

# SCOUT LS XT ELECTRIC BIKE 2018

## MANUAL



### Welcome

First off, welcome to the Wattwheels family! We're so happy to have you on board! You've picked a great model and, in this manual, we're going to break down the basics to make sure that your bike remains in top shape and performs to the highest standard.

You're about to experience the ride of your life. In order to get you out and having fun as quickly and as safely as possible please read the all the manual carefully, paying close attention to the safety section.

Also, we highly recommend familiarizing yourself with local laws for e-bikes and the components of the model that you have before your first ride.

Wattwheels assumes that all persons involved in: using, repairing, maintaining, cleaning, or disposing of this or any Wattwheels product must have fully read and understood the content and meaning of these operating instructions.

Additionally, Wattwheels claims no responsibility for any injury or damage resulting in improper use of any electric bike.

**READY TO GET STARTED? LETS RIDE!**

### USING THIS MANUAL

This manual contains details of the product, its equipment, and information on its operation and maintenance. Read it carefully and familiarize yourself with the Scout before using it to ensure a safe use and prevent tragic accidents. Be sure to retain this manual as your convenient Scout information source.

This Manual contains many Warnings and Cautions concerning the safe operation and consequences,

if safe setup, operation and maintenance are not performed. All information in this manual should be carefully reviewed and if you have any questions you should contact your local retailer immediately.

Because it is impossible to anticipate every situation or condition which can occur while riding, this manual makes no representations about the safe use of bicycles under all conditions. There are risks associated with the use of any bicycle which cannot be predicted or avoided, and which are the sole responsibility of the rider. You should save this manual, along with any other documents that were included with your bicycle, for future reference, however all content in this manual is subject to change or withdrawal without notice. Visit [www.wattwheels.co.nz](http://www.wattwheels.co.nz) to download the latest version. Wattwheels makes every effort to ensure accuracy of its documentation and assumes no responsibility of liability if any errors or inaccuracies appear within. Assembly and first adjustment of your Scout Bike requires special tools and skills and it is recommended that this should be done by a trained bicycle mechanic if possible.

## LET'S GET STARTED:

### 1. COMPLETELY CHARGE THE BATTERY BEFORE THE FIRST USE

*(Red light is on when battery is charging, green when fully charged. Approx. time is around 4-5 hours)*

**(PLEASE BE CAREFUL NOT TO PRESS THE BRAKES LEVERS WHILE THE FRONT WHEEL IS NOT INSERTED. DOING SO WILL RESULT IN THE BRAKES PADS CLAMPING TOGETHER, AND YOU WILL NOT BE ABLE TO INSERT THE FRONT WHEEL WITHOUT BLEEDING THE BRAKES IN WHICH YOU WILL NEED A BIKE WORKSHOP TO PERFORM)**

### 2. ASSEMBLE THE HANDLEBARS

### 3. ATTACH THE PEDALS

*(Beware: The left-hand pedal has a reverse thread. To tighten, please turn anti-clockwise)*

### 4. ATTACH THE SEAT POST

### 5. ATTACH THE FRONT MUDGUARD AND ATTACH FRONT LIGHT

### 6. INSERT THE FRONT WHEEL WITH QUICK RELEASE

### 7. CHECK ALL SCREWS AND BOLTS ARE TIGHT, SEAT AT CORRECT HEIGHT, GEARS AND BRAKES CHECKED AND WORKING PROPERLY

## LCD DISPLAY FEATURES

The image shows the various features and information displayed on the wireless remote. The display is controlled using the 5-button remote mounted on the left side of the handlebar. For more information on the LCD display and operation please refer to the manual included. This is also located on our website at [www.wattwheels.co.nz/manuals](http://www.wattwheels.co.nz/manuals)



## LIGHTS

The front light is activated by pressing the remote button located under the throttle. Due to the power of the front light a separate switch is needed.

The rear light is activated by pressing down the light icon on the keypad. Also it will illuminate the display at night when pressed. The rear light will also activate when the brake levers are pressed to indicate to the person behind you are stopping

## BATTERY DISPLAY CAPACITY

The LCD readout on the handlebar of your Scout Bike features a battery capacity gauge (much like the fuel gauge on an automobile). Once the battery is fully depleted, the last remaining bar will begin to flash, communicating to the user that they should cease operation immediately.

## THROTTLE

The Throttle is located on the left-hand side of the handlebars in the form of a thumb piece. Please be careful that these throttles are set to operate the Scout from stationary so any slight press of this will propel the Scout forward. The throttle can be used when taking off from a stationary start, as a cruise control or just if you're in need of a break! Please be aware using the throttle will drain the battery much quicker than normal riding. Also, the throttle is not designed to climb steep hills. To get the maximum amount of power from the Scout on steep gradients select the highest level of PAS and use the highest gear.

## PAS (Pedal assist modes)

Pedal assist modes start from 1 and go up to 5. PAS level 1 is the first pedal assist level and will give you some slight assistance.

The rider however will still be doing most of the work. As you select the higher levels, the assistance will increase with level 5 basically doing all the work for you. Using higher levels of PAS will drain the battery faster. The recommended level is PAS 2-3 to ensure maximum battery life.

The higher the gear the faster the speed you'll get from the bike. On PAS 5 in gear one will give you less top speed than being in gear 7.

## BRAKES

The Scout electric bikes are equipped Tekro hydraulic disk brakes. Please be aware the hydraulic disk brakes are very powerful, so care is too be taken when braking. The front wheel brake is located on left hand side with the rear wheel brake on the right. All the brakes are equipped with a cut-out feature which means if either of the brakes are pressed the motor will automatically cut out.

## FRONT BASKET

A front basket comes with the Scout bikes. This is optional if you put on or not. Please note, if you put the front basket on the front handlebars cannot be folded down.

## TYRE PRESSURE

To avoid flats, keep tyre pressure at the recommended PSI. On off-road terrain a slightly lower PSI will provide more grip, but flats can occur.

**WARNING** Caution should be exercised when inflating tires with compressor air pressure equipment (e.g. gas stations). Due to the relatively small volume of air required be sure not to overinflate the tires as this can cause them to burst. Correct tire pressure should be adjusted according to the terrain within the range of. 10 to 30 psi

## DRIVING RANGE

The range of your Scout Bike is the distance the bike will travel on a single full charge of the onboard battery pack. The range values in this manual are estimates based on expected usage characteristics. Some of the factors which effect range include changes in elevation, speed, payload, and acceleration, number of starts and stops and ambient air temperatures. Tire pressure and terrain are also important variables to consider.

We suggest that you ride conservatively when you first get your Scout Bike to get to know your bike and travel routes.

Once you become familiar with the range requirements of your travel routes, and the capabilities of your Scout Bikes you can then adjust you riding characteristics if you so desire.

The following table provides general estimates and outlines various factors effecting range and their combined estimated effects on range. This table is meant to help owners understand the factors that can increase or decrease range, but Scout Bikes makes no claims to the range that individual users might obtain

Expected Range	Operating Conditions
45 Km	<ul style="list-style-type: none"> <li>o Hilly Terrain</li> <li>o Heavy Payload</li> <li>o Windy</li> <li>o High Speeds</li> <li>o High PAS levels</li> </ul>
68 Km	<ul style="list-style-type: none"> <li>o Flat Terrain</li> <li>o Normal Payload</li> <li>o Not Windy</li> <li>o Medium Speeds</li> <li>o Moderate PAS levels</li> </ul>
90 Km +	<ul style="list-style-type: none"> <li>o Flat Terrain</li> <li>o Normal Payload</li> <li>o Not Windy</li> <li>o Low Pedal Assist Level</li> <li>o Moderate to Heavy Pedaling</li> </ul>

## ADJUSTING THE SEAT HEIGHT

Use the quick release lever to free the seat post and pull upwards or push downwards to reach desired height.

**Notice:** Ensure seat post and seat are properly adjusted before riding. Do not raise the seat post beyond the minimum insertion marking etched into the seat post tube. If your seat post projects from the frame beyond these markings, the seat post or frame may break, which could cause you to lose control and fall. Prior to first use, be sure to tighten the seat clamp properly. A loose seat clamp or seat post binding bolt can cause damage to the bicycle or can cause you to lose control or fall. Periodically check to make sure these the seat clamp is properly tightened.

## RIDER COMFORT

To obtain maximum comfort, the rider should not overextend his or her arms reach when riding. In order to obtain the most comfortable riding position and offer the best possible pedaling efficiency, the seat height should be set correctly in relation to the rider's leg length. The correct saddle height should not allow leg strain from over extension, and the hips should not rock from side to side when pedaling. While sitting on the bicycle with one pedal at its lowest point, place the ball of your foot on that pedal. The correct saddle height will allow the knee to be slightly bent in this position.



## BATTERY & CHARGING

The battery can be either charged by leaving the battery in the bike or by removing it.

To remove the battery firstly flick the seat up using the quick release switch located at the back of the seat. This will enable you to take the battery out of the bike. Insert the keys then press in and turn anti clockwise until the locking mechanism retracts from the battery mount.

When the battery is on you can see the current charge state by pressing on the button located on top of the battery. This will give you 4 bars. A full battery will indicate three bars lighting up green and one red at the bottom.

Removing the battery from the bike when storing it for a long period of time is recommended. In this case store it in a cool, dry area away from water. The charge left in the battery should be 50%-75% for long storage times.

Cleaning the battery and battery housing should only be done while disconnected and powered off. Use a dry rag, and if need be a lightly damp rag.

**DO NOT** spray with high-pressured water to prevent damage or possible short-circuiting. Only charge the battery with the supplied charger as others may not function properly, and this increases the possibility of fire or explosion.

Charging the battery during the day in a dry space with a smoke/fire alarm is recommended, while placing the battery on a non-flammable surface. Do not store the charger or battery in a wet place or in direct sunlight.

Lithium-ion batteries are meant to be recharged with 10%-15% of the charge remaining to prevent damage to the cells. Keep both the battery and charger out of the reach of children and If there appears to be an issue with the charger or battery, stop use immediately and contact either the manufacturer or Wattwheels at [admin@wattwheels.co.nz](mailto:admin@wattwheels.co.nz)

## Charging:

- Firstly, insert plug of the charger into charging socket of the battery box.
- Second, Insert the charger into the socket of the home power supply. It shows the power has already been put through when the indicator lamp of the charger is on.
- It is charging when the indicator light is red. When the light turns from red to green, it indicates that the battery is fully charged.
- After the green light is on, the charger is in little electric current and "fill slowly mode". It will not be harmful to the battery if left to charge for a longer period or overnight. We do recommend not leaving for longer than 48 hours if possible

Please don't use the charger of other brands to charge. The electric apparatus contains a high-pressure circuit.

## USEFUL TIPS

While starting or climbing, please ride with feet auxiliary as much as possible, otherwise the energy consumption will be very high. By doing this it can lengthen the life of battery and motor.

- This specified load of the Electric Bicycle is 120kg, please don't overload.
- While riding if the level of charge shows only one bar is recommended to ride as a normal bike at this time and charge as soon as you can.
- Close the power and take down the key, while parking.
- The power switch of the LCD panel should be turned every time making the Electric Bicycle won't start suddenly and cause accidents.
- Try and reduce please reduce braking frequently while riding, in order to save the electric energy.
- Do not turn on the bike when the brake levers are depressed as this will trigger the faulty brake sensor and disable the motor.
- Inspect the bolts on a regular basis, to ensure that they are tight and all components are secure. This is especially important if you are riding in demanding conditions.

As with all bikes pay particular attention to the crank bolts, as they are subject to more loosening forces than any other bolt.

Regularly check the brake pads, the provided Tektro pads should be replaced if they have:

- Been contaminated
- Have less than .8mm of material
- Cracks or deformation

To replace the brake pads or perform other maintenance take it to a qualified professional at your local bike shop.

Properly inflate your tyres according to riding conditions. Under-inflated tyres are prone to pinch flats, especially if riding off-road.

Please don't dismantle and repair parts by yourself, please go to your local bike repair shop. This bike comes with a manufacturer's warranty (document included) so any standard repairs please contact Wattwheels and we will arrange a service agent close to you to look at the bike. We carry spare parts so anything electrical that a standard bike shop doesn't have we will ship to you.

## BEST PRACTISES FOR EXTENDING BATTERY LIFE

**Notice:** It is recommended that users pay close attention and ride within the following limitations to ensure the mid-drive motor does not overheat or become damaged from excessive loading.

- o Do not climb hills steeper than 20% in grade.
- o Pedal to assist the motor when climbing hills and accelerating from a stop.
- o Avoid sudden starts and stops.
- o Accelerate slowly.

## PARKING, STORAGE & TRANSPORT

Please follow these basic parking, storage and transport tips to ensure your bike is well cared for on and off the road.

- o When pushing the vehicle manually, turn off the power to avoid accidental acceleration from the motor.
  - o It is recommended to park indoors.
  
  - o Switch the power off, and any lights to conserve battery. Remove the key from the bike and ensure the battery is locked to the frame or removed and brought with you for security.
  - o In public places, your Scout Bike must be parked in accordance with local rules and regulations.
  - o If you have to park outdoors in rain, or wet conditions you should only leave your Scout Bike outside for a few hours and proceed to park the bike in a dry location afterwards in order to allow all the systems to dry out. Much like a regular bike, use in wet conditions mandates a more regular maintenance schedule to ensure your bike does not become rusty, corroded and to ensure all systems are always working safely.
  - o Do not park, store, or transport your Scout Bike on a rack that is not designed for the size and weight of the bike.
  - o Wide tyres, as used on Scout Bikes, cannot fit into all bike racks, please select an appropriate rack for the width of tyres used on your bike.
  - o Locking up your bike is recommended to ensure your bike is secure and the chance of theft is reduced.
- Bikes makes no claims or recommendations on the proper lock hardware or procedures to secure your bike, but we do recommend you take the appropriate precautions to keep your Scout Bike safe from theft.
- o When storing your bike or carrying your bike on a rack for transport, you can remove the battery pack to reduce the weight of the bike and make lifting and loading easier.

## SAFETY CHECK

Safety Check	Basic Steps
1. Brakes	<ul style="list-style-type: none"> <li>o Ensure front and rear brakes work properly.</li> <li>o Ensure brake pads are not over worn and are correctly positioned in relation to the rims.</li> <li>o Ensure brake control cables are lubricated, correctly adjusted and display no obvious wear.</li> <li>o Ensure brake control levers are lubricated and tightly secured to the handlebars.</li> </ul>

2. Wheels and Tyres	<ul style="list-style-type: none"> <li>o Ensure tyres are inflated to within the recommended limits displayed on the tire sidewalls.</li> <li>o Ensure tires have tread and have no BULGES OR EXCESSIVE WEAR.</li> <li>o Ensure rims run true and have no obvious wobbles or kinks.</li> <li>o Ensure all wheel spokes are tight and not broken.</li> <li>o Check axle nuts and quick releases to ensure they are tight. If your bicycle is outfitted with quick release axles, ensure the locking levers are correctly tensioned and in the closed position.</li> </ul>
3. Steering	<ul style="list-style-type: none"> <li>o Ensure handlebar and stem are correctly adjusted and tightened, and allow proper steering.</li> <li>o Ensure the handlebars are set correctly in relation to the forks and the direction of travel.</li> </ul>
4. Chain	<ul style="list-style-type: none"> <li>o Ensure the chain is oiled, clean and runs smoothly.</li> <li>o Extra care is required in wet or dusty conditions</li> </ul>
5. Bearings	<ul style="list-style-type: none"> <li>o Ensure all bearings are lubricated, run freely and display no excess movement, grinding or rattling.</li> <li>o Check headset, wheel bearings, pedal bearings and bottom bracket bearings.</li> </ul>
6. Cranks and Pedals	<ul style="list-style-type: none"> <li>o Ensure pedals are securely tightened to the cranks.</li> <li>o Ensure the cranks are securely tightened and are not bent.</li> </ul>
7. Derailleurs	<ul style="list-style-type: none"> <li>o Check that the derailleur(s) are adjusted and functioning properly.</li> <li>o Ensure shift and brake levers are attached to the handlebar securely.</li> <li>o Ensure all brake and shift cables are properly lubricated.</li> </ul>
8. Frame and Fork	<ul style="list-style-type: none"> <li>o Check that the frame and fork are not bent or broken.</li> <li>o If either are bent or broken, they should be replaced.</li> </ul>
9. Accessories	<ul style="list-style-type: none"> <li>o Ensure all reflectors are properly fitted and not obscured.</li> <li>o Ensure all other fitting on the bike are properly secured and functioning.</li> <li>o Ensure rider is wearing helmet and any other required riding safety gear.</li> </ul>
10. Motor Drive Assembly and Throttle	<ul style="list-style-type: none"> <li>o Ensure hub motor is spinning smoothly and the motor bearings are in good working order.</li> </ul>

11. Battery Pack	<ul style="list-style-type: none"> <li>o Ensure battery is charged before use.</li> <li>o Ensure there is no damage to battery pack.</li> <li>o Lock battery to frame and check to see that it is secured.</li> </ul>
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## BASIC TROUBLESHOOTING

Symptoms	Possible Causes	Most Common Solutions	
1	<b>It doesn't work</b>	<ol style="list-style-type: none"> <li>1. Insufficient battery power</li> <li>2. Faulty Connections</li> <li>3. Battery not fully seated in tray</li> <li>4. Improper turn on sequence</li> <li>5. Brakes are applied</li> </ol>	<ol style="list-style-type: none"> <li>1. Charge the battery pack</li> <li>2. Clean and repair connections</li> <li>3. Install battery correctly</li> <li>4. Turn on bike with proper sequence</li> <li>5. Disengage brakes</li> </ol>
2	<b>Irregular acceleration and/or reduced top speed</b>	<ol style="list-style-type: none"> <li>1. Insufficient battery power</li> <li>2. Loose or damaged throttle</li> </ol>	<ol style="list-style-type: none"> <li>1. Charge or replace battery</li> <li>2. Replace throttle</li> </ol>
3	<b>When powered on the motor does not respond</b>	<ol style="list-style-type: none"> <li>1. Loose wiring</li> <li>2. Loose or damaged throttle</li> <li>3. Loose or damaged motor plug wire</li> <li>4. Damaged motor</li> </ol>	<ol style="list-style-type: none"> <li>1. Repair and or reconnect</li> <li>2. Tighten or replace</li> <li>3. Secure or replace</li> <li>4. Repair or replace</li> </ol>
4	<b>Reduced range</b>	<ol style="list-style-type: none"> <li>1. Low tire pressure</li> <li>2. Low or faulty battery</li> <li>3. Driving with too many hills, headwind, braking, and/or excessive load</li> <li>4. Batter discharged for long period of time without regular charges, aged or damaged.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust tire pressure</li> <li>2. Check connections or charge battery</li> <li>3. Assist with pedals or adjust route</li> <li>4. Replace the battery</li> </ol>
5	<b>The battery won't charge</b>	<ol style="list-style-type: none"> <li>1. Charger not well connected</li> <li>2. Charger damaged</li> <li>3. Battery damaged</li> <li>4. Wiring damaged</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust the connections</li> <li>2. Replace</li> <li>3. Replace</li> <li>4. Repair or replace</li> </ol>
6	<b>Wheel or motor makes strange noises</b>	<ol style="list-style-type: none"> <li>1. Damaged motor bearings</li> <li>2. Damaged wheel spokes or rim</li> <li>3. Damaged motor wiring</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace</li> <li>2. Repair or replace</li> <li>3. Repair or replace motor.</li> </ol>

## ERROR DETECTION

Your Scout Bike is equipped with an error detection system integrated into the LCD display and motor controller. In the case of an electronic control system fault an error code should display. The error codes are listed in the manual and the most common and can aid in troubleshooting. If your bike has an error code displayed at any time it is recommended that you cease operation and contact Wattwheels immediately.

**FINALLY, WE WOULD LIKE TO SAY THANKS AGAIN AND ENJOY YOUR NEW E-BIKE! AND PLEASE CONTACT YOUR LOCAL DEALER OR WATTWHEELS IF YOU HAVE ANY ISSUES OR QUESTIONS.**

**"POWER TO THE PEOPLE"**

# LCD-P Instructions



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## About the User Manual

Dear users:

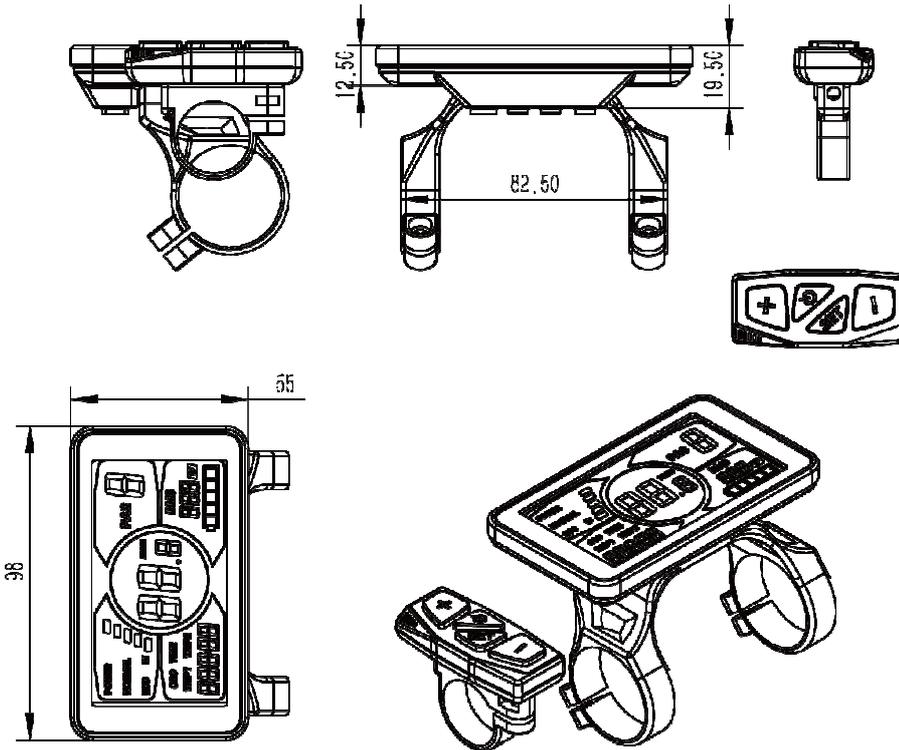
To ensure better performance of your e-bike, please read through the LCD-P product introduction carefully before using it. We will inform you all the details concisely (including hardware installation, setting and normal operations) when using our display. Meanwhile, the introduction will also help you solve possible confusion and malfunction.

## Outlook and Size

### Material and Color

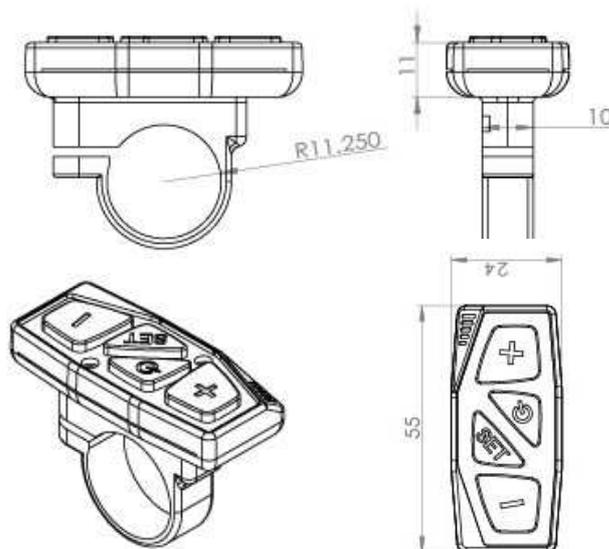
LCD-P products are made of black ABS material and the bracket is made of nylon material. Under the temperature of -20 to 60°C, the shell material can ensure normal usage and good mechanical performance of the products.

Dimension figure (unit: mm)



## Button Definition

LCD-P has four buttons, including **ON/OFF**、**SET**、**UP** and **DOWN** “ON/OFF” names to “”, “SET” names to “**SET**”; “UP” names to “+” and “DOWN” names to “-”.



# Function Summary

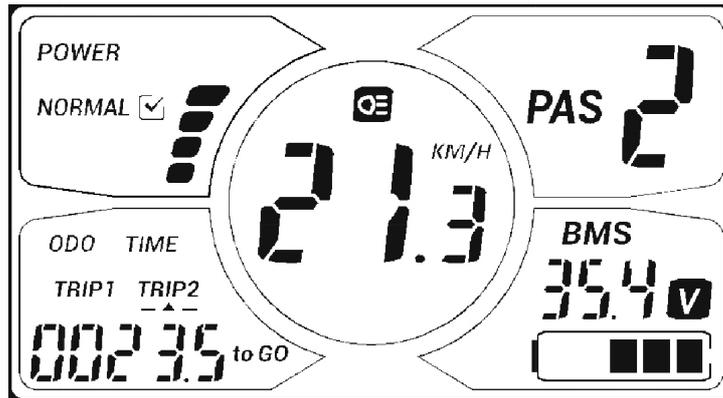
## Function Summary

LCD-P provides a wide range of functions and indicators to fit the users' needs. The indicated contents are as below.

1. ON/OFF
2. Current display
3. Riding mode selection
4. Speed display
5. KM/H & MPH
6. Backlight indicator
7. 6KM/H work
8. PAS level selection
9. Error code indicator
10. SET operation
11. Distance indicator
  - 11.1 Total distance (ODO)
  - 11.2 Trip 1
  - 11.3 Trip 2
  - 11.4 Remaining distance indicator (**without this function by default**)
12. Trip time indicator
13. Battery indicator
  - 13.1 Battery residual capacity indicator
  - 13.2 Battery voltage
  - 13.3 Battery capacity percentage (**without this function by default**)
  - 13.4 Battery charging and discharging times (**without this function by default**)
14. Cable definition

## Normal View Area

With the display on ,the default display are riding speed、 trip 2、 PAS level、 battery indicator as show in fig below. Press **SET** to switch the display information.



## Normal Operation

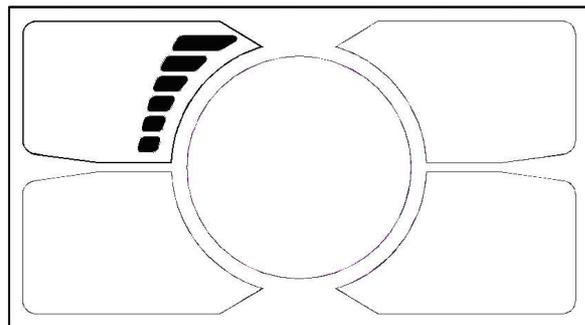
### 1. ON/OFF

Hold **ON/OFF** and start the display. The display will provide power for the controller. Hold **ON/OFF** again to open the backlight. With display on, press **ON/OFF** for 3 seconds to turn off the power. With the display off, there is no battery power consumption. The leakage current is no more than 2  $\mu$ A.

※ The panel will go to sleep when the speed is 0 km/h for 5 minutes.

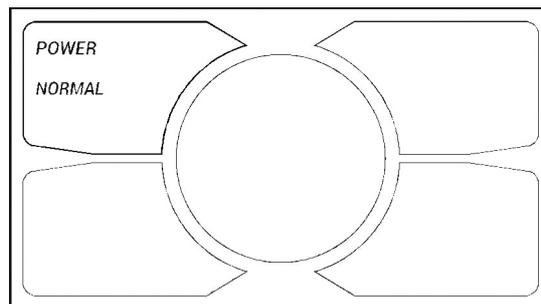
### 2. Current Display

That represents the discharging current of the controller currently, each segment is 2A, six segments is  $\geq 12$ A.



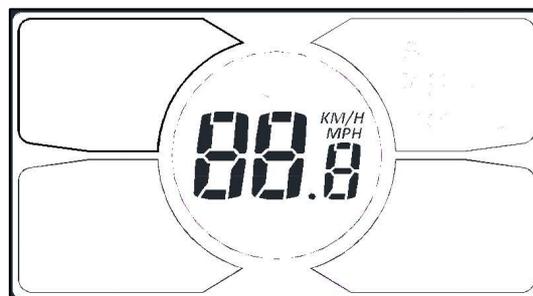
### 3. Riding Mode Selection

There is only one default mode on this display now and "power" is the option. Normal mode is not available



### 4. Speed Display

The speed display is as below, and user can select KM/H or MPH in SET3.

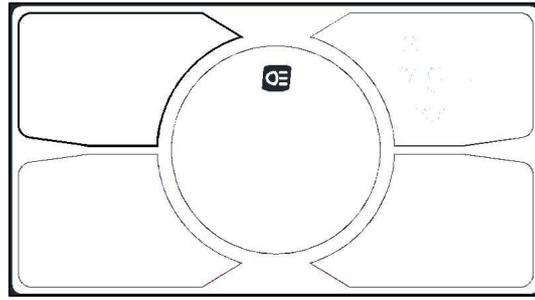


### 5. KM/H & MPH

Select KM/H or MPH for the speed and mileage, display will be the currently selected units display.

### 6. Backlight Indicator

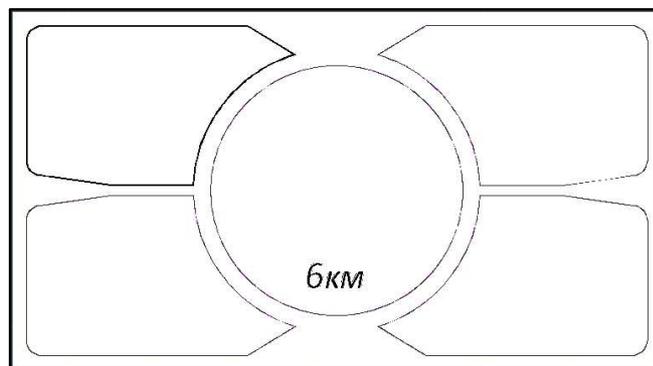
With the power on, click the **ON/OFF** and turn on the backlight. Click it again and turn off the backlight.



※ If the e-bike has headlight, the controller will turn on/off the headlight at the same time of the backlight on/off (without this function by default)

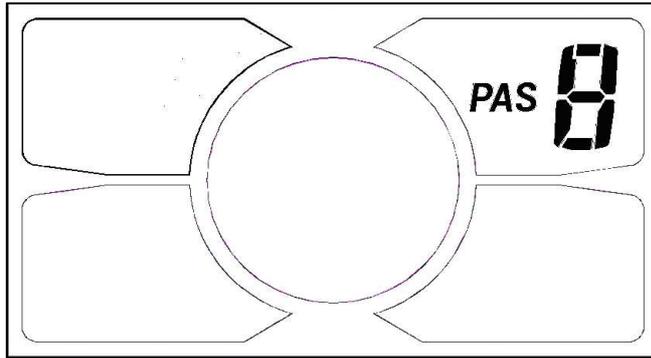
## 7. 6KM/H Work

Hold the UP for 2 seconds to get in 6km PAS work, and with your hand off, the 6km PAS work is released. The display is as below.



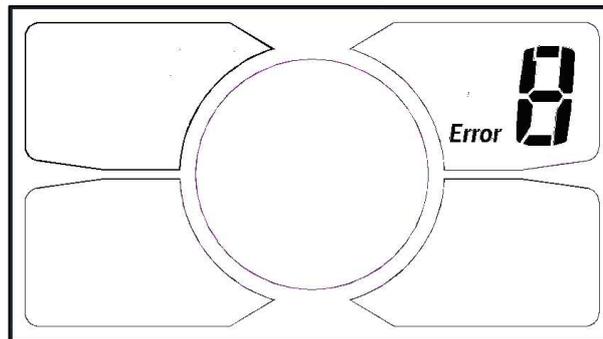
## 8. PAS Level Selection

Click **UP** or **DOWN** to change the stages and output power ratio, the output power range from level 0 to level 5, the default value is level 0.



## 9. Error Code Indicator

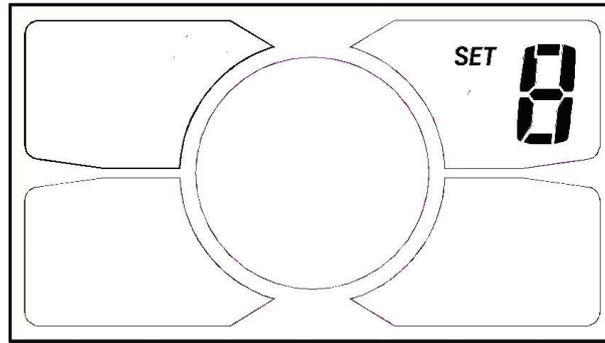
If there is something wrong with the electronic control system, the display will flash at 1 HZ and show the error code automatically. Different error code is corresponding with different fault information, please see the last page **Error code table** for details.



※ Display return to normal only after problem being fixed and e-bike will not run before fixing the problem.

## 10. SET Operation

Hold the **SET** for 2 seconds and enter into the setting interface, then Number 8 is lighting, the display will flash at 1 HZ. Click the **SET** to cycle from 0 to 3 setting interface, press **UP** or **DOWN** to select the wanted parameter, and hold the **SET** for 1 second to exit.



### 10.1. SET0: Riding mode selection

There are two modes for selection: POWER and NORMAL.

### 10.2. SET1: Reset trip 1 distance

Click the **DOWN** to reset the trip 1, then the **TRIP1** icon will flash at 1 HZ, meanwhile the trip 1 will be cleared.

### 10.3. SET2: Wheel diameter setting

Select the accurate wheel diameter value to ensure the accuracy of display about speed and mileage.

### 10.4. SET3: KM/H & MPH

Select KM/H or MPH for the speed and mileage, display will be the currently selected units display.

※ Press **UP** or **DOWN** to select parameter, hold the **SET** for 1 second to save and exit.

## 11. Distance Indicator

With the display on, press **SET** to switch the display information, in turn shows: ODO, trip 1 and trip 2.

### 11.1 ODO

The ODO records the driving mileage from using, the accumulated value cannot be cleared.

### 11.2 Trip 1

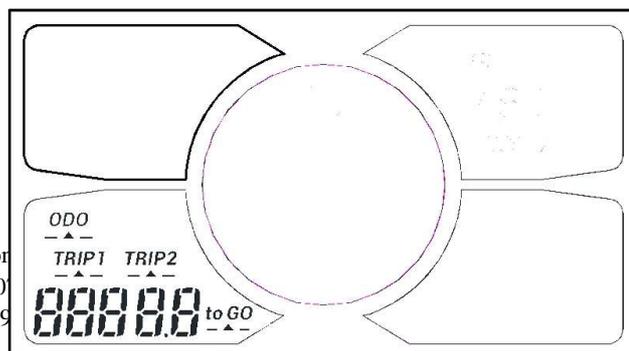
Trip 1 can be reset by hand in the **SET 1** interface. (when the riding mileage  $\geq 500\text{km}$ , it will be reset automatically. The value will be accumulated without resetting.)

### 11.3 Trip 2

Trip 2 displays the last driving distance for 30 s after turning on the display, then reset it automatically and start to record the current distance.

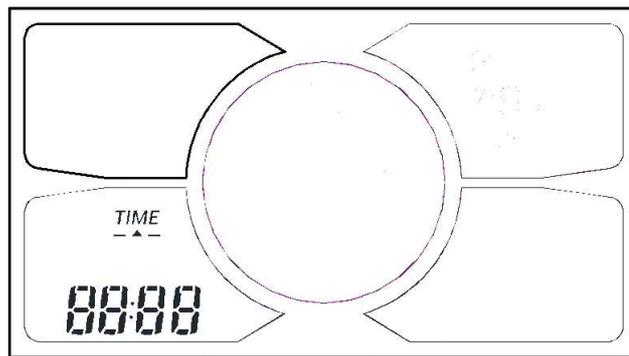
### 11.4 Remaining distance (without this function by default)

This function need to be customized.

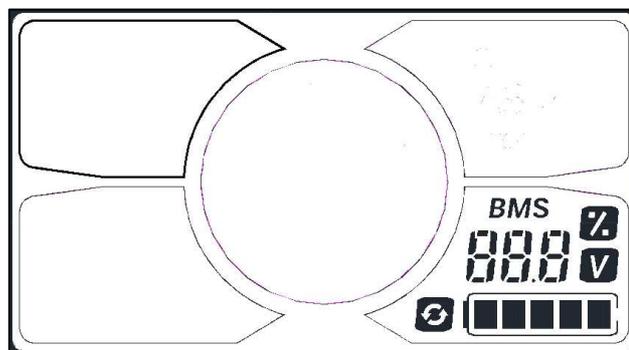


## 12. Trip Time Indicator

The riding time parameter is automatically reset after shut down.



## 13. Battery Indicator



### 13.1 Battery residual capacity indicator

The battery frame have five segments, each segment represent 20% battery capacity. When the capacity is full, the five segments are all light. In low battery, the battery frame will flash, it indicates that the battery is severely low and needs to be recharged immediately.



### 13.2 Battery voltage

It displays the current voltage of the battery.

### 13.3 Battery capacity percentage (without this function by default)

It displays the percentage of battery capacity. This function needs to be customized.

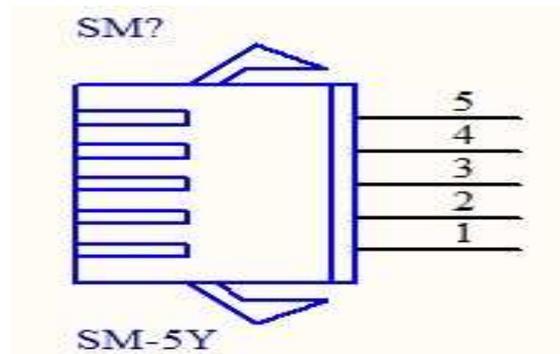
### 13.4 Battery charging and discharging times (without this function by default)

This function needs customization.

※ The panel displays the voltage for the default.

## 14. Cable Definition

- 1 RED: Battery +
- 2 BLACK: Battery-
- 3 GREY: UART- SEND (TXD)
- 4 WHITE:UART-RECEIVE (RXD)
- 5 YELLOW: Lock



## 15. Auto Sleep After 5 Minutes

When the riding speed is 0 km/h for 5 minutes, the system will go to

sleep automatically.

## Common Problems & Solutions

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

A: Checking the connector that between display and controller.

Q: How to deal with the error code?

A: Fix it to the maintenance place immediately. If cannot be resolved, you can go to the electric vehicle repair points repair it in a timely manner.

## Error Code Table

The error code is corresponding with the fault definition.

Error code	Definition
0	normal
2	Current error or MOS damaged
3	Motor stalling
4	Under voltage
5	Brake error(Start detection)
6	Hall error
7	Throttle error(Start detection)
9	Over voltage
A	communication controller receiving error

F	communication display receiving error
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