QUEST

HUB MOTOR eBIKE

USER MANUAL

PLEASE READ THIS MANUAL BEFORE OPERATING

watch the full assembly video

www.vimeo.com/channels/questhubassembly

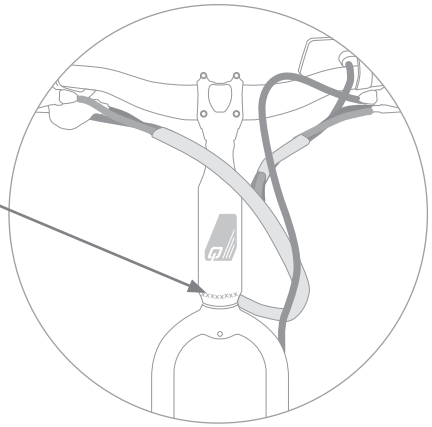
If you have any issues regarding you new bike
do not return to place of purchase.
Call customer support at 1.866.996.6686

Quest
support@ridequest.ca

REGISTER YOUR NEW BIKE

Registering your new ebike is very important. This will allow us to keep you informed on any information, and updates we think you should know about.

Please locate your serial number below the head badge on the headtube, front of the bike.
Go to **www.ridequest.ca**, click on the register tab and follow the instructions & create a login.



WARRANTY

For complete information on the warranty of your new Quest, please go to ridequest.ca and click on the warranty button at the bottom of the home page.

ATTENTION! Your ebike may differ from the illustrations in this manual.

Quest highly recommends having the ebike assembled and adjusted by a professional bicycle technician.

Note:

Quest reserves the right to make changes without notice to design(s) and / prices listed in this manual.
This manual has been compiled with great care. Quest can not be held responsible for any inaccuracies.

QUEST

CONGRATULATIONS !

You are the proud owner of a Quest electric ebike.
We have taken great steps to create an incredible product and hope you enjoy riding it as much as we did creating it.
With the help of our electric bike, your riding experiences will be extremely pleasurable and memorable and we hope you will explore many new surroundings.
Whether you use the ebike for commuting, shopping or just a leisurely ride, you will do so comfortably and confidently on your new Quest.

Read through this user manual carefully before riding your new ebike to obtain a full understanding of its features and functions.

We wish you many happy rides and beautiful quests with your new ebike.

Sincerely,

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IMPROPER STORAGE OF YOUR BATTERY COULD RESULT IN TOTAL BATTERY FAILURE

DISPLAY & FUNCTIONS

The battery must be locked into your bike for the display to function.
Make sure to remove key from battery lock when riding.

Turn the power on by pressing the 'MODE' Button for 2 seconds.

BUTTONS

'MODE' : Powers ebike ON/OFF, Toggles through display modes

'PLUS' : Pedal assist level up, Turns on lights when held for 2 seconds

'MINUS' : Pedal assist level down

Electric system display and control unit

INFORMATION ON THE SCREEN

SPEED
(km/h or mph)

ASSISTANCE LEVEL
(0 - 9) Mode 0 = No assistance

BATTERY INDICATOR
6 Bars = Full Battery

ODOMETER
Total distance traveled

TRIP ODOMETER
Distance traveled since last reset

TIMER
Active riding time (speed above 5km/h)

MAX SPEED
Current maximum speed

ERROR WARNING
See page. 11 for error code descriptions

CONTROLS

Turning the ebike ON/OFF

Press and hold the 'MODE' Button for 2 seconds to turn the electric system on or off. If the system is not used for a duration of 10 minutes, it will shut itself off to conserve battery.

Selecting the display mode

Press the 'MODE' button to cycle through the different modes of the display.
Speed/Trip Distance/Trip Time/Max. Speed/Average Speed/Motor Power

Adjusting the pedal assistance levels

Use the '+' and '–' buttons to select the different levels of pedal assistance. (0 - 9)

Power level 9 gives the strongest assistance from the motor.

In power level 0 the motor does not provide any pedal assistance or throttle but you will still be able to use the lights and functions of the display.

NOTE: The battery will run out of power quicker when using a higher level of pedal assistance.

Throttle

Your bike is equipped with an on demand throttle on the left grip.
The throttle can only be used within pedal assist levels 1 though 9.
Regardless of the power assist level you select the throttle is capable of taking you to top speed.
You can use the throttle along with the pedal assist or on its own.

YOU MUST ALWAYS WEAR AN APPROVED BICYCLE HELMET WHEN RIDING AN ELECTRIC BIKE.

CONTROLS (Cont'd)

Lighting

With the ebike's power on, hold the + button for 2 seconds and release to turn on the displays backlight as well as the bikes lighting system

ATTENTION! DO NOT TEXT WHILE RIDING.

Control unit and throttle located on left handlebar

SETTINGS MENU

Hold down both the '+' and '–' button for 2 seconds to enter the Settings Menu.
The Settings Menu will allow you to change certain features of your ebike.

Pressing the 'Mode' button will allow you to cycle through the different settings.
The '+' and '–' buttons will allow you to change the values of those settings.

Pressing the '+' and '–' buttons at the same time for 2 seconds will save the settings and exit the Settings Menu.

Set 1: Reseting the Trip Odometer

Press '–' to erase trip odometer, riding time, and maximum speed.

Set 2:

DO NOT MODIFY THESE SETTINGS.
Any changes will disrupt the controller and cause your bike to shutdown.

Set 3: Set Wheel Diameter

Preset to 26.

Set 4: Choosing km/h or mph

Switch between km/h and mph

Pressing the '+' and '–' buttons while in this mode will allow you to switch between values 1 and 2 to have the information displayed in kilometers or miles.
Press 'MODE' to save this setting and return to the first option or
hold 'MODE' for 2 seconds to exit the settings menu.

DISPLAY & FUNCTIONS

ERROR CODES

If an issue should occur with your Quest ebike an error code will apear on your display.

Please note the error code and contact **support@ridequest.ca** or call 1.866.996.6686.

Error 1:	Check Controller
Error 2:	Check Throttle
Error 3:	Check Motor
Error 4:	Check Hall Sensor
Error 5:	Check Brake Cutoff Switch
Error 6:	Motor Under Voltage
Error 7:	Check Motor Protection Lockout
Error 8:	Check Controller Connunication
Error 9:	Check Display

WHAT IS PEDAL ASSISTANCE?

The bike is equipped with 9 levels of electronic pedal assistance.
As you pedal, the motor will assist you and enhance your pedaling effort. This will allow you to pedal much further and faster but use much less energy and effort. It is also a great feature when climbing a hill, as the motor will help to make any climb easier.

TURNING PEDAL ASSIST ON OR OFF

When you turn on the power to the display, the pedal assistance will automatically default to level 0. By using the '+' and '–' buttons, you can increase or decrease the level of assistance. You can turn off the assistance completely by pressing the '–' button until the level of assistance is at level "0". This will allow you to use the lights and functions of the display, but ride the bicycle without any pedal assistance from the motor.

Pedal assist levels 1-5 are meant to be used more on flat roads or paths, the higher levels (6 - 9) are more powerful and meant for hills, slopes, or heavy circumstances.

If you prefer to ride slowly, it would be more comfortable for you to ride in a lower power level. If you prefer to ride faster, then you should increase the power level.

DERAILLEUR FUNCTIONS

Your bike is equipped with a Shimano 8 speed derailleur.
Please choose the proper gear to match the riding terrain.

The use of a proper gear along with pedal assisted or conventional power will enhance your riding experience

We recommend checking your derailleurs functions at least once a month.
If you are not capable of adjusting the derailleur your local bike store can help.

SAFETY PRECAUTIONS WHILE USING THE PEDAL ASSIST & ON DEMAND THROTTLE

- Since the motor is assisting you, you will easily reach higher speeds than you might be used to. We recommend that you ride the bike in a minimal traffic area at first to become more comfortable with it.
- The operation of the pedal assistance depends on the speed at which the pedals are rotated and your cycling speed.
- The electric motor speed is limited to a speed of 32 Km/h (20 mph). This means that as you reach this speed electrical assistance stops and returns when speed returns to 32km/h (20 mph)
- The level of pedal assistance will affect the battery range. Battery range is dependent on many factors which are measured under average conditions. It is dependent on, but not limited to, rider weight, speed, elevation, tire pressure, wind, start-stop frequency, and outside temperature.

ATTENTION! Remember that acceleration will be much quicker with pedal assistance.

ATTENTION! Make sure to turn off the power when walking next to, mounting, or dismounting the bike.

ATTENTION! Hold both brakes when stationary.

YOU MUST ALWAYS WEAR AN APPROVED BICYCLE HELMET WHEN RIDING AN ELECTRIC BIKE.

BATTERY RANGE

How far can I travel on my electric bike?

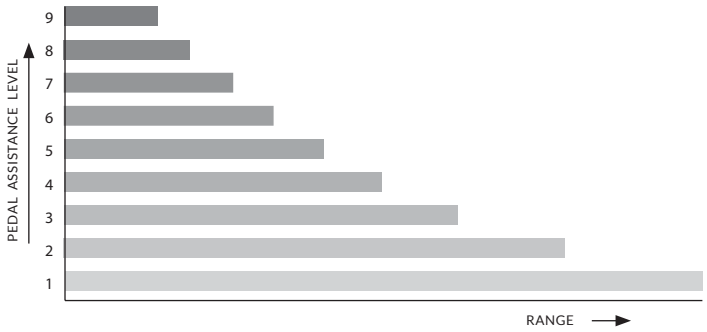
The total distance you can travel on your electric bike is not an easy amount to specify. The range depends on many different factors including, but not limited to:

- Total Weight (weight of the bike + rider + cargo)
- Resistance (wind, tire pressure, speed, road conditions and altitude)
- Outside Temperature
- The level of pedal assistance and throttle usage
- The condition of the battery
  (battery capacity decreases as the battery ages)

Battery Capacity

Batteries are compared based on capacity - Amp hours (Ah).
However, a comparison based on capacity alone does not properly depict a battery since the performance of a battery pack is also based on battery voltage (V). The best way to compare battery performance is by looking at the amount of energy that can be used in watt-hours (Wh). Wh take into account both the capacity of the battery, as well as the average voltage during discharge. Simply put, the higher the V/Ah, the higher Wh range!

Wh calculation ex: 36 V x 11.6 Ah = 417.6 Wh



DISCONNECTING & REMOVING THE BATTERY

On the top-right side of the downtube is the battery lock. This lets you lock/unlock the battery pack of the bike.

To Lock:
Insert the bottom of the battery into its receptacle on an angle as shown while pushing the top of the battery into the lock.

To Unlock:
Insert the key into the lock and turn 1/4 turn clockwise.

ATTENTION! Remove the key after installing the battery to prevent any form of loss or theft to the key or the battery.

ATTENTION! Always remove the key while riding.

CHARGING THE BATTERY

Fig. 16.1

The battery can be charged both on and off of the bike.

Please identify your charging port (figure 16.1).

First plug the chargers male plug into the battery, then plug the chargers 110 volt plug into your wall outlet. (Do not use an extension for 110 volt.)

The indicator on the charger will light green for a few seconds and if a charge is necessary, the LED will turn red. The battery is fully charged when the battery indicator LED becomes green.

Unplug the charger from the wall first, and then from the battery.

Fig. 16.2

Battery Status

Press and hold the button (figure 16.2)

Red	Needs Charge
Green	50%
Blue	100%

ATTENTION! The battery will sustain permanent damage if not used for a long period of time (ex: Winter storage). SEE PAGE 18 Make sure to charge the battery once a month during this time.

ATTENTION! When the battery is completely depleted you must charge it immediately. If the cells are left depleted for a long period of time, they may become irreparably damaged.

WHAT YOU SHOULD KNOW ABOUT YOUR BATTERY

- DO NOT connect the positive terminal of the battery to the negative terminal.
- The battery is sealed and therefore is rain resistant, however, DO NOT expose your battery to water.
- The battery should be recycled properly at the end of its life.
- The performance of the battery will decrease at low temperatures.*
- Under ideal conditions, the battery pack can be recharged approximately 750 times. The performance will slowly decrease over time and eventually will need to be replaced.
- DO NOT expose your battery to high temperatures. (>50°C), such as direct sunlight)
- Problems: remove the battery from the bike and consult your dealer.
- For long term storage see storage info page 18.
- Use ONLY the supplied charger.

* The action mentioned is optimal at temperatures of approx. +/- 25°C. The guideline is that the capacity will decrease by 1% at every 1°C of temperature drop.

ATTENTION! Make sure to only charge the battery in a dry, well ventilated area.

ATTENTION! Unplug the charger when the battery is fully charged, or when charger is not in use.

ATTENTION! Please recycle your battery to an authorized recycling company in your area.

IMPORTANT BATTERY STORAGE INFORMATION

When not using your bike for periods exceeding one month please charge as follows:

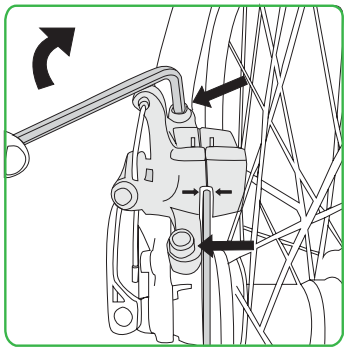
1. Before storage make sure that the battery is not charged more than 50% so that it will except a periodic charge.

   (You cannot periodically charge a fully charged battery)

2. Once every month you must attach the supplied battery charger and charge for a period of no more than 15 minutes.
3. Continue this procedure once a month until more frequent riding.

This process will make sure that your battery does not stay at a specific rate of charge for long periods of time.

ALIGNING THE BRAKES



Your electric bike is equipped with a disc brake system. To properly adjust them you must first make sure that the brake disc is properly aligned within the brake. To do this, loosen the top and bottom hex bolts (figure 19.1) with an Allen key. Then maneuver the brake with your hand so that the disc passes through the brake pads with minimal contact. Once the disc rotates through the brake freely, retighten the hex bolts and make sure that while tightening you maintain the alignment.

Fig.19.1

ADJUSTING THE BRAKES

If when squeezing the brake handle the bike does not stop properly, you will have to adjust the brakes. You can do this by loosening the hex bolt (figure 19.2) with an Allen key. Once the bolt is loosened, lift the braking arm so that the brake is squeezing the brake disc (figure 19.3) and spin the wheel. Lower the brake arm in small amounts until the wheel is spinning smoothly. Pull the brake cable tight and retighten the hex bolt.

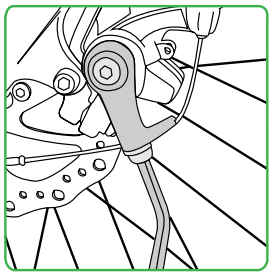


Fig. 19.2

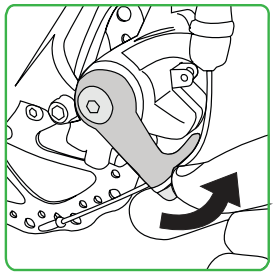


Fig. 19.3

ADJUSTING YOUR SEAT HEIGHT

Your seat height should be adjusted properly to ensure you get the most comfortable ride possible. The seat height is properly adjusted when your knee has a slight bend when sitting on the saddle with your foot on the pedal at its lowest position (figure 20.1). The seat height can be adjusted by loosening the lever on the seat tube clamp figure 20.2. Make sure to retighten after adjustment.

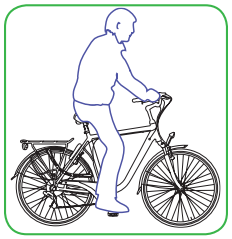


Fig. 20.1

Fig. 20.2

ATTENTION! Ensure that the safety marks for max. height written on the seat post are not visible when retightening the hex bolt.

ATTENTION! If you can put your feet flat on the ground while seated, your seat height is too low.

ADJUSTING YOUR SADDLE POSITION

You can tilt the saddle to change the seating angle, as well as, slide it backward or forward (figure 21.1). To adjust the saddle, loosen the nut located on the underside of the saddle with a wrench (figure 21.2). You will be able to move the saddle around to suit your preferred riding style. When you are done adjusting, make sure to retighten the nut.

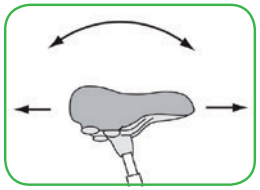


Fig. 21.1

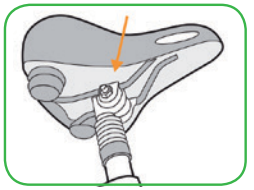


Fig. 21.2

ADJUSTING STEM ANGLE & HANDLEBAR POSITION

You can adjust the height and angle of your stem to create a comfortable custom riding position.

Insert the 6 mm Allen key as show (figure 21.3) and turn counter clockwise to loosen. Adjust the height & angle as desired, and re tighten.

Fig. 21.3

FRONT LED LIGHT INSTALLATION

Identify the light bracket mounting bolt and nut.

Assemble as seen in figure 22.1 using a 4mm allen key.

Make sure that the light bracket is in same position before attaching to light.

Fig. 22.1

GEARS

Your ebike comes equipped with a Shimano 8 speed drivetrain. The trigger shifter mounted to your right handle will allow you to change gears. It is important that you only change gears while cycling as the chain must be in motion to properly shift gears.

To shift up a gear, pull the trigger closest to your index finger.
To shift down a gear, push the trigger closest to your thumb.

TIRE PRESSURE

The tire pressure will affect the range and comfort of your bike.
Quest recommends that you always keep your tires at the designated pressure to ensure the best ride. The recommended tire pressure is listed on the sidewall of the tire. The tire pressure is measured in P.S.I. (Pounds / Square Inch).
Make sure to use a tire pressure gauge when pumping your tires to fill the proper amount of air.

ATTENTION! Riding on deflated / soft tires will severely reduce the range of the battery.

SERVICING

Servicing your bike is very important. You can avoid unnecessary damage by servicing your bike regularly.

In the paragraphs to follow, there are some simple tips you can follow at home to keep the bike running at top performance.

CLEANING

Regular cleaning of your ebike will prolong its life and appearance.

REMOVE THE BATTERY BEFORE CLEANING and use brushes and wet sponges to remove dirt. Finish by drying with paper cloths / towel.
(Use of a mild soap solution, degreaser, chain lube and a chain cleaning device are recommended for a thorough cleaning.)

When cleaning the ebike **do not submerge parts or let water accumulate by the battery or electrics** as prolonged exposure to water may damage these components.

ATTENTION! DO NOT USE A HOSE OR PRESSURE WASHER TO SPRAY THE BIKE. THIS WILL RESULT IN IRREPARABLE WATER DAMAGE AND WILL VOID YOUR WARRANTY!

GENERAL MAINTENANCE

- If caught in the rain ensure bike and electrical components are wiped dry, remove battery and allow to dry over night
- Check brake wear every month and adjust
- Check tire pressure regularly
- Lubricate the chain occasionally
- Have your bike adjusted at least once a month by a professional bicycle technician

BEFORE EVERY RIDE

- Make sure battery is charged and locked into position
- Check tire pressure
- Check brakes for proper braking
- Always wear an approved bicycle helmet

NOTES

NOTES

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support@ridequest.ca

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