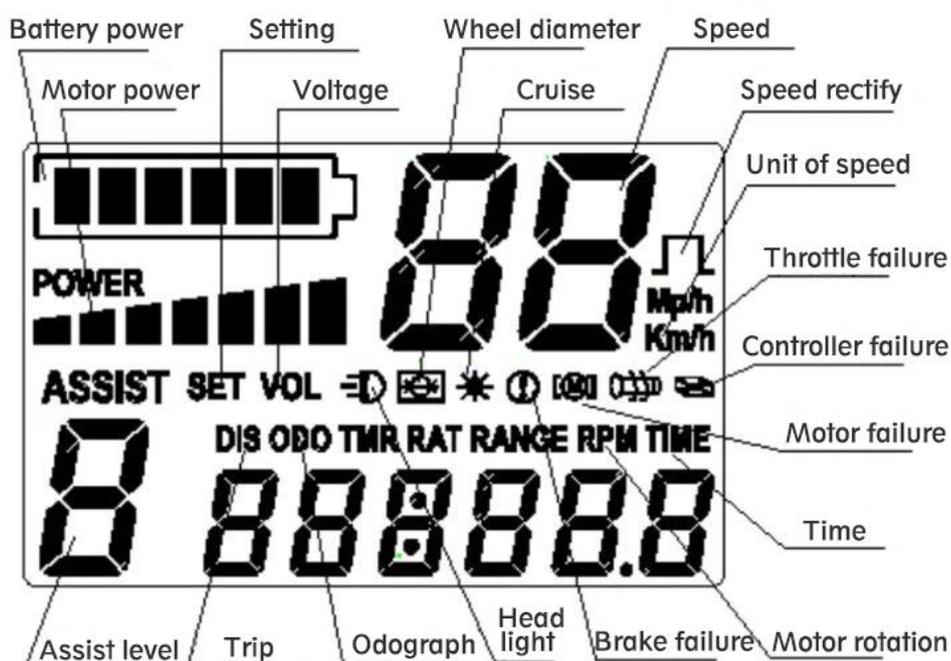
This warranty does not have any influence on the rights of the purchaser according to this statutory rights.

## **Legal Requirements**

Legal requirements vary from country to country and you should always comply with them.

The important areas you need to consider are lighting, and helmet use. Consult your local bike dealer for information about what is required in your area. Please also remember that even if not required by law, some equipment (such as helmets and lights) can increase your personal safety and should be carefully considered.

# LCD-A Display User Manual



## Basic Parameters Setting

Press the UP and DOWN buttons  at the same time to enter the setting interface.

**P0 interface** ----- Set the battery low voltage protection point. It is used to adjust the display accuracy of battery power. General lithium battery setting: 36V battery is set to 31V, 48V battery is set to 42V.

**P1 interface** ----- Set the wheel diameter in inches. For example, set 26 inch wheel to :

**P4 interface** ----- Set the unit of speed in km/h or mph. After setting, press the up and down buttons at the same time to save and exit.

**P2 & P3 interface** ----- These two interfaces have been set before leaving the factory. Please do not reset them by yourself.

# Functional Description

## Battery Power Indicator

5 rectangles  means the battery is at full power. The rectangles will decrease as the battery power decreases, and will flash when the power is off.

## Motor Output Power

7 rectangles  means full power output status. It changes according to the load change and road conditions. The fewer number of rectangles means the smaller output power.

## Assist Level

Press UP/DOWN button to adjust pedal assist level. The top level is 5, the min. level is 0. At 0 level, the motor output power is 0. The pedal assist and throttle can not work. The default is level 1 when the LCD is turned on. The assist becomes stronger when levels increase.

## ODO

Short press the button  to switch the interface to indicate ODO. At this interface, hold down the UP button for 5 seconds to reset the number.

## Trip

Short press the button  to switch the interface to indicate DIS. At this interface, hold down the UP button for 5 seconds to reset the number.

## Time

Short press the button  to switch the interface to indicate riding time.

## Motor Rotation

Short press the button  to switch the interface to indicate motor rotation.

## Voltage

Short press the button  to switch the interface to indicate the voltage.

## Headlight

This feature is not available in the standard model.

## Cruise

Twist the throttle and long press the button  at the same time to enter cruise mode. Release the throttle, the bike cruises at the current speed.

Long press the button  and twist the throttle or hold the brake lever to exist cruise

## Fault Display

 ----- Brake failure

 ----- Throttle failure

 ----- Motor failure

 ----- Controller failure

*DAPU*

## **LCD-K Specification**

CHUBUT PRECISE ELECTRONIC COMPANY LIMITED

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## About the User Manual

Dear users,

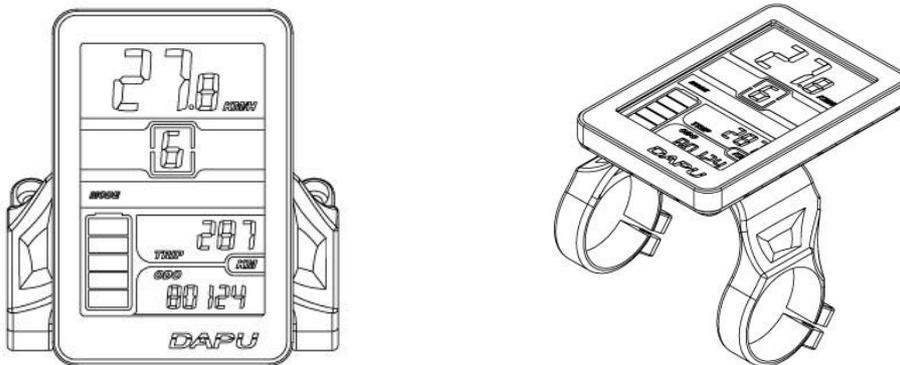
To ensure better performance of your ebike, please read through the LCD-K inspection carefully before using it. We will inform you of all the details, including the installation and setting of the hardware and normal use of the display with the most concise words. Meanwhile, the specification will also help you solve possible malfunction.

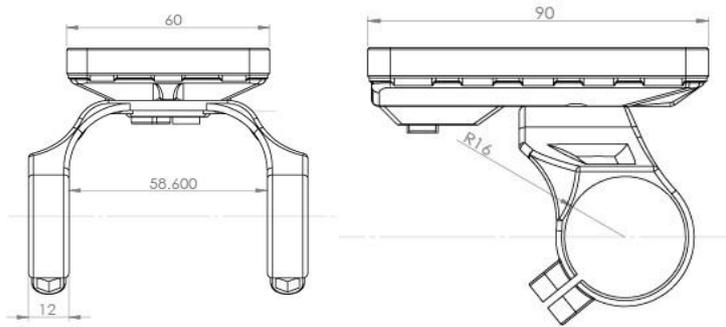
## External Dimensions

### Material and Color

LCD-K products are made of black PC material. Under the temperature ranging from  $-20^{\circ}\text{C}$  to  $60^{\circ}\text{C}$ , the shell material can ensure normal usage and good mechanical performance of the products.

Real product and dimension figure (unit: mm)





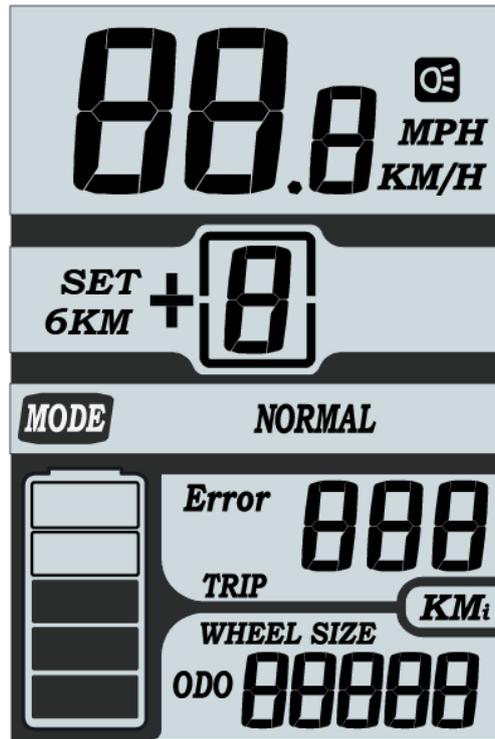
## Function Summary & Button Definition

### Function Summary

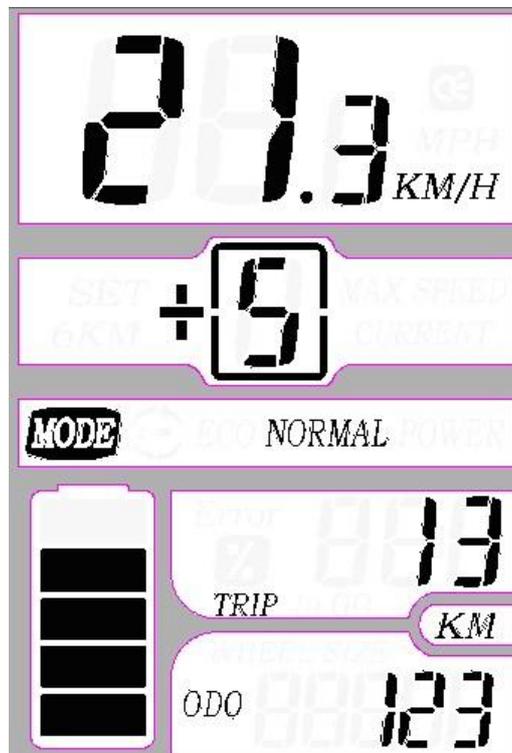
LCD-K provides a wide range of functions and indicators to meet the users' requirement during the riding. The displayed contents are as follows:

- ◆ ODO Display;
- ◆ Riding Distance Display;
- ◆ Speed Display;
- ◆ 6KM/H Display;
- ◆ Backlight ON/OFF;
- ◆ Assist Level;
- ◆ Capacity Display;
- ◆ Mode display;
- ◆ Error Code Display;
- ◆ Wheel Diameter Setting;
- ◆ KMH, MPH Switching;

## Full Display Area

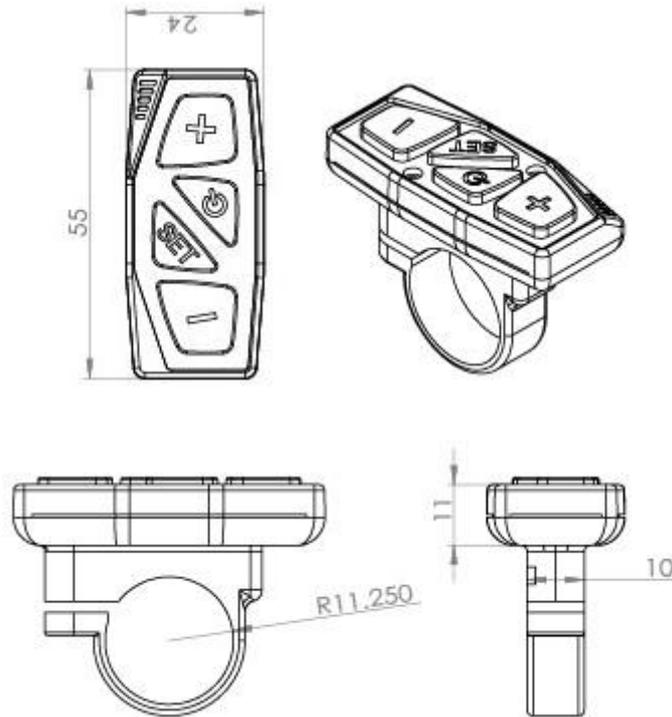


## Normal Display Area



## Button Definition

There are four buttons equipped on the LCD-K, namely, **ON/OFF**, **SET**, **UP** and **DOWN**.



## Normal Operation

### 1 ON/OFF

Press **ON/OFF** and the display will begin to function. The display will provide power supply for the artificial circuit of the controller.

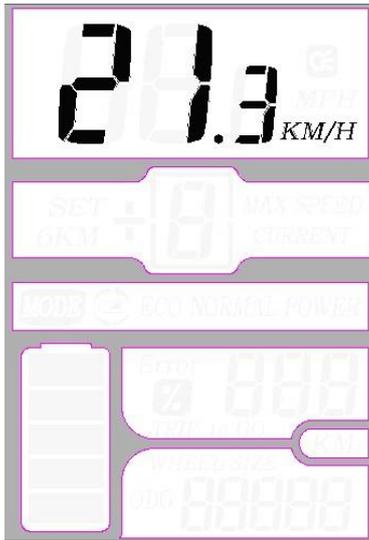
With display on, power can be turned off by pressing the **ON/OFF** for three seconds. With the display off, the display and controller no longer consume battery power. The leakage current is no more than  $2\mu\text{A}$ .

※ **If the ebike has not been used for more than five minutes, the display will automatically shut down.**

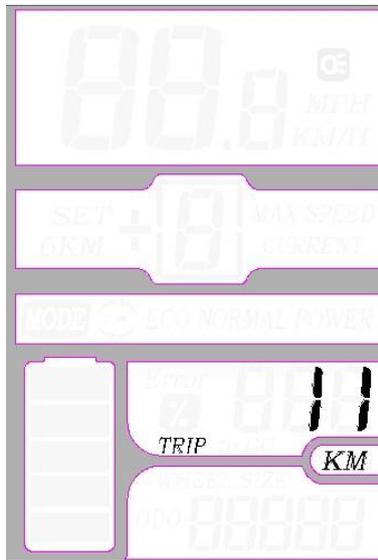
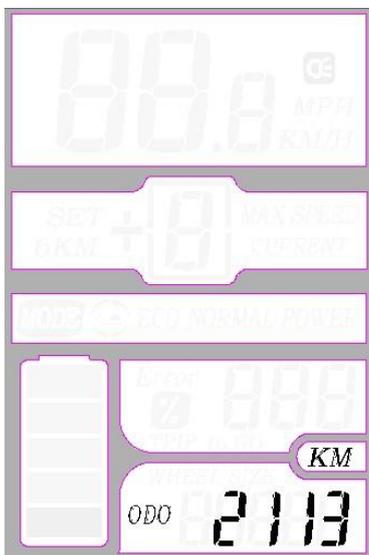
## 2 Display Interface

The LCD-K displays speed, ODO, TRIP, assist level, battery and mode by default.

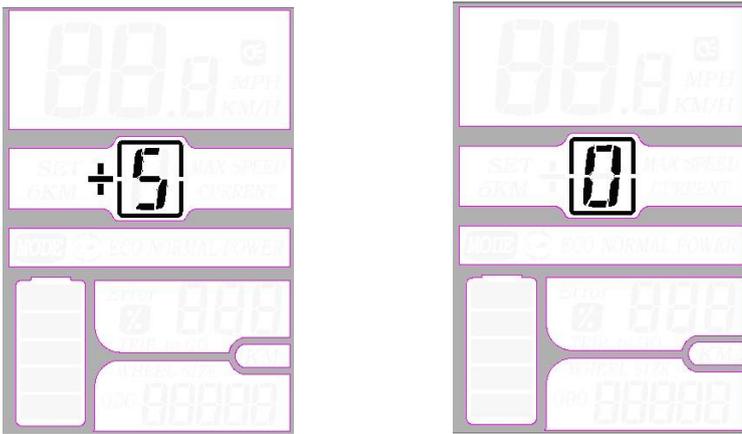
Speed display:



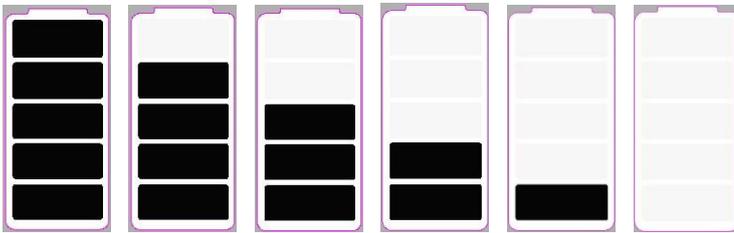
Distance display:



Assist level display:



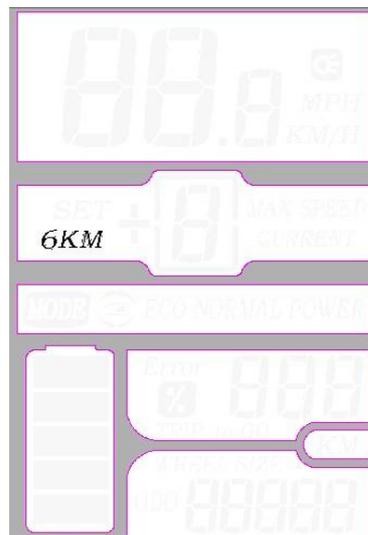
Battery display:



### 3 Push Cruise Control

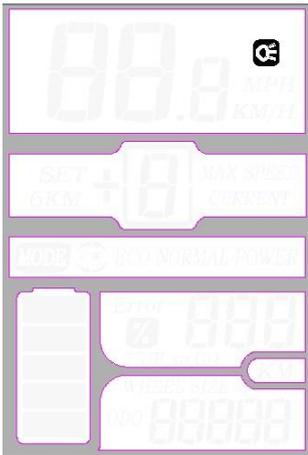
Press **UP** for 2 seconds to enter into the mode of power assist walk.

The ebike will move at a constant speed at 6 km/h with 6km indicating on the screen.



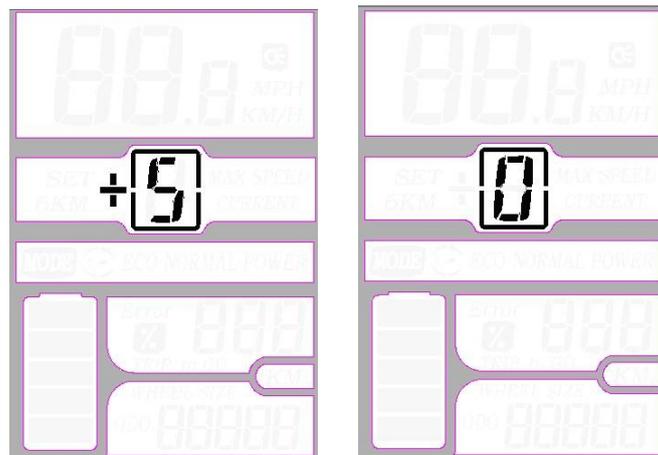
#### 4 Backlight ON/OFF

With the display on, press **ON/OFF** to turn on the backlight. Meanwhile, the controller will turn on the headlight. When driving in the evening or lack natural light, LED backlight can be turned on. And press **ON/OFF** again to turn off the backlight.



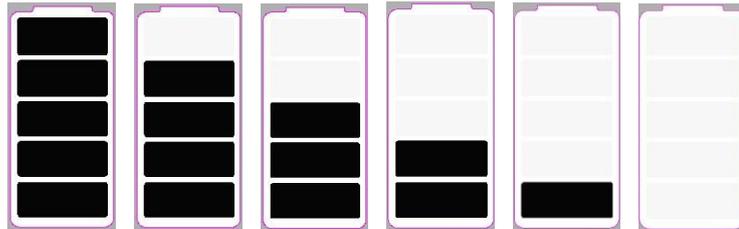
#### 5 Assistance Level Select

Press **UP** or **DOWN** to switch the ebike Assist Level as well as the output power of the motor. The output power at default ranges from 0 to 6 levels. The current level will be saved as the display turns off.



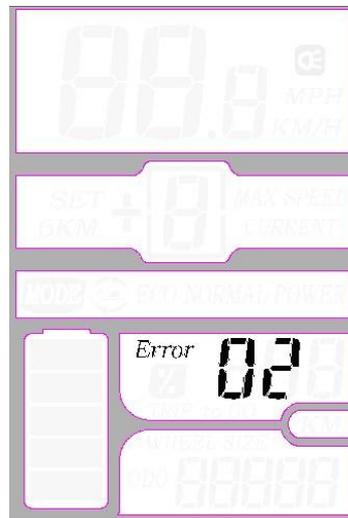
## 6 Capacity Display

When the battery is fully charged, the battery capacity icon is filled. When the battery is in low voltage, the last check will flash, indicating the necessity to recharge the battery immediately.



## 7 Error Code Display

If there is something wrong with the electronic control system, the display will show the error code automatically. Refer to **Table 1** for detailed error code information.



※Error display interface can be exited only when the problems have been fixed.

## General Setting

### 1、 Distance and Riding Time Clearing

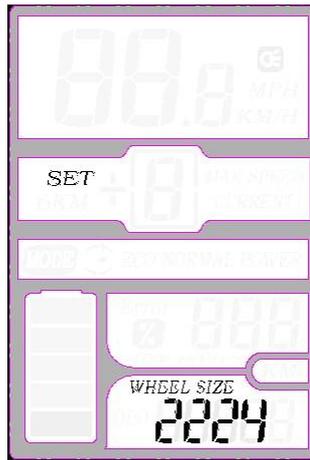
- ★ Press **SET** for 5 seconds to enter into TRIP distance display mode and press **DOWN** to clear Riding Distance.
- ★ Hold **SET,UP** and **DOWN** for 5 seconds to clear Riding Distance and Total Distance.

### 2、 Wheel Size Setting

- ★ Hold **SET** for 10 seconds to enter into wheel diameter setting interface.

Optional wheel diameter parameters include: 16, 20, 24, 26, 700C, 28. Press **UP** or **DOWN** to select the suitable diameter so as to ensure the accuracy of display about speed and mileage. Press **SET** to save current setting and exit the setting mode. The wheel diameter at default is 700C when leaving the factory.

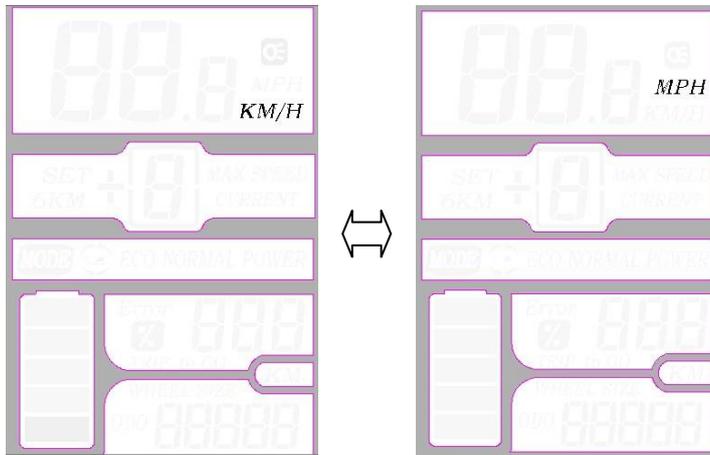
It is shown as below when the diameter is set at 700C:

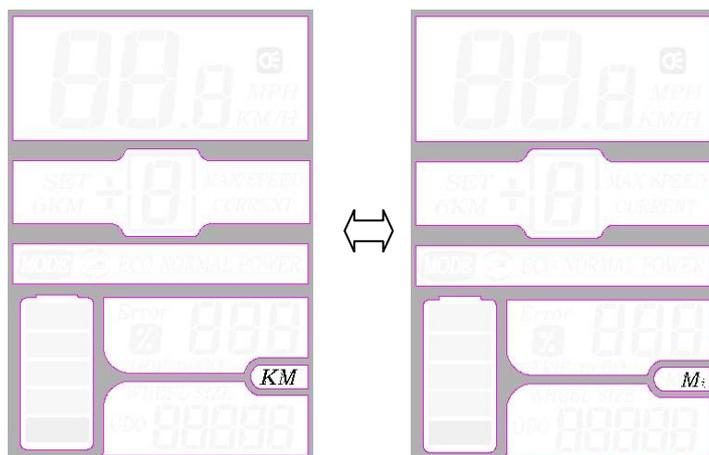


※ Press **UP** or **DOWN** to choose the wheel diameter, Press **SET** to save the current setting and exit the setting mode.

### 3、KM/H, MPH Switching

Press **UP** and **DOWN** for 5 seconds to switch between KM/H and MPH. (Show KM/H at default)





#### 4、 Version NO.

Press **SET,DOWN** and **UP** for 3 seconds to enter into the interface where current software version number can be indicated.(This feature is only for after-sales service)

※ **Press SET to exit the above setting interface.**

#### FAQ

Q: Why the display is not able to start up?

A: Checking the connector between the display wiring harness and controller.

Q: How to deal with the error code?

A: Find the corresponding problem according to the error code. If failed to handle by oneself, fix it at the maintenance center.

#### Quality assurance and Warranty scope

##### Warranty

- 1、 Under warranty, our company will shoulder the responsibility

to provide limited warranty to any faults caused by the quality of the product under normal use.

2、 The warranty period lasts for 18 months since the date of purchase.

### **Other items**

The following items does not belong to warranty scope

- 1、 Disassembly or modification without authorization.
- 2、 Malfunction or damage caused by the misuse or improper installation and debugging by the users or the third party.
- 3、 Shell scratch or breakage after leaving the factory.
- 4、 Wiring scratch or breakage.
- 5、 Malfunction or damage caused by the force majored (fire, earthquake etc. ) or natural disasters (lightening etc.)
- 6、 Beyond Warranty period.

### **Version Updates**

This specification goes with the general software version (V2.1) of CHUBUTSU PRECISE ELECTRONIC COMPANY LIMITED. There might be some discrepancy between the software version used on the bicycle and this specification, but all are subjected to the real version.

## **Error code definition**

Corresponding error code is shown to indicate the malfunction:

<b>Error code</b>	<b>Definition</b>
2	Current Abnormality or Damage of MOS
3	Motor blocked
4	Low voltage
5	Brake Abnormality (POST)
6	The hall of motor Abnormality
7	Throttle Abnormality
8	358 Error
9	Over voltage (>45V)
10	Controller Communication Abnormality
15	Panel Communication Abnormality

**Table 1**

# Li-ion Battery User Manual (Rear Rack Type I)



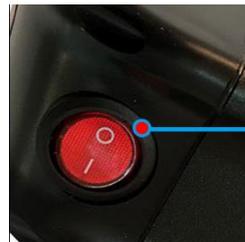
This manual contains important safety, performance and service information. Read it before you take the first ride on your new bicycle, and keep it for reference. The manual can also be found online at [www.motrike.com](http://www.motrike.com).

## Introduction



Battery level Indicator

Tail Light



Power Switch



Charging Port



Lock

**Battery Level Indicator** ----- Short press  button the indicator will turn on.

1 red, 3 green --- 100%

1 red, 2 green --- 75%

1 red, 1 green --- 50%

1 red, 0 green --- 25%

**Power Switch** ----- Turn ON/OFF the battery power ( " - " power on, " o " power off).

**Tail Light** ----- Long press  button the indicator will turn ON/OFF.

**Charging Port** ----- Charging current can not be more than 5 Amps.

Lock -----



Battery Locked On the Holder



No Lock

The battery must be locked when riding or it may fall out.

To remove the battery, switch the key to OPEN position, then pull the battery (using the underside finger groove) to slide it out from the holder.

**The key does not have to be in to operate the bike.**

**Operating** - Always switch the battery off, when inserting or removing it from the holder.

**Charging** - Battery should be charged in a dry location and at room temperature.

**Cleaning** - Cleaning with a direct water jet is impermissible, in particular to protect the electronic components. Before cleaning the eBike, remove the battery. Occasionally clean and lightly grease the connection port.

**Storage** - Store batteries in a dry location at temperatures between 0 and 20°C. Temperatures below -10°C and above 60°C should be avoided. Fully charging or fully discharging results in higher loading of the battery. The ideal charge status for lengthy periods of storage is approx. 30 to 60% or two to three LEDs on the battery indicator.

**Transport** - Always remove the battery pack from the bicycle before transporting the bicycle on a vehicle bike rack.

**Winter use** - During winter use (particularly below 0°C) we recommend charging and storing the battery at room temperature before inserting the battery in the eBike immediately before riding it. For longer journeys in the cold, it is advisable to use thermal protective covers.

**Correct disposal of damaged, used and redundant battery** - Do not touch heavily damaged batteries with your bare hands, since electrolyte may leak and cause skin irritation. Damaged batteries are best stored in a safe place outdoors with the connection port taped over.

## WARNING

**Read and understand all safety warnings. Failure to follow the below warnings could result in death or serious injury. Save all safety warnings and instructions for future reference.**

- Do not puncture or crush the battery pack. Do not impact the battery pack or modify it in any way. Do not use the battery pack if it shows visible damage. Danger of fire or explosion which can cause death or serious injury.
- Protect the battery pack against heat (e.g., temperature  $>60^{\circ}\text{C}$ ), fire and immersing into water. Danger of explosion.
- Remove the battery from the eBike before beginning work (e.g. inspection, repair, assembly, maintenance, etc.) on the eBike, transporting it with a car or airplane, or storing it. Unintentional activation of the eBike system poses a risk of injury.
- Do not open the battery. There is a risk of shortcircuiting. Opening the battery voids any and all warranty claims.
- Never touch the two battery electrodes at the same time as this could cause an electric shock.
- When the battery is not in use, keep it away from paper clips, coins, keys, nails, screws or other small metal objects that could make a connection from one terminal to another. A short circuit between the battery terminals may cause burns or a fire. Short circuit damage which occurs in this instance voids any and all warranty claims against Motrike.
- Avoid mechanical loads and exposure to high temperatures. These can damage the battery cells and cause the flammable contents to leak out.
- Do not place the battery near flammable materials. Ensure the battery is completely dry and placed on a fireproof surface before charging. There is a risk of fire due to the heat generated during charging.
- The eBike battery must not be left unattended while charging.
- If used incorrectly, liquid may leak from the battery. Contact with this liquid should be avoided. If contact accidentally occurs, rinse off with water. If the liquid comes into contact with your eyes, seek additional medical attention. Liquid leaking from the battery may cause irritation or scalding.
- Battery must not be subjected to mechanical shock. There is a risk of the battery being damaged.
- The battery may give off fumes if it becomes damaged or is used incorrectly. Ensure the area is well ventilated and seek medical attention should you experience any adverse effects. The fumes may irritate the respiratory system.

- Only charge the battery using original Motrike chargers. When using chargers that are not supplied by Motrike, the risk of fire cannot be excluded.
- Keep the battery away from children.

The safety of both our customers and our products is important to us. Our eBike batteries are lithium-ion batteries which have been developed and manufactured in accordance with the latest technology. We comply with or exceed the requirements of all relevant safety standards. When charged, these lithiumion batteries contain a high level of energy. If a fault occurs (which may not be detectable from the outside), in very rare cases and under unfavorable conditions, lithium-ion batteries can catch fire.

# Li-ion Battery User Manual (Rear Rack Type II)



This manual contains important safety, performance and service information. Read it before you take the first ride on your new bicycle, and keep it for reference. The manual can also be found online at [www.motrike.com](http://www.motrike.com).

## Introduction



**Battery Level Indicator** ----- Short press  button the indicator will turn on.

1 red, 3 green --- 100%

1 red, 2 green --- 75%

1 red, 1 green --- 50%

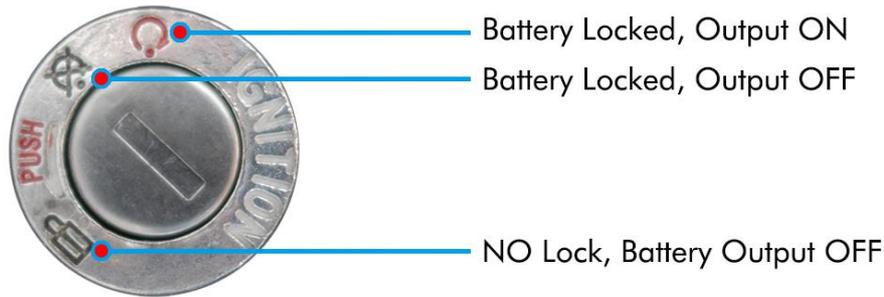
1 red, 0 green --- 25%

**Tail Light** ----- Long press  button the indicator will turn ON/OFF.

**Charging Port** ----- Charging current can not be more than 5 Amps.

**USB Port** ----- Output 5V 1A (Can be used to charge cell phone).

Lock -----



To remove the battery, switch the key to NO Lock position, then pull the battery (using the battery handle) to slide it out from the holder.

**Key must be pushed in to turn all the way ON.**

**Operating** - Always switch the battery off, when inserting or removing it from the holder.

**Charging** - Battery should be charged in a dry location and at room temperature.

**Cleaning** - Cleaning with a direct water jet is impermissible, in particular to protect the electronic components. Before cleaning the eBike, remove the battery. Occasionally clean and lightly grease the connection port.

**Storage** - Store batteries in a dry location at temperatures between 0 and 20°C. Temperatures below -10°C and above 60°C should be avoided. Fully charging or fully discharging results in higher loading of the battery. The ideal charge status for lengthy periods of storage is approx. 30 to 60% or two to three LEDs on the battery indicator.

**Transport** - Always remove the battery pack from the bicycle before transporting the bicycle on a vehicle bike rack.

**Winter use** - During winter use (particularly below 0°C) we recommend charging and storing the battery at room temperature before inserting the battery in the eBike immediately before riding it. For longer journeys in the cold, it is advisable to use thermal protective covers.

**Correct disposal of damaged, used and redundant battery** - Do not touch heavily damaged batteries with your bare hands, since electrolyte may leak and cause skin irritation. Damaged batteries are best stored in a safe place outdoors with the connection port taped over.

## WARNING

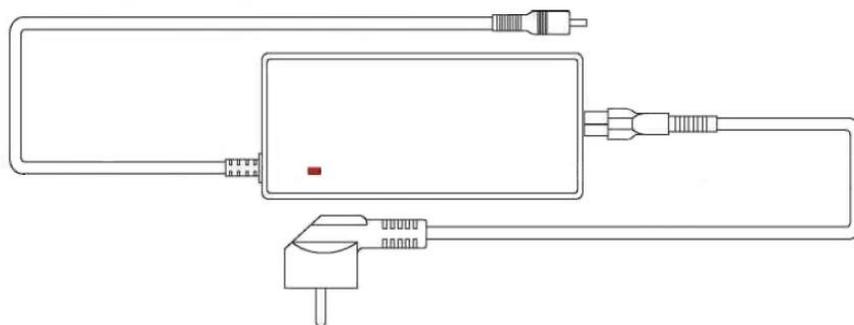
**Read and understand all safety warnings. Failure to follow the below warnings could result in death or serious injury. Save all safety warnings and instructions for future reference.**

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- Protect the battery pack against heat (e.g., temperature  $>60^{\circ}\text{C}$ ), fire and immersing into water. Danger of explosion.
- Remove the battery from the eBike before beginning work (e.g. inspection, repair, assembly, maintenance, etc.) on the eBike, transporting it with a car or airplane, or storing it. Unintentional activation of the eBike system poses a risk of injury.
- Do not open the battery. There is a risk of shortcircuiting. Opening the battery voids any and all warranty claims.
- Never touch the two battery electrodes at the same time as this could cause an electric shock.
- When the battery is not in use, keep it away from paper clips, coins, keys, nails, screws or other small metal objects that could make a connection from one terminal to another. A short circuit between the battery terminals may cause burns or a fire. Short circuit damage which occurs in this instance voids any and all warranty claims against Motrike.
- Avoid mechanical loads and exposure to high temperatures. These can damage the battery cells and cause the flammable contents to leak out.
- Do not place the battery near flammable materials. Ensure the battery is completely dry and placed on a fireproof surface before charging. There is a risk of fire due to the heat generated during charging.
- The eBike battery must not be left unattended while charging.
- If used incorrectly, liquid may leak from the battery. Contact with this liquid should be avoided. If contact accidentally occurs, rinse off with water. If the liquid comes into contact with your eyes, seek additional medical attention. Liquid leaking from the battery may cause irritation or scalding.
- Battery must not be subjected to mechanical shock. There is a risk of the battery being damaged.
- The battery may give off fumes if it becomes damaged or is used incorrectly. Ensure the area is well ventilated and seek medical attention should you experience any adverse effects. The fumes may irritate the respiratory system.

- Only charge the battery using original trike chargers. When using chargers that are not supplied by Motrike the risk of fire cannot be excluded.
- Keep the battery away from children.

The safety of both our customers and our products is important to us. Our eBike batteries are lithium-ion batteries which have been developed and manufactured in accordance with the latest technology. We comply with or exceed the requirements of all relevant safety standards. When charged, these lithiumion batteries contain a high level of energy. If a fault occurs (which may not be detectable from the outside), in very rare cases and under unfavorable conditions, lithium-ion batteries can catch fire.

# Li-ion Battery Charger User Manual



This manual contains important safety, performance and service information. Read it before you take the first ride on your new bicycle, and keep it for reference.

## Introduction

Charge Cycle and LED Indicators for Li-ion Battery	
LED	STATUS
Green	Battery not connected yet
Red	Charging
Green	Charging completed

## Troubleshooting Your Charger

- Check that the power cable is properly connected to the wall outlet and the battery so
- Check that the contacts of the charger and battery are clean and not damaged or bent
- Check that the battery isn't damaged or defective in any way.

If the battery will not charge:

- Unplug the charger from the outlet then plug it back in.
- Check that the outlet your charger is plugged into is functioning properly, if necessary connect other devices to it to confirm.
- Check the contacts of the plug connections.
- If charging is still not possible, please have the battery and charger checked by a dealer.

## WARNING

Read and understand all safety warnings. Failure to follow the below warnings could result in death or serious injury. Save all safety warnings and instructions for future reference.

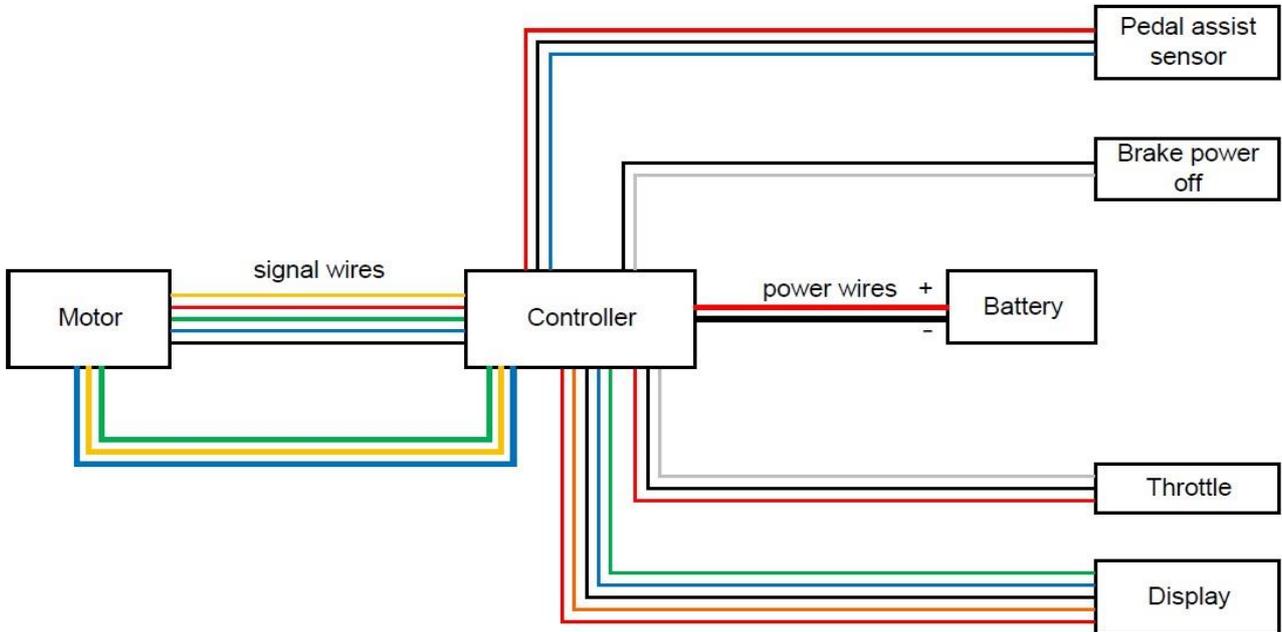
- Protect your charger from children. To prevent injury use the charger that comes with your e-bike. Other battery types can explode when charged with the incorrect charger. This can lead to personal injury and material damage.
- The use of accessories or batteries which are not sold or recommended by us can lead to fire, electrical shock, or injuries.
- Avoid operating the charging unit in a damp or wet environment.
- Avoid water penetration into the appliance. If liquid has entered, unplug the charger from the outlet and take it to your dealer for inspection.
- Avoid using the charger in thunderstorms.
- Avoid direct sunlight.
- Always switch the power off before charging the battery.
- The charger must always be used indoors.
- Make sure that the charger voltage matches your local voltage.
- Make sure you have a flat surface on which the unit is secure.
- Disconnect the device from the power supply when fully charged.
- Do not pull on the cable to avoid damage to the cable and the risk of electric shock.
- Make sure the power cord is unrolled or unwound after use so as not to damage the c
- Do not operate the charger with a damaged cable or plug. Ensure immediate replacement by the dealer if damaged.
- Do not operate the charger after it has been damaged.
- Do not disassemble the charger yourself. Faulty repair may result in electric shock or fire. To prevent electric shock, disconnect the charger from the outlet before clean it.
- Any cleaning of the charger should only be done with a dry cloth. Do not use oil, water or other solvents.
- An extension cable should only be used when absolutely necessary. The use of a faulty extension cables can result in fire or electric shock. If an extension cable needs to be used, make sure that:

the pins of the plug in number, size and shape exactly correspond to those.

- the extension cable is correctly wired and in good electrical condition.
- the extension cord has no visible damage.
- when using cable drums, the drum is fully unwound.

# Wiring Diagram

## M-009E



## M-F010E

