



OWNER'S MANUAL

QUICK START

SCAN THE QR CODES BELOW FOR HELPFUL TIPS AND TRICKS



GETTING STARTED



PRODUCT MANUALS



VPO MANUAL




WARRANTY / REGISTRATION

1,2 AND 3 YEAR PROTECTION PLANS AVAILABLE WITHIN 30 DAYS OF DELIVERY.
PLEASE CONTACT [SUPPORT@QUIETKAT.COM](mailto:support@quietkat.com) FOR MORE INFORMATION.

DON'T FORGET TO REGISTER YOUR QUIETKAT E-BIKE FOR 10% OFF YOUR NEXT ACCESSORY PURCHASE.
ONCE THE REGISTRATION PROCESS IS COMPLETE, CHECK YOUR EMAIL FOR A DISCOUNT CODE.



WARNINGS

 **WARNING: READ MANUAL.** Failure to comply with the following warnings and instructions can lead to serious injury or death. Save this manual.

The user assumes the responsibility for the risk of injury or death as a result of riding or using QuietKat products. It is the responsibility of the user to know and obey all local laws, rules, and regulations regarding the use of electric assisted bicycles.

Bicycling is a dangerous activity. Crashing on an ebike, even at low speed, can result in serious injury or death. Always ride within your limits.

QuietKat is designed for riders 16 years of age or older. Adult supervision is required for any operator under the age of 18. Never allow a child to alter the settings of your QuietKat or to ride without adult supervision.

QuietKat ebikes are designed for ONE (1) rider only.

Always wear a helmet when you ride. Motorcycle or bicycle helmets can be appropriate for use on an e-bike. Choose a helmet that meets local regulations for use in the type of riding you intend to do. We recommend choosing a helmet that has the most head coverage.

Always obey all laws, rules, and/or regulations regarding the use of electric assisted bicycles.

Proper maintenance is required. Failure to maintain your QuietKat and keep your bike in proper operating condition can lead to an accident resulting in property damage, injury, and/or death.

If your bike has the ability to change classes:

- Always come to a complete stop before changing classes
- It is the responsibility of the rider to ensure he/she is following local and state laws regarding ebike class.

Risk of Electric Shock – Following Battery Care and Charging instructions carefully
Turn off battery before performing any repairs or maintenance. Any turning of the cranks will cause the motor to engage, which could result in injury.

Always inspect that the bike is in proper working condition and that all components are undamaged before each ride.

Ebikes are heavier than normal bikes and may require increased stopping time at the same speed than a normal bike. QuietKat recommends become familiar with all aspects of the bike (mounting, steering, breaking, etc.) before heading out on a ride.

Do not touch any moving parts of the ebike.

Do not ride faster or more aggressively than the conditions permit, or beyond your ability.

Do not ride at night or under low visibility conditions without proper lighting and safety practices. Headlights, tail lights, and reflective tape or clothing are recommended if riding in low light or at night.

Riders must have the physical coordination, reaction time and mental capacity to ride and manage traffic, road conditions, sudden situations, as well as respect and obey the local laws governing bicycle and electric bicycle use.

If you have an impairment or disability, consult your physician before riding any bicycle.

CHOKING HAZARD: Small parts. Keep away from children 3 years and below. Adult assembly required.

 **CAUTION: Failure to comply with the following instructions can result in serious injury.**

Other personal safety items highly recommended are gloves, wrist, elbow, knee/shin, and eye protection. Failure to use appropriate safety equipment can increase the risk of injury.

Avoid baggy or loose clothing while operating your QuietKat.

Always wear closed toe shoes while riding an e-bike.

Long hair, loose clothing or loose items worn by the rider must be secured to prevent interference with moving parts or the surroundings.

Do not exceed the weight limit. Exceeding the weight limit may significantly reduce performance and/or render the vehicle unstable and/or exceed the capability of the brakes and other control devices. Exceeding the weight limit may cause structural damage not covered by the warranty. Specific model weight limits can be found on www.quietkat.com.

Be aware, some parts such as brake rotors can become extremely hot during use. Avoid contact with these components until properly cooled.

Do not submerge this vehicle in water.

The rider should be securely seated on the unit ready to ride before turning the power on.

If you need to walk the bike, you can press and hold the (-) button on the keypad. Holding the (-) button will engage the motor at a walking pace to make it easier to walk alongside the bike in tricky terrain. If you have any questions about the proper care and maintenance of this vehicle consult your dealer/distributor or contact QuietKat Customer Service.

Because it is impossible to anticipate every situation or condition which can occur while riding, this manual makes no representation about the safe use of the bicycle under all conditions. There are risks associated with the use of a bicycle which cannot be predicted or avoided, and which are the sole responsibility of the rider.

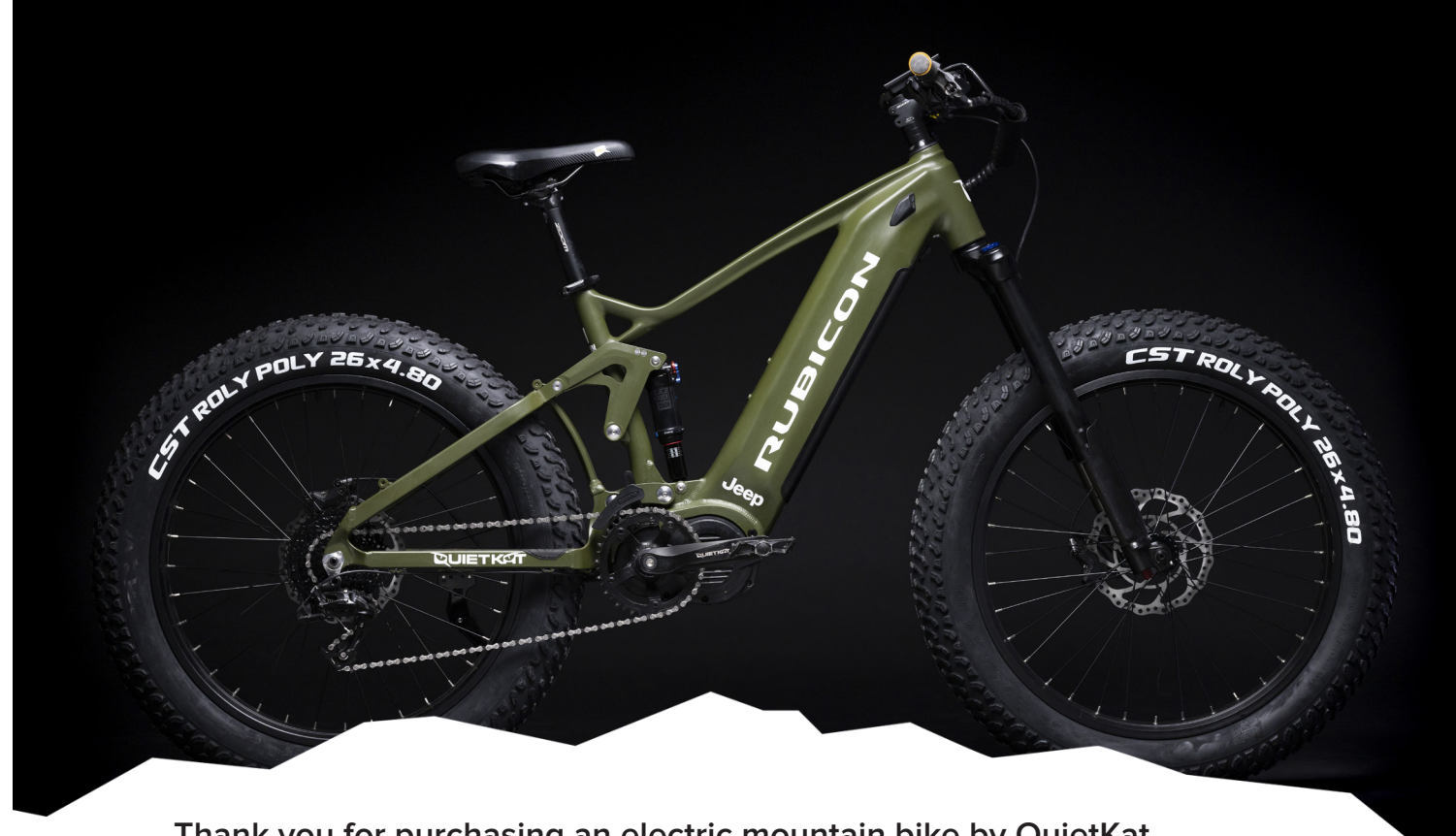
Class Guidance:

Some QuietKat Ebikes have the ability to change classes. These class parameters are defined below. When the ebike reaches maximum speed based on the chosen class, the motor will no longer assist, but the bike may still accelerate due to pedaling or gravity.

CLASS MODE	MAXIMUM SPEED	MOTOR MODE
CLASS I	20 MPH	PEDAL ASSIST
CLASS IIV	20 MPH	PEDAL ASSIST + THROTTLE
CLASS III	28 MPH	PEDAL ASSIST
UNLIMITED MODE	N/A	PEDAL ASSIST + THROTTLE

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Thank you for purchasing an electric mountain bike by QuietKat.

This is a serious piece of machinery designed for use by adults in fully controlled and safe environments. As the purchaser/owner of the bike, you are responsible with the task of keeping the rider safe at all times. Your bike has great capabilities and can grow with the skills of the rider to high levels, but it is imperative that the responsible adult is in control during the entire learning process and gives full attention at all times.

The QuietKat is designed for off-road use, but can also be ridden on the road. Please obey all laws regarding Electric Assisted Bicycles and/or Motorized Vehicles and their usage in your area. QuietKat may only be ridden in safe areas where all laws are being followed and all required permissions are given.

Because it is impossible to anticipate every situation or condition which can occur while riding, this manual makes no representation about the safe use of the bicycle under all conditions. There are risks associated with the use of a bicycle which cannot be predicted or avoided, and which are the sole responsibility of the rider.

This Owner's Manual provides important information regarding safety and maintenance of your QuietKat e-bike. Please read through the entire manual prior to operating your machine and save this manual for future reference. Visit www.QuietKat.com for updated information.

If at any time you have questions or need assistance with the maintenance of your QuietKat product, please contact us using the contact information below and throughout the Owner's Manual.

Thanks again for purchasing a Quietkat product. We hope you enjoy the ride!

Jake Roach, President – QuietKat



QUIETKAT CONTACT INFORMATION

Service & Support - customerservice@quietkat.com

Accounting - accounting@quietkat.com

General Info - info@quietkat.com

Sales - sales@quietkat.com

(970) 328-2399

FOREWORD ON SAFETY

An electric bicycle can be a great way to access terrain that may be impossible by any other means. It can also be dangerous, especially if you ride terrain above your ability level or beyond the capability of the bike itself. If you are headed into the backcountry, be prepared. QuietKat recommends bringing a bike-specific multi-tool that includes various hex wrenches, screwdrivers, and a bicycle chain tool. Bring water, food and clothing appropriate for the season and the environment. A dry trail with good traction may turn impassible with a little rain, meaning you will need to walk the bike. Always practice proper backcountry safety protocols.

The bicycle will not protect you in an accident. There are no seat belts or air bags, and therefore a crash even at low speeds can result in injury or death. If you are in an accident, inspect the bike thoroughly before continuing with your ride. If you aren't sure, do not ride the bike; take it to a professional bicycle mechanic or repair shop for a professional inspection.

If you experience any mechanical problems while on a ride, immediately turn off the electric power at the battery prior to attempting any repairs. Repairs include anything such as putting the chain back on, adjusting brakes, or adjusting accessories. Attempting to replace or re-engage the chain while the power is on could result in injury.

Secure all cargo, and ensure loose straps are secured to avoid interference with the moving parts on the bike. Be aware of loose clothing, especially on the drive side (Right Side) of the bicycle, as to avoid interference between your clothes and the drivetrain. Be sure the wheels spin freely and there is nothing that could get caught in the spokes or prevent the wheels from turning freely. If you get a piece of clothing or equipment caught in the front chainring, first turn the power off. The chainring is not on a freewheel system and won't go backwards like a typical bike. You may need to be prepared to cut or remove clothing that gets caught in the drivetrain in order to remove it from the system.

QuietKat electric bicycles use lithium-ion battery technology which require some care and maintenance. Please refer to the Battery Care section of this manual for important safety and care information for the battery.

The QuietKat bike is a fun and exciting ride! Always be aware of your surroundings and your environment. Be cautious of other riders and pedestrians. Always stay in control and within your ability.

CHAPTER 1 | UNBOXING AND ASSEMBLY



WARNING:

Failure to follow assembly instructions below can lead to serious injury or death.

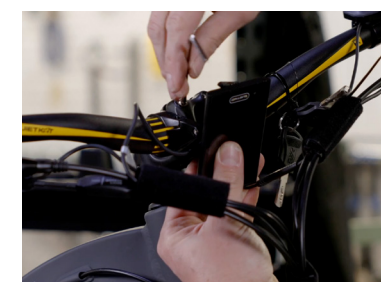
QuietKat recommends that the bike be assembled, inspected and adjusted by a certified bicycle mechanic or bicycle shop before riding. For more information on assembly, check out our assembly and maintenance videos at www.QuietKat.com.

YOU WILL NEED

- ▼ 4mm Hex Key
- ▼ 5mm Hex Key
- ▼ 6mm Hex Key
- ▼ Phillips Head or JIS Screwdriver
- ▼ Cable Cutters
- ▼ General Purpose Grease
- ▼ Torque Wrench (Optional)
- ▼ 15mm Wrench or Pedal Wrench

UNBOXING

1. Carefully remove the bike from the box.
 - a. Use caution when opening the box as there may be staples exposed when opening the lid.
 - b. It is easier to clip the zip ties attaching the front wheel to the bike and remove the front wheel from the box first.
 - c. Take out all the accessories and the box with pedals and other miscellaneous parts, and the battery charger before removing the bike.
2. Remove all bubble wrap and other packaging materials and place them back in the box.
3. Be careful not to cut hydraulic brake lines when removing zip-ties and protective packaging.
4. Install the seat-post into the seat-tube and hang the bike from a bike repair stand (if possible).
 - a. If you do not have a repair stand, place the bike on the floor and engage the kickstand. Use caution as the bike could tip over prior to installing the front wheel, even with the kickstand engaged. For extra safety, lean the bike against a wall or solid object to avoid tipping over.
5. Attach the handlebars.
 - a. Using a 4mm allen wrench, remove the 4 screws from the front of the stem and remove the bracket.
 - b. Place the handlebars on the stem, with REAR brake and gear shifter (if equipped) on the riders RIGHT and put the bracket and 4 screws back into place.
 - i. Don't worry about aligning the handlebars yet. Tighten the screws until snug. DO NOT OVERTIGHTEN!



ATTACH THE FRONT WHEEL

APEX PRO / IBEX / RUBICON / JEEP

The Apex Pro, Ibex, Rubicon, and Jeep bikes use an inverted fork which provides maximum stiffness and traction. Inserting the front wheel on this type of design can be tricky, so follow these instructions carefully.

1. Remove the axle from the front fork.

- Loosen the 4 pinch bolts on the bottom of the fork legs with a 4mm hex-wrench.
- Ensure both bolts on each leg are loose. In some cases, you may completely for this step.
- Axle has a 6mm end cap head bolt. Remove the end cap bolt from one side and push the axle out of the fork.



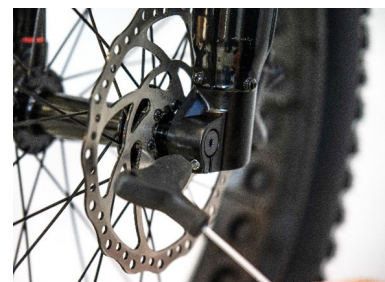
2. Align the wheel between the fork legs taking care to align the brake rotor between the brake pads.

- Because of the inverted design, the fork legs may spin out of alignment, has rotated
- If the brake lever was squeezed, or the pistons have squeezed the brake pads together, use a Brake Pad Spreader to push the pistons back to their open position (Hydraulic Brakes Only). If you don't have a spreader, you can carefully use a clean, flat head screwdriver.



3. Insert the axle through the drive-side fork leg, through the hub, and through the brake-side fork leg.

- Insert the 4mm hex-head bolt into the axle on the brake side. Tighten to 7nm.
- Ensure the drive side 4mm hex-head bolt in the axle is tight to 7nm.
- Tighten the clamps on the bottom of each fork leg with the 5mm bolts.
 - Tighten the clamps to 10nm
- Rotate the wheel to ensure proper brake clearance on the rotor.
- Re-align the brake caliper on the rotor if needed (SEE PG 17)



APEX SPORT / RANGER / VILLAGER

1. Place the axle into the dropouts on the front fork, be careful to align the brake rotor into the brake caliper.

- If the brake lever was squeezed, or the pistons have squeezed the brake pads together, use a Brake Pad Spreader to push the pistons back to their open position (Hydraulic Brakes Only). If you don't have a spreader, you can carefully use a clean, flat head screwdriver.
- Make sure the washer is between the fork and the 15mm nut.



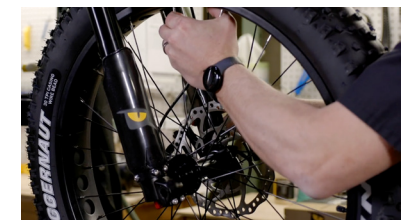
Center the wheel in the fork. The tire should have equal space on each side.

- If the wheel is not centered, loosen the 15mm nuts on the axle, and straighten. It can help to put the bike on the floor (if on a stand) and let gravity help lower the dropouts around the axle.



2. Use your 15mm wrench to tighten axle nut until snug. DO NOT OVERTIGHTEN! The nut should be hand tight, do not use a power tool as you can damage the axle threads.

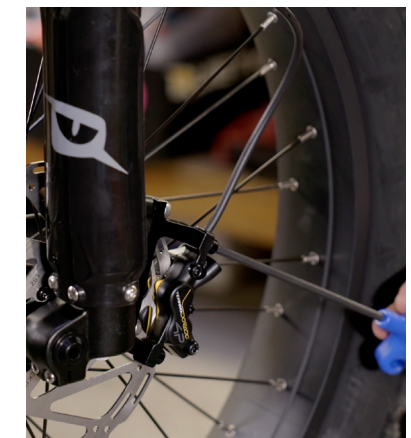
- Be careful when tightening to ensure the axle stays parallel to the ground. Place some weight over the handlebars and press down while tightening the nuts to ensure the axle stays level and straight.



3. Re-align the brake caliper on the rotor if needed (SEE PG 17)

ALIGN THE BRAKE CALIPER AND ROTOR

- With the wheel inserted into the bike, loosen bolts that attach the brake caliper to the adapter just enough so the caliper can move side to side.
- Squeeze the brake lever to engage the pistons and squeeze the rotor with the pads; keep it squeezed while tightening the Brake Caliper bolts.
- Release the brake lever and spin the wheel to ensure the rotor is centered within the pads.
- For Mechanical Disc Brakes, you can make fine adjustments to the inside pad position with a 5mm Allen key on the side of the brake caliper.
- The same process can be used for both front and rear brakes.
- For more information on disc brakes and disc brake care and maintenance, go to QuietKat.com for a full catalog of maintenance videos.



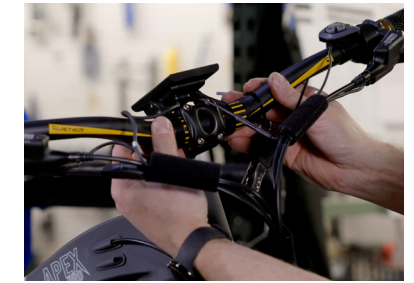
ATTACH THE PEDALS

1. The pedals are left and right side specific. The end near the threads will have an L or R on them, indicating Left and Right.
2. Put a small dab of grease on the threads of each pedal before inserting into the crank.
3. The right side is standard thread. The left side is reverse thread. Please ensure you have the correct pedal on the correct side. **DO NOT CROSSTHREAD.** Cross-threading the pedals will not be covered under warranty.
4. Pump tires to desired pressure
 - a. The range for the tires is from 5psi to 30psi.
 - b. 5psi is the lowest the tire is rated for.
 - c. 5-15psi is for very soft sand or snow.
 - d. 15-25psi is the recommended range for most off-road riding, depending on your preferences and the specific terrain you are travelling.
 - e. 25-30psi is for pavement or hard, smooth surfaces.
 - f. Lower pressures can provide more traction, however increase the risk of punctures, and decrease the range of the motor. Higher pressures can decrease the possibility of a puncture, but also can decrease grip on softer and varied terrain.
 - g. We recommend using a 2psi difference between the Front tire and Rear Tire (+2psi in the Rear tire) to maximize traction in the front and stability in the rear. Example: 15psi Front, 17psi Rear).
 - h. If you are in an area with a lot of thorns we recommend adding Tannus Liners to the tires.



ALIGN THE HANDLEBARS AND BRAKE LEVERS

1. If you have the bike in a repair stand, place the bike on the floor.
2. Align the handlebars to the correct angle.
 - a. Loosen the stem bracket attaching the handlebars so the bars can move freely side to side and roll forward and back.
3. Ensure the handlebars are centered left to right.
4. Roll the handlebars forward and/or backwards to get the angle correct.
 - a. The up-sweep and back-sweep of the handlebars is designed to adjust the bars for comfort. The handlebars are properly aligned when the handlebar grips are parallel to the ground. A rotational difference of +/- 15 degrees is acceptable for comfort.
5. Align your brake levers to a position of comfort. You should be able to reach the brake levers with either One or Two Fingers (Index or Index and Middle fingers).
 - a. Using your 5mm Allen key or Torque Wrench, tighten all stem bolts to 7nm (Newton Meters).



HOW TO ADJUST THE FRONT SUSPENSION FORK (IF EQUIPPED)

1. The Red dial is to lock out the fork. Turn toward lock symbol to lock the suspension travel. Turn the opposite direction to activate the spring and allow the suspension to travel.
2. On Coil Sprung Forks, the Left side Black knob adjusts the preload on the spring. The preload adjustment will change the characteristics of the spring, more tension (tighter) will stiffen the initial travel, while less tension will allow for more supple initial stroke of the spring.
3. Air Forks have a cap covering a Schrader Valve to adjust the pressure in the Air Spring. Use a Shock Pump to adjust the air spring pressure. You should have enough pressure such that the fork compresses between 10% and 15% of travel under body weight.



Final Bolt Checklist

- 1- Ensure all bolts are tight from front to back of the bike
 - a. Stem (handlebar and steer-tube bolts at 7nm)
 - b. Wheel axles
 - c. Crankarms
 - d. Chainring
 - e. Kickstand
 - f. Accessories
- 2- Bicycle "break in":
 - a. In the first 20 miles or so the cables and system components will settle and may need to be adjusted. If you are unfamiliar with adjusting the derailleur or mechanical brakes, go to our Video Assembly Page or bring it to your local bike shop.

CHAPTER 2 | HOW TO CHARGE AND POWER ON

BATTERY

WARNING: **Failure to follow assembly instructions below can lead to serious injury or death.**

1. It is better to use it first to drain it down to 10% and then charge it to 100%. This is also the case if you haven't used the bike for a few weeks. Batteries must be charged and discharged every few weeks. See the section on Battery Care.
2. Batteries can be charged while inside the bike frame or remove the battery to charge away from the bike. NEVER attempt to charge the battery while operating the bicycle. NEVER charge the battery in an environment with temperatures below freezing.
 - a. If you store your bike in a barn or garage be sure to store the battery above freezing temperatures to avoid damage to the battery.
 - b. See the section on Battery Care.
3. Remove the battery from the frame.
 - a. Turn the key to unlock the battery from the frame.
 - b. Pull the switch on the lower side of the downtube towards the drive-side of the bike to release the battery.
 - i. Be careful, the battery can fall out the bottom of the frame once you pull the switch.
 - c. For Dorado Batteries, turn the key and pull up and out on the battery handle.
4. To charge the battery, remove the rubber plug from the charging port.
5. Plug the charger into the bike.
6. Plug the charger into the power outlet and wait until the light on the charging unit is illuminated.
7. While charging, the battery indicator light will be red. The light will change to green when it's charged. If the battery is not charged but the charger indicator light stays green, consult customer service.
 - a. Allow approximately 4-6 hours to fully charge (depending on model and power).
8. The charger will get hot, so make sure to keep it away from all flammable materials and surfaces. Do not place battery on top of charger while charging.
9. During normal use you can charge it after every ride regardless of battery level, there is no battery memory and therefore consistent charging will not damage the battery.
10. Never leave a battery charging unattended and remove the battery from charger once charging is complete. Do not leave a battery plugged into a charger for long periods of time.
11. Always charge in dry, ventilated conditions away from sunlight, ideally 50-80 degrees Fahrenheit.
12. Only use the original charger, DO NOT use any aftermarket chargers or charging accessories.
13. For long term battery storage, it is best to leave the battery at about 40-60% charge. Always store the battery in a cool place.
 - a. For best results, do not store for longer than 4 months without cycling the battery; use your bike to discharge, then recharge to 40-60%.

Consult the charger instruction manual for additional guidance

POWER-ON THE QUIETKAT ELECTRIC BIKE

- a. Make sure the battery is fully inserted and locked into the bike.
- b. Get on the bike, ready to ride.
- c. Press and hold the power button on the keypad for a couple seconds until the display turns on.
 - i. On the Hub Drive models (Ranger, Rover) Press and hold the M button until the display turns on.
- d. When the power comes on the power level will be set to 1, and therefore engaged for throttle or pedal assistance.
- e. Use the + or – key on the keypad to change your pedal assist power level from 0-5 (0 is the lowest assistance, 5 is maximum assistance)
- f. To turn off, press and hold the power button again for a couple seconds. You can also turn the bike off at the battery (O).



DISPLAY SCREEN (COLOR LCD) MID DRIVE MOTORS

Five Button Keypad

- Power Button – Turns power and display on and off
- (+) Increases power
- (-) Decreases power
- Light button – changes level of backlight
- (i) button – scrolls through information screens on the Analyst Display. Double tap button and use +/- to scroll, (i) to select.



The Analyst displays the following information:

- Current speed
- Total distance
- Trip distance
- Battery level
- Power level
- Watts output
- USB charging - Port located on bottom of display
- Use the (i) button to scroll through the different screens on the Analyst Display.



DISPLAY SCREEN (LCD ANALYST) HUB DRIVE MOTORS

Three Button Keypad

- Power Button (M)– Turns power and display on and off
- (∧) Increases power
- (∨) Decreases power

The Analyst displays the following information:

- Current speed
- Total distance
- Battery level
- Power level
- Watts output



CHAPTER 3 | BATTERY CARE



WARNING: Do not attempt to disassemble or repair the internal parts of the battery. This could lead to serious injury or death.

The battery is one of the most important components of the QuietKat electric bike. Please read this section carefully as there are many important steps to ensure the maximum life of your battery.

TRANSPORTING THE BATTERY:

- Batteries can be transported (with proper paperwork) via truck, train, and vessel, NOT by airplane.
- Keep out of sun & rain during transportation.
- When transporting on a vehicle rack, take the battery off the bike and transport it in the vehicle.
- Keep the battery dry, well ventilated, and out of direct sunlight.
- Handle the battery with care during assembly.
- Do not throw, toss, or slide batteries.
- Do not place batteries under heavy objects.
- Do not transport or store the battery near flammable, explosive, or sharp objects.

STORAGE OF THE BATTERY:

- Do not store a fully charged battery pack; discharge or charge the battery to 40% - 60% state of charge (SOC). Storing between 40% - 60% SOC can increase the life of the battery.
- To ensure a longer battery life cycle, it is recommended to discharge and recharge the battery every 2-3 months.
- Best way to discharge your battery is to ride your bike.
- Deep cycling is not necessary for lithium and can harm the overall life cycle of the Lithium-Ion cells.
- After storage time, simply recharge the battery to full state of charge and allow it to sit on the charger for an extra 30mins to 1hr after completed charge to ensure proper cell balance.
- Do not leave the battery connected to a charger during its storage period or prolonged periods of time.
- Do not store the battery in temperatures exceeding 40°C (104°F). Lithium-Ion can be stored in cool or cold environments but must always be warmed up to room temperature before charging.
- Never charge a battery in freezing or near freezing temperatures. Attempting to charge a battery in these conditions can cause irreversible damage.



OPERATION OF THE BATTERY:

- a. Always ensure the battery is fully installed and locked in the ebike before powering on.
 - b. Avoid dropping below 10% battery power. This can shorten the life of the battery.
 - c. Try to minimize time spent near 0 or 100 percent state of charge. This can reduce lifetime of the battery. Re-charge the battery as soon as possible.
 - d. Do not try to utilize a battery pack that has turned off automatically until it has been recharged.
 - e. Charging the battery to 100% is fine if the bike will be used within a short time. Otherwise avoid charging to 100% (see section on Storage above).
 - f. The battery will perform best under the following conditions:
 - i. 0°C to 50°C (32°F to 122°F) for discharging.
 - ii. Room temperature always for charging, 20°C (68°F).
 - iii. NEVER attempt to charge a frozen battery. If a battery has been stored in an environment below freezing, allow enough time for the battery to warm up to room temperature, 20°C (68°F) before charging.
- 4. Safety** In winter, keep the battery as warm as possible. Freezing temps can cause lithium-ion batteries to lose capacity quickly.
- a. Keep out of direct sunlight. If the internal temperature of the battery pack is in excess of 60°C (167°F) there will be damage to the battery's capacity and a reduction in battery life and can increase the risk of a fire or explosion.
 - b. Do not wash the battery shell with organic solvent.
 - c. In case of fire, do NOT use CO2 to extinguish fire. Use CCl4 or Class D extinguisher to extinguish fire. You can use sand or soil to help extinguish fire as well, only use water to ensure the fire does not spread to surrounding areas.
 - d. Handle the battery pack with care. Do not throw, drop, or expose to heavy vibration.
 - e. Do not submerge the battery pack in water. The battery pack can get wet in the rain, or when washing the bike but do not submerge.
- 5. How to maximize the range of your battery**
- a. Use the pedals as often as possible, especially when starting. DO NOT simply rely on the throttle for power; using only throttle power will decrease the life of the battery.
 - b. Start in a low gear and low power. This means looking ahead and shifting to a lower gear before coming to a stop, so you are in the correct low gear to resume riding again.
 - c. Use low gears for climbing steep hills. Avoid putting unnecessary torque into the transmission, which requires more power from the motor and battery.
 - d. Minimize starts and stops by looking ahead and planning the route.
 - e. Lower tire pressure will use more battery power, and lower air temperatures will reduce the life of the battery.

CHAPTER 4 | SAFE OPERATION, MAINTENANCE, AND INSPECTION



WARNING: Turn off the battery before performing any repairs or maintenance on the ebike. Any turning of the cranks will cause the motor to engage, which could result in serious injury.

1. Before First Ride (After Initial Build and Inspection):

- a. Adjust seat to comfortable height.
- b. Adjust the saddle rails fore/aft positioning for comfort.
- c. Adjust the handlebar, shifter, and brake lever position to your preference.
- d. Read Chapter 2 of this manual to become familiar with the components and how the motor and analyst work.
- e. Squeeze brake levers and test the braking power with the bike in a stand, or just walking alongside the bike. DO NOT attempt to ride the bike if the brakes are not adjusted properly.

2. Before Every Ride:

- a. Check tire pressure and tread wear. Check the sidewalls for damage.
- b. Check the brakes, ensure brakes have adequate power and appropriate amount of brake pad remaining.
- c. Check that wheels are straight and turning freely. Ensure spokes are consistently tight.
- d. Check the Chain tension and lube the chain to reduce friction and increase shifting precision.
- e. Check that the handlebars and stem are secure; and tighten all stem bolts to 7nm.

3. After every ride:

- a. Wipe down frame with soap and water. DO NOT use a power washer or high-pressure hose, this could damage the motor and electrical components.
- b. Mud and dirt can be washed away with a low-pressure hose, avoiding direct flow with the electrical components and motor assembly.



4. Monthly Maintenance:

- a. Check frame for any damage.
 - i. Look for any dents, cracks, or chips to the frame. Although some may only be cosmetic, a small crack in the frame can be a serious safety hazard. **DO NOT** ride the bike if you identify any cracks in the frame.
- b. Check for loose spokes.
 - i. Squeeze the spokes together to check the spoke tension. Spokes should flex slightly and return to their original position. See your local bike shop for wheel truing and spoke replacements if necessary. Tighten any loose spokes with a spoke wrench.
- c. Check forks for damage and air pressure (if applicable).
 - i. The fork legs should move freely. Check the seals where the stanchions enter the lower legs of the forks. These seals can wear over time, and if not kept clean can damage the fork stanchions as well.
- d. Check cassette and chainring for wear/damage.
 - i. Ensure the chain flows freely around the front chainring and each gear in the rear. Inspect the teeth in the front chainring as well as each individual cog in the rear. It is typical for grease and dirt to build up along the sides of the chainring, cassette cogs, and pulley wheels on the rear derailleur.
 - ii. Use a bicycle degreaser or chain cleaner and a brush to clean and degrease the chain and drivetrain components. Re-Lube with bicycle specific chain lube and wipe off excess.



CHAPTER 5 | VPO™ (VARIABLE POWER OUTPUT)

WARNING: It is always up to the consumer to verify that they are adhering to the local legislation and comply to the rules of the road.

Power when you want it, classification when you need it. The new VPO(TM) (Variable Power Output) firmware allows users to change the bike output parameters to be compliant where required and unlimited when desired.

QuietKat is paving the way with this new software, which is compliant to the eBike 3-Class classification system that a majority of states have adopted.

If using an Ultra Drive motor, the firmware also allows you to switch the motor from torque sensing control to cadence sensing control.

The firmware allows you to ride your bike how you want, maximizing your capability no matter where you are.

Check out quietkat.com/vpo to learn more!

QuietKat's Definition of the Classes

Class 1:

- Mechanical output power limited to 750W
- Throttle disabled
- Motor assistance capped at 20mph

Class 2:

- Mechanical output power limited to 750W
- Throttle enabled
- Motor assistance capped at 20mph

Class 3:

- Mechanical output power limited to 750W
- Throttle disabled
- Motor assistance capped at 28mph

Unlimited:

- Power is limited by the max current limit of the controller
- Throttle enabled
- No speed limit

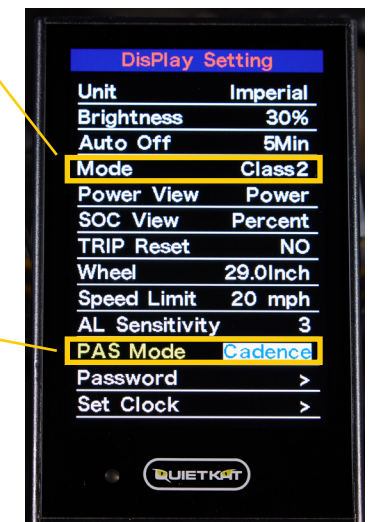
How it Works – Class Change

1. The bike will ship in Class 2 and Torque based control (if applicable)
2. A QR code sticker containing a link to a how-to page will be covering the display
3. Displayed on the screen is the current class in the bottom left corner and the throttle status in the bottom right corner. The PAS level (ECO, TRAIL, or BOOST) is centered on the bottom
4. To change the class, bring the bike to a complete stop
5. Double tap the “i” button on the keypad
6. Go into display information by selecting “i”
7. Toggle up and down using the “+” and “-” buttons
8. Select the option you’d like to change using “i”
9. Toggle through the different parameter options using “+” and “-”
10. Go back to the home screen by double tapping “i”



How it Works – PAS Mode Change

1. Toggle into the display settings (double tap “i”)
2. Select display settings (“i”)
3. Scroll down to PAS Mode and select “i”
4. Toggle to Cadence or Torque based control



Note:

- Only Ultra Drive E-Bikes have the ability to use Torque control.
- Hardtails are only able to use cadence control. However, selecting torque control will have no negative effects.

FAQs:

Q: Can I change classes while I'm riding?

A: No, the firmware only allows you to switch class from a complete stop. This is a compliance issue as well.

Q: My bike doesn't have the class change firmware, can I upgrade to include this feature?

A: Currently, this feature must be included from the factory.

Q: What trails and paths can I ride on?

A: The firmware complies with the 3 class system for eBike classification. It is up to the user to make sure they are in compliance with the particular area they are riding.

Q: Can you still switch the PAS setting (ECO, TRAIL, BOOST) while riding?

A: Yes, only the class change function is disabled while moving.

Q: How do I tell if my bike has VPO™?

A: Upon boot up, check bottom left corner of the display. If you don't see Class 1, Class 2, Class 3, or Unlimited, your bike does not have VPO™.

Q: What mode will my bike arrive in?

A: Upon first boot up, the bike will be in Class 2. After changing the class, the bike will boot up in the class it was previously shut down in.

Q: What if "ECO" is too fast for my needs?

A: You can pulse the throttle/pedals or barely push the throttle to go slower

Q: Where can I learn more about local eBike legislation?

A: Please check out peopleforbikes.org.





CHAPTER 6 | WARRANTY INFORMATION

Every QuietKat comes with a Lifetime Limited Warranty against manufacturing defects in materials and workmanship on its frame, and a One-Year Limited Warranty on the battery, controller and motor assembly. This warranty only applies to the original registered owner of the QuietKat and is not transferable. Original purchase receipt or invoice is required for all warranty claims.

The limited warranty does not apply to normal wear and tear, malfunctions or failures due to abuse, neglect, improper use or repair, improper maintenance, alteration, modification, or other improper use.

The limited warranty does not apply to damage sustained in a crash.

The limited warranty does not cover routine maintenance such as component adjustments due to shipping, use of the product, nor does the warranty cover replacement of parts that have not been properly maintained.

The one-year warranty on QuietKat's lithium ion batteries does not include damage from a power surge, use of improper charger, improper maintenance or other such misuse, normal wear or water damage.

If a component is deemed to be defective or damaged without user error or other improper use, QuietKat will assist in replacing the frame or specific part in question. This includes any parts damaged in shipping. We will not replace any part deemed to be damaged by the user in a crash.

In the case of repair or parts replacement under warranty, we will work with the owner to find a local certified bicycle repair shop to make the necessary fix. QuietKat will also cover the associated repair labor fees that are directly associated with the specific warranty situation.

The owner may also return the unit to QuietKat to make the needed repairs, but will be responsible for the shipping costs.

All warranty claims must be made through QuietKat, Inc., and can be submitted to info@quietkat.com. Original proof of purchase is required with any warranty request. Before making a claim, please contact our service department at customerservice@quietkat.com for repair and/or warranty information. The warranty period extends one (1) calendar year from the date of purchase.

CHAPTER 7 | SHIPPING DAMAGE CLAIMS

Upon delivery, immediately inspect your products for damage. Freight damage claims are extremely time sensitive, and we will not accept any freight damage claims later than 3 business days from delivery. If possible, make notes of any damage to your products on the Bill of Landing before you and the delivery driver sign-off on the shipment. Take any photos of damage and date the images when possible. Report shipping damage claims to QuietKat inc., at 970-328-2399 or visit <https://kb.quietkat.com/en/support/contact-quietkat-support> to file a claim.

CHAPTER 8 | RETURN POLICY

QuietKat will accept the return or cancellation of an order under the following conditions:

1. Items that are purchased and cancelled before shipping are subject to a 15% processing fee
2. Items that are shipped may be returned within 30 days if there are fewer than 10 miles on the odometer. Those returns are subject to a 15% restocking fee on the purchase price, as well as return shipping fees. A 1% fee is added for every mile over 10. The original shipping charges are non-refundable.
3. Under the "QuietKat Test Ride Guarantee Program," a customer pays an additional non-refundable fee (\$150 for bikes and \$225 for all terrain trikes) to test ride the vehicle for up to 30 days and for fewer than 10 miles. Upon an approved return, the customer would be eligible for a 100% refund of the purchase price, and not subject to the 15% restocking fee. However, a 1% fee would be added for every mile over ten miles of testing. QuietKat would arrange for and cover the return shipping fees. The original shipping costs paid by the customer are not refunded.
4. QuietKat will not accept the returns of products after 30 days.
5. In the event of a product return, QuietKat will not accept the return of promotional items associated with that sale. The MSRP value of the promotional items will be deducted from the refund.
6. Before a return is made, the customer must receive written approval of the return and a Return Authorization Number from QuietKat Inc. If a customer sends a return without the written consent of the company, a refund will not be issued. The customer who sends a unit back without consent will be responsible for shipping costs back to them; or will sacrifice the item. Once a return is approved by QuietKat Inc., you may receive an exchange, company credit or a refund.
7. All purchases made through authorized QuietKat retailers are subject to the dealer's return and refund policies; QuietKat does not accept direct returns of products sold through authorized retailers. All products sold through dealers must be returned to the original reseller.

CHAPTER 9 | ERROR CODES

MID-DRIVE MOTORS (APEX PRO, APEX SPORT, RUBICON, IBEX, JEEP)

Error	Description	Repair Notes
07	High Voltage Protection	Check the battery connections and charge state.
08	Hall Sensor Malfunction	Contact QuietKat Customer Service or your local QK dealer.
10	Motor Temp Sensor	Stop riding, turn the motor off and allow to cool. If problem persists, contact QuietKat customer service.
12	Controller Sensor Error	Contact QuietKat Customer Service or your local QK dealer.
13	Battery Temp Setting	Turn off the bike, remove the battery and ensure proper connections. Allow the battery to cool. If problem persists, contact QuietKat customer service.
21	Wheel Speed Sensor	Check the wheel speed sensor on the rear wheel. Ensure magnet on the spoke aligns with magnet on frame.
22	BMS Communication Fault	Remove the battery, Contact QuietKat Customer Service
30	Communication Fault	Contact QuietKat Customer Service or your local QK dealer.

HUB-DRIVE MOTORS (RANGER, VILLAGER, PIONEER)

Error	Description	Repair Notes
10	Communication Fault	Check the display wires are connected properly to the bike. If problem persists, contact QuietKat customer service.
21	Abnormal Current	Check the battery is correctly installed into the bike. If problem persists, contact QuietKat customer service.
22	Abnormal Throttle	Check to ensure the throttle is connected properly. Try removing to verify the bike still powers under pedal assist. If the problem persists, replace the throttle.
23	Motor Phase Loss	Check the battery is correctly installed into the bike. If problem persists, contact QuietKat customer service.
24	Hall Sensor Fault	Contact QuietKat Customer Service or your local QK dealer.
25	Brake Sensor Fault	Check that the Brake sensors are plugged in properly. If problem persists, contact QuietKat customer service.

CHAPTER 10 | FREQUENTLY ASKED QUESTIONS

Q: Can I climb hills with the QuietKat?

A. QuietKat electric bikes are designed for ascending hills. The e-bikes have enough power to ascend as steep of a hill as you are comfortable riding up and back down again.

Q: Will my QuietKat rust over time?

A. No, QuietKat's design utilizes stainless hardware and an aluminum frame. Keep components such as chain and gears clean to avoid corrosion and poor performance. Do not store outside. prolonged exposure to the elements especially coastal areas will result in rust buildup on the drivetrain.

Q: Can I exceed the weight rating on the bikes or trailers?

A. This will void the warranty. E-Bikes and trailers are designed to work within their weight limits.

Q: How do the e-bikes perform in Mud, Snow and Sand?

A. You can reduce the tire pressure for better performance on soft terrain; keep in mind this is still a bicycle and will be limited by snow or mud that is deep or lacking support for the tires.

Q: Can the QuietKat go through Water?

A. Yes, but do not submerge the motor or any electronic components, including the battery compartment.

Q: Is the suspension adjustable for varying terrain?

A. Yes. All air-spring suspension models can be adjusted using a shock pump. Some components are equipped with additional adjustments such as lockout, compression, and rebound dampening.

Q: Are the wheel bearings sealed?

A. Yes. Best way to keep the wheels spinning smoothly is to keep the bike clean. Use grease / lube for all parts mechanical parts.

Q: Can I switch out my seat to a different style?

A. Yes. This is a standard mountain bike design and many aftermarket options are available, including the QuietKat comfort saddle at www.QuietKat.com

Q: Can I buy extra batteries?

A. Yes, extra batteries are available for purchase.

Q: Can I ride it on bike trails and access roads?

A. Always check local laws and regulations. Rules can change based on the specific trail you are on, and which entity manages the land you are travelling on.

Q: Can I use it to pull a deer out of the woods?

A. Yes, we recommend using one of the cargo trailers. Do not overload the trailer with too much weight. DO NOT DRAG a deer on the ground with the e-bike.





APEX
PRO 700

QUIETKAT

KENDA

MUGGERNAUT
3.0 29x2.35
KENDA

 QUIETKAT