

Blackburn TL





User Manual

Thank you for choosing and purchasing our E-Bike.

For your riding safety, please read all the instructions before using the product. KEEP THESE INSTRUCTIONS.

To reduce the risk of injury, close supervision is necessary when the product is used near children.

Do not put fingers or hands into the product. Do not use this product if the flexible power cord or output cable is frayed or has broken insulation, or if there are any other signs of damage.

This equipment is not intended to be used at ambient temperatures less than -20°C or above ambient temperatures of 60°C.

The battery is intended to be charged when the ambient temperature is between 0°C and 40°C. Never charge the battery when ambient temperatures are outside this range.

- Strictly abide by local laws and regulations and traffic laws. The company is not responsible for any consequences caused by violation of the above laws and regulations.
- Strictly follow the instructions in the manual for corresponding operations. The company is not responsible for any consequences caused by improper use, speeding, overloading, etc.
- 3. Do not use this E-Bike to do stunts as it will increase the probability of injury and damage to the product. It is not intended for use at elevations greater than 2000 m above sea level.
- 4. Please always wear a helmet when riding an E-Bike.
- 5. Do not leave the battery near fire or heat sources.
- 6. Please regularly check whether the brake performance is good.
- 7. Please do not modify, repair or disassemble the product on your own.
- 8. Avoid using used, defective or aftermarket batteries.

SAFETY INSTRUCTIONS

- 9. People who should not ride the E-Bike include:
 - Anyone under the influence of alcohol or drugs.
 - Anyone who suffers from an illness that puts them at risk if they engage in strenuous physical activity.
 - Anyone who has problems with balance or with motor skills that would interfere with their ability to maintain balance.
 - Anyone whose weight is outside the stated limits (see Specifications).
 - Pregnant women.

SPECIFICATIONS

Model	Blackburn TL
Max Load	120kg
Motor	500W/48V Hub, UL approved
Battery	Samsung 14.7Ah with BMS, UL approved (21700 cell)
Fork	RST hydraulic suspension
Max Speed	32km/h
Derailleur	7 Speed
Max Distance	35km – 40km (Pure Power)
Max Distance	70km – 110km (Pedal assist)
Sensor	Speed Sensor
Frame	Aluminum Alloy
Brake Type	Zoom Hydraulic brakes w/ cut-off
Tire Size	Kenda 70 cm X 6 cm (27.5 x 2.35)
Tire Pressure	Min: 30 psi Max:50 psi
Charger	54.6V/2A UL approved
Charge Time	6-8 hours
Net Weight	29.4kg

PARTS DIAGRAMS



Features and parts

- 1. Brake light
- 2. Battery
- 3. Seat
- 4. Brake Lever
- 5. Headlight

- 6. 70-cm Tire
- 7. Rear Derailleur
- 8. Kickstand
- 9. Pedal

PARTS DIAGRAMS



- 1. Front Brake Lever (Left).
- 2. LCD Display
- 3. Rear Brake Lever and derailleur shifter
- 4. Handlebar
- 5. Controller for LCD display
- 6. Thumb Throttle
- 7. On/Off for LCD Display

DISPLAY PANEL



Riding interface

- 1. Battery Capacity
- 2. Cruise control
- 3. Speed unit
- 4. Abnormal warm
- 5. Real-time speed
- 6. Real-time motor power
- 7. Data area
- 8. Assist level
- 9. Headlight status
- 10. Time
- 11. Incoming call signal
- 12. Bluetooth connection signal

DISPLAY BUTTON

Button functions



1	"M"	button
<u> </u>		

② "+" button

③ "-" button

1	"M"button	Short Press to change info on screen
2	PAS Level 12km/h,16km/h,21km/h,26km/h 32km/h	Short Press "+" or " – "button to switch assist level
3	Switch Speed/Power	Short Press 'M' button
4	Walk (Pedestrian mode)	Long Press "- "button
5	Turn on/off headlight	Long Press "+ " button for 1.5s

The display can warn of any bike faults. When faults are detected, the error code will be shown on the interface and blink at 1Hz. When an error code is shown, the button functions will not be affected, interfaces can be shown normally by pressing buttons. If there is no button operation after 5s, the display will return to the error code interface.

Error code interface as shown below:

ERROR CODES

Error code	Error description	Suggest operation
E21	Current anomaly	Check controller
E22	Throttle anomaly	Check throttle
E23	Motor Phase Fault	Check motor
E24	Motor HALL anomaly	Check motor
E25	Brake anomaly Check Brake	
E26	Low-Voltage Protection	Check battery
E30	Communication Fault	Check connector to controller

CHARGING INSTRUCTIONS



Only use the provided charging cable to charge your Blackburn TL battery pack. Charging of the E-Bike shall only be performed with our recommended charger. Using any other unauthorized charger may cause damage to your battery pack and void any warranty.

CHARGING THE BATTERY

- Ensure the E-Bike is turned off.
- Remove the battery pack from the battery dock.
- Ensure that the charging port is clean and dry.
- Make sure that there is no dust, debris or dirt inside the port.
- Plug the charger into a grounded wall outlet.
- The charging indicator light on the charger will be red.
- Connect the cable with the power supply (100~240 VAC).
- Align and connect charging cable into the charging port of the battery pack.

FAILURE TO FOLLOW ANY OF THE FOLLOWING SAFETY PRECAUTIONS CAN AND MAY LEAD TO DAMAGE TO YOUR DEVICE, VOID YOUR MANUFACTURER WARRANTY, LEAD TO PROPERTY DAMAGE, CAUSE SERIOUS BODILY INJURY, AND LEAD TO DEATH.



Any Blackburn TL that doesn't work properly can make you lose control and fall. Inspect the entire device thoroughly before every ride, and do not ride it until any problems <u>have been corrected. Do not modify or</u> <u>attempt to repair</u> the E-Bike system except as indicated in the instructions for use and care.

Never ride your E-Bike with the kickstand down.

OPERATING YOUR E-BIKE

Make sure the battery pack is fully charged before the first initial use. Before turning on your E-Bike, sit on it like a standard bicycle to get comfortable with the device before using it with the motor.

GEARS

Your E-Bike is equipped with eight gears. The lowest gear (1) is for easier and uphill pedalling, and the highest gear (7) is for maximum speed on levelled or downhill terrain. Change gears only while pedalling.

The rear wheel contains seven chain sprockets. When the chain is around the largest sprocket you are in first gear, or the lowest gear. When the chain is around the smallest sprocket, you are in seventh gear, or the highest gear.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	SOLUTION
Motor will not engage	 Low battery Battery loose or unplugged Severed wire connection 	 Recharge the battery. Make sure battery connections are secure. Contact customer support.
Feels shaky when driving	 Low tire pressure Wheel is not securely fastened Worn-out bearings in steering system 	 Inflate to 40 psi. Fasten the wheel securely. Replace bearings.
Mileage not being recorded correctly	 Infrequently charged Defective or worn-out battery pack Cold temperature affecting battery performance 4 Defective or incorrect charger damaged battery 	 Frequently charge battery. Replace battery pack. Allow battery pack to reach room temperature and fully recharge it. Contact customer support
LCD Display not registering	 Low battery Broken display Bad battery cells Faulty charger burns out display 	 Recharge battery pack. Replace display. Replace battery pack. Contact customer support.

Brakes squealing	1.Dirty brake pad2.Hard edges on newbrakes3.Brake pads are too tight	1.Clean the brake pad 2. More you ride Squealing will stop 3.Adjust brake pads to I- 2mm gap from wheel
Stiffness when steering	 Grime build-up in steering system Bearings in steering system are worn out 	1.Clean steering system 2.Replace bearings

Getting Started

First, unpack your electric bike carefully and save all packing material. Be sure to locate your charger, pedals and any small parts like nuts or screws inside the shipping carton. Sometimes small parts like nuts or screws may come loose during shipping so be sure and check the bottom of the carton and protective wrapping carefully. Keep your packing material until you are through assembling your bike and know that it is running properly. Sometimes small parts like nuts or screws may come loose during shipping so be sure and check the bottom of the carton and protective wrapping

Assembly Instructions

This bicycle was fully assembled, inspected, and tuned at the factory and then partially disassembled for shipping.

Your bike arrives in the shipping carton about 75% assembled. To ship the bike, the pedals, seat, front wheel and sometimes the handlebar are loosened or removed.

Name of clamp bolts	Standard torque /N.m
Bolt for handlebar	6 Nm
Handlebar stem and fork stem bolt	10 Nm
Sunflower fixing bolt	10 Nm
Saddle	15Nm
Front wheel	25 Nm
Rear wheel	35 Nm
Rear carrier	8Nm

To ensure your safety, please follow the proper tolerances listed below when tightening any of the fasteners.

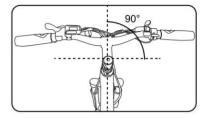
This manual will list all the steps required for the various models.

The following "basic" assembly instructions will assist in getting the bike ready to ride. If you have questions about your ability to assemble this product, please consult a qualified bicycle technician.

We recommend that two people work together to assemble the electric bicycle.

Attaching and adjusting the handlebar

Your handlebars have two main parts: the bar itself and the adjustable stem. If your bar has been removed for shipping, position the bar in the center of the stem and check, to be sure, that your grips are in the right place and the angle of the bar is comfortable. Tighten the screws clamp to hold the bar in place, ensuring all brake cables is clear.



Be sure to check that your handlebars are centered and tight before riding.

The stem must be inserted to the minimum depth or lower as indicated on the steer post to ensure the safety (see the picture). Tighten the stem screw located on the top of the handlebar stem.

You may adjust the handlebar stem height by loosening the Allen key screw located underneath the stem. Tighten the stem, adjusting screw securely after positioning the stem.

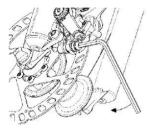
Check that the forks and the handlebars are facing forward and straight. Stand at the front of the handlebar, put the front wheel in between your legs and hold the handlebar. Adjust the handlebar and the body of the bicycle to form an angle of 90° (see the picture).

Some models have a light console that attaches to the handlebar. Attach this with the plastic brackets and screws provided.



Checking and adjusting the disc brake

The rear brake is operated with the right brake handle and the front brake is operated with the left brake handle normally.



Always check that both your front and rear brakes are properly adjusted before riding your bike. Squeeze your brake together and slip the cable into the through. You may need to adjust the cable length by loosening the nut and sliding the cable through to the proper position. Retighten the nut to hold the proper position.

Adjust the brake pads on either side by using an Allen wrench so that they make contact on the metal wheel rim and not the tire. Be sure they are straight, and the distance is 1-1.5 mm between the rim and the two brake pads.

The pads will be close when adjusted properly.

There are some small adjusting screws on the sides of the brake pad levers that can be used to adjust the distance of each side. If the distance of the two brake pads to the rim is different, adjust the spring adjustment screw on the brake arm of the fixed mount till the distance of the two sides is the same, making sure that it can break efficiently. If the brake pad is damaged severely, please replace it immediately to ensure the brake works efficiently.

Adjusting the saddle

Your saddle height is adjusted by a quick release. Pull the quick release lever, insert your saddle post to at least the minimum insertion line marked on the post. Tighten the adjusting nut by quick release lever, then push the quick release lever to the closed position.

The saddle angle is adjusted with the nuts that attach the seat to the saddle rail. Ensure that the nuts are tightened firmly and that the seat does not move forward or back while you are sitting on it.

When you sit on the saddle to tread on the pedal flatly by heel, when the pedal is at the lowest position, legs slightly stretched, it is the most suitable height at this point. If you can tread on the pedal only by toes or your legs can't stretch slightly, you will experience fatigue and sports injury, so you need to carefully adjust the height of the saddle post. Loosen the hand release of the seat post, take out the seat post, adjust the screw, take the seat post back to the frame tube as former station, and tighten the clamp of the seat position.

Attaching the pedals

Pedals are marked "L" and "R" on the axle end. Screw the pedal marked "L" into the left side of crank and "R" to right.

(1) The right pedal attaches to the chain side crank arm with (clockwise) thread.

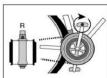
(2) The left pedal attaches to the other arm and has a left-hand (counterclockwise) thread.

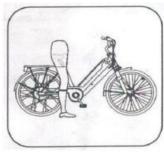
Check your pedals before each ride to ensure that they are tight. If you ride your bike with loose pedals, you may strip the threads that hold the pedal to the crank.

Attaching the front wheel

Slip the wheel into the forks. Slip on the safety catches and then the nuts on both sides. Spin the wheel and check whether it's straight. If your bicycle is fitted with quick release axles, make sure locking levers are correctly tension and in the closed position.







Operating your E-Bike

Your E-Bike is driven by a motor embedded in the hub of the rear wheel. The motor is powered by a battery. The power can also be driven directly by throttle or pedalling. When pedalling, the amount of power delivered to the motor, and hence the accelerating force on the E-Bike, is controlled by you in a way according to the power-assisted mode you choose.

Electric assisted mode

You must turn on the battery to use the E-Bike in electric assisted mode.

In the electric assisted mode, power assist is triggered when you pedal forward, and power assist stops when you stop peddling. In other words, power assist happens as long as you pedal. You don't need to pedal hard. All you need is to apply a light force to the pedals continuously to maintain the current flow. When you apply one of the brakes, the power-assist function will automatically stop, allowing the E-Bike to slow down and stop. The power assist mode will turn itself off when the E-Bike has reached the maximum speed of 32 km/h.

Throttle Mode:

If you don't want to use pedal power, you can also use the throttle to control the speed. The maximum speed of this E-Bike is 32 km/h.

Charging Your Battery

Fully charge your battery before your first ride and then after any operation, especially after long-distance riding.

Your charger plugs directly to your battery pack with either a flat connector or the same two-prong plug as your bikes power cord. You must plug your charger to the bike first and then to the wall outlet.

You can also remove the battery from the E-Bike and directly plug the charger to the battery. Remove and install the battery properly as shown in the steps below.





Press the button with your right hand, turn the key with your left hand, and take out the battery as shown in the picture.



Press the battery as shown in the picture, to install it.

NEVER PLUG A POWER CORD FROM A WALL OUTLET DIRECTLY INTO THE BATTERY! YOU MUST USE YOUR CHARGER!

The light on the charger will be red while charging and turn green when charging is finished. When the charger's light turns green, keep on charging the battery for one to two hours to ensure that the battery has a longer usage life, then unplug your charger from the battery and the wall.

Always charge your battery before it gets too low. If you let your pack run completely dead, it may not recharge. It's a good idea to turn the key to the position OFF and remove your key after any ride so that it will not be left on accidentally.

To unlock the pack, push the key in slightly and turn to the left. It can then be removed. Push in and turn right to lock it on.

The red button on top of the pack shows the power level when pushed. The first light only comes on when the battery is too low to run the bike. The next lights indicate low, medium, and full. The lights on the handlebar also show the level.

Remember: The sooner you charge after riding, the longer your pack will last.

The lithium battery is built with circuitry that prohibits overcharging and excessive discharging.

The battery charger is designed specifically for the bike; connecting the battery to any other charger will void the warranty.

It's important for the customer to follow the instructions on the battery charger label.

Display functions

There are five pedal assist levels (1 to 5).





Long press the " 🕛 button" on display to switch on the LCD, and press "+ " and " - " button to change assist levels. Short press the "M" button to change info on the screen.

Best practices

- 1. Please observe the traffic regulations.
- 2. Keep both your hands on the handlebars so that you're ready to break while riding.
- 3. Always charge your battery after riding.
- 4. Don't run your battery dead or extremely low. If you do, charge as soon as you can.
- 5. Remember to turn off the key when you stop.
- 6. Always remove the key when you are done riding. If left on, the battery will slowly drain.
- Under standard road conditions (concrete and cement road without wind resistance and with temperature around 25°C, the battery capacity attenuation ≤5%), the running distance per charge is up to at least 30 km.
- 8. Please put on your helmet when riding the electric bike. The fasteners on the electric bicycle should be checked frequently.
- 9. The total loading capacity should not be exceeding 120 kg (this includes rider and additional items). The bicycle weighs 29.4 kg.

Information on the rear rack :

- 1. The rated loading capacity for the rear rack is 25 kg. Do not overload. The maximum tire size that would fit the rear rack is 70 cm.
- 2. If there is no rear rack on the electric bicycle, do not install one by yourself.
- 3. The rear rack cannot pull a trailer.
- 4. When items are put on the rear rack, the reflector or the lights should not be blocked. Items should be put on the two sides of the rear rack evenly.
- 5. Consumers are not allowed to modify rear racks by themselves.
- Consumers need to understand that once the rear rack is loaded, it will affect the overall handling of the bicycle.
- 7. Consumers should make sure when the rear carrier is loaded, it must be done in accordance with the manufacturer's instructions. There is no belt and the rope is rolled into the wheel.
- 8. Only objects can be put on the rear carrier.
- 9. The rear rack is not suitable for a child seat.

The match of the electric bicycle and people

R	Approximate Rider Leg Length	Suggested Frame Size for Racing/Touring Bicycle	Suggested Frame Size for Mountain or Hybrid Bicycle
()	61-69cm / 24-27 inches	÷	37cm / 14.5 inches
A_N	66-76cm / 26-30 inches		43cm / 17 inches
	71-79cm / 28-31 inches	50cm / 19.5 inches	45cm / 18 inches
	76-84cm / 30-33 inches	55cm / 21.5 inches	50cm / 19.5 inches
	79-86cm / 31-34 inches	57cm / 22.5 inches	52cm / 20.5 inches
	81-89cm / 32-35 Inches	60cm / 23.5 Inches	53-56cm / 21-22 Inches
	86-94cm / 34-37 inches	63cm / 25 inches	58-60cm / 23-23.5 inches

Frame Sizing Guide

USER MAINTENANCE INSTRUCTIONS

Adjustments and Maintenance

- Your E-Bike is designed to be used on a regular road by a single person. Using your E-Bike for extreme maneuvers, such as extreme off-road use, jumping or carrying excessive load will damage the E-Bike and could cause serious injury.
- Do not use high-pressure water streams to clean your E-Bike as water might seep inside the motor or the wiring compartment and cause rusting of electric parts or short circuits. Please use damp cloth with neutral detergent to clean the bike body. Do not use alkali-based or acid-based detergent, such as rust cleaners as it may result in damage or failure of the bike body.
- Avoid parking your E-Bike outside when it's raining or snowing. At the end of a ride when it was raining or snowing, bring the E-Bike inside and use a clean, dry towel to remove any water.
- During daily use, keep the controller clean and dry. Keep it away from water, vibration and contamination, otherwise the controller may be damaged.
- Prolonged Exposure to UV rays, rain and the elements may damage the materials. Store indoors when not in use.

Warning!

Do not over lubricate. If oil gets on the wheel rims or the brake shoes, it will reduce brake performance and it will take longer for the bike to stop. Injury to the rider or to others can occur. Leave it indoor when charging or not riding.

- The chain can throw excess oil onto the wheel rim. Wipe excess oil off the chain. Keep all oil off the surfaces of the pedals where your feet rest.
- Using soap and hot water, wash all oil off the wheel rims, the brake shoes, the pedals, and the tires. Rinse with clean water and dry completely before you ride the bicycle.

Pedal	Every 6 months	Put 4 drops of oil where catch pedal axle goes into the pedal
Chain	Every 6 months	Put 1 drop of oil on each roller of the chain
B.B.	Every 6 months	Contact a professional technician
Motor	Every 1 year	Contact a professional technician

-Use a light machine oil (20W) and the guide above to lubricate the bicycle:

MOVING AND STORAGE INSTRUCTIONS

1. Please charge the battery for 6-10 hours after its energy is consumed 50%-70% of its total energy, in this way, the battery life will be longer. Please charge the battery pack full after each long-distance ride. Do not charge the battery for a long time (that "exceeds 10 hours") in case the battery will overheat.

- 2. Recharge battery once a month during the period of storage.
- 3. Charging temperature:0°C ~ 40°C
- 4. Battery pack might not be fully charged when temperature is extremely low or extremely high.When the battery is charged, its temperature may become a little higher, it is normal under the temperature of 40°C.I If the charger indicator is doesn't register when the battery is full charged or the battery is very hot (that exceeds 40°C) please return to the seller for maintenance at once.
- 5. Do not allow the charger bounce around in the rear box if there is one box attached; and the charger should be far away from water. The impact and extreme vibrations should be minimal when moving the battery.
- 6. Each special designed charger is provided for each battery pack. Do not use an other type of charger for fear of burning out battery and causing danger.
- 7. Battery storage conditions: cleanliness, coolness, dryness and airiness, temperature

 $0^{\circ}C \sim 40^{\circ}C_{\circ}$ No solarization, fire, waterlogging and mixing the battery together with corrosive substance during battery shipping and storage.

- 8. If your battery has an on/off switch charging should be in the off position.
- 9. Please ens ure that there is no short-circuit in your wall socket for fear of burning out battery and causing danger.

10. Please don't pull out the power key when you are riding the bike forward under high

speed

FCC STATEMENT:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Cl ass B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. -Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body

INDUSTRY CANADA STATEMENT:

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation of the device. In additional, this device complies with ICES-003 of the Industry Canada (IC) Rules. Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Industry Canada licence-exempt RSS standard(s). These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: -Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. -Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

The above table is only meant to act as a guide to help you figure out any problems you may have with your EBIKE. If you are unable to get your EBIKE to operate properly, please return to the local servicing dealer that you purchased from.

info@taubik.com

