



QUIETKAT

APEX 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 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. Do not use this product if you are under the influence of alcohol, drugs, or medications. For outdoor use only.

eBikes are heavier, accelerate faster, can achieve higher speeds more quickly and maintain those speeds for longer periods of time compared to regular bicycles. These features can dramatically affect the handling, braking and cornering of your eBike, which means you must exercise more caution around other people and when cornering, accelerating and slowing down. It is recommended that you get to know the functionality and intricacies of accelerating and decelerating your eBike in an area away from people and cars/traffic.

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 keep your feet on the pedals when in motion.

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 bike and remove the 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.

Under wet conditions, the stopping power of your brakes (as well as the brakes of other vehicles sharing the road) is dramatically reduced and your tires don't grip nearly as well. This makes it harder to control speed and easier to lose control. To make sure that you can slow down and stop safely in wet conditions, ride more slowly and apply your brakes earlier and more gradually than you would under normal, dry conditions.

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 or death.**

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 toggle the display to walk mode, then 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:

The Apex has 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 II	20 MPH	PEDAL ASSIST + THROTTLE
CLASS III	28 MPH	PEDAL ASSIST
UNLIMITED MODE	N/A	PEDAL ASSIST + THROTTLE

TABLE OF CONTENTS

INTRODUCTION	07
FOREWORD ON SAFETY	09
CHAPTER 1 – Unboxing & Assembly	11
CHAPTER 2 – How To Charge & Power On	20
CHAPTER 3 – About the Bike	22
CHAPTER 4 – Battery Care	27
CHAPTER 5 – Safe Operation, Maintenance & Inspection	29
CHAPTER 6 – VPO 2.0 (Variable Power Output)	32
CHAPTER 7 – Warranty Information	35
CHAPTER 8 – Shipping Damage Claims	36
CHAPTER 9 – Return Policy	36
CHAPTER 10 – Troubleshooting	37
CHAPTER 11 – Error Codes	38
CHAPTER 12 – Frequently Asked Questions	42



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 and remove 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 serious injury or death.

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

- ✓ 3, 4, 5, 6, 8mm hex tools
- ✓ 8, 19mm box wrench
- ✓ 15mm pedal wrench
- ✓ Phillips Head or JIS Screwdriver
- ✓ Cable Cutters
- ✓ General Purpose Grease
- ✓ Torque Wrench (Optional)

UNBOXING

- Carefully remove the bike from the box.
 - Use caution when opening the box as there may be staples exposed when opening the lid.
 - It is easier to clip the zip ties attaching the front wheel to the bike and remove the front wheel from the box first.
 - Remove the accessory box, charger box, and any miscellaneous parts from the box before removing the bike.
- Remove all packaging materials and place them back in the box.
- Be careful not to cut hydraulic brake lines when removing zip-ties and protective packaging.
- Place the bike in a repair stand hanging from the seatpost (if possible)
 - 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.
- Attach the handlebars.
 - Using a 4mm allen wrench, remove the 4 bolts from the front of the stem and remove the faceplate.
 - Place the handlebars on the stem, with REAR brake and gear shifter (if equipped) on the riders RIGHT and put the bracket and 4 bolts back into place.
 - Don't worry about aligning the handlebars yet. Tighten the bolts until snug. DO NOT OVERTIGHTEN!



ATTACH THE FRONT WHEEL

1. Remove the axle from the front fork.
 - a. Remove the 6mm end cap bolt using a 6mm hex tool.
 - b. Loosen the 4 pinch bolts on the bottom of the fork legs with a 4mm hex tool
 - c. Ensure bolts on each leg are loose. In some cases, you may completely remove the bolts for this step.
2. Align the wheel between the fork legs taking care to align the brake rotor between the brake pads.
 - a. Because of the inverted design, the fork legs may spin out of alignment
 - b. 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 brake-side fork leg, through the hub, and through the drive-side fork leg.
4. Insert the axle with one 6mm hex-head axle end cap bolt into the into the brake-side fork leg.
5. Insert the 6mm hex-head axle end cap bolt into the drive-side of the axle. Tighten to 7Nm.
6. Tighten the 5mm pinch bolts on the bottom of each fork leg to 10Nm with the 4mm hex tool.
7. Rotate the wheel to ensure proper brake clearance on the rotor.
8. Re-align the brake caliper on the rotor if needed (SEE ALIGN THE BRAKE CALIPER AND ROTOR)



ALIGN THE BRAKE CALIPER AND ROTOR

1. 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.
2. Squeeze the brake lever to engage the pistons and squeeze the rotor with the pads; keep it squeezed while tightening the Brake Caliper bolts.
3. Release the brake lever and spin the wheel to ensure the rotor is centered within the pads.
4. The same process can be used for both front and rear brakes.
5. For more information on disc brakes and disc brake care and maintenance, go to [QuietKat.com](https://www.quietkat.com) for a full catalog of maintenance videos.

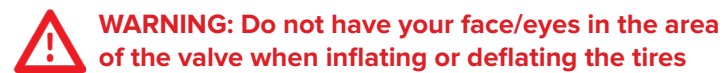


ATTACH THE PEDALS

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



WARNING: Do not have your face/eyes in the area of the valve when inflating or deflating the tires

- 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. Never exceed the rated psi stamped in the side of the tire.
- 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, AND DROPPER LEVER

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).
6. Attach (if not already on bars) the dropper lever on the left side of the bars between the control pad and the left brake. Tighten to 3Nm using the 2.5mm hex tool.



HOW TO ADJUST THE FRONT SUSPENSION FORK

1. The blue dial (this dial may be red on some models or replacement parts) 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. The rebound adjust knob is on the bottom of the fork and is red. If the suspension feels like it is extending too fast after a compression, tighten the knob (clockwise if looking up on the knob). If the suspension response is too slow to extend, loosen the knob.
3. Air Forks have a cap covering a Schrader Valve on the bottom of the non drive side of the fork. 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.



Note: Lay the bike on its side or upside down before adding or removing air from the fork.

Final Bolt Checklist

- 1- Ensure all bolts are properly tightened from front to back of the bike
- 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 making these adjustments, go to our Video Assembly Page or bring it to your local bike shop.

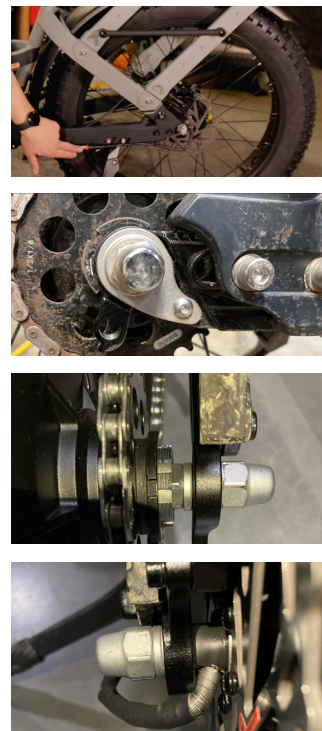
TO REMOVE THE REAR WHEEL

1. Loosen the 4x M8 dropout pinch bolts with a 6mm hex tool until you can turn them by hand.
2. Use a 4mm hex tool to loosen (counter-clockwise) the dropout tensioning bolt.
3. Alternate left and right side every 4 - 6 full rotations to ensure the hub doesn't get cammed in the dropout.
4. Once the chain is slack, stop loosening the dropout tensioning bolt.
5. Using the 19mm box wrench, loosen the axle nuts. The wheel should easily remove from the dropouts.
 - a. Note: on hub drive models, it's easier to unplug the motor cable before install/removal of the wheel. Always remove the battery before unplugging!
 - b. Note: on mid drive models, you will need to remove the torque arm bolt with a 3mm hex tool before the axle will come free of the dropout.



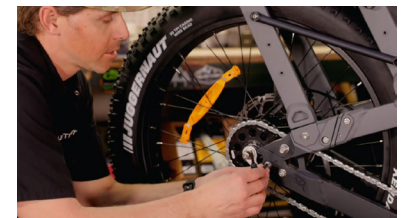
TO INSTALL THE REAR WHEEL

1. Insert the wheel into the dropouts ensuring that the brake rotor is between the brake pads.
 - a. Note: on hub drive models the motor power cable should be exiting the axle towards the bottom rear of the bike.
2. Once the axle is in the dropout, push down firmly on the rear of the bike or pull the wheel securely up into the dropouts (if in bike stand) to ensure that the axle is fully seated inside the dropout. Then...
 - a. For Mid Drives: Align the torque arm washer so the M5 torque arm bolt and corresponding dropout threads are concentric. Tighten the torque arm bolt with a 3mm hex tool to 7Nm both sides.
 - b. For Hub Drives: Ensure you have the proper washer orientation.
 - i. Drive side: Tabbed washer between frame and hub on inside of frame.
 - ii. Non drive side: Tabbed washer between frame and axle nut on outside of frame.



INSTALL REAR WHEEL CONTINUED

3. Tighten the axle nuts with a 19mm box wrench. Torque to 30Nm.
 - a. Note: do not overtighten or you can damage the axle threads.
4. Using a 4mm hex tool, loosen (counter-clockwise) the dropout tensioning bolt until you can place the chain on the rear cog.
 - a. 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.
5. Once you have the chain on, tighten (clockwise) the dropout tensioning bolt with the 4mm hex tool. Again alternating sides every 1 or 2 full rotations. The chain should feel slightly more slack than a traditional single speed bike chain.
6. Ensure the dropout is equally adjusted by matching the measurement on the right side of the dropout to the left.
 - a. Note: there are numbered tic marks on the dropout to aid this process.
7. Using a 6mm hex tool, tighten down the 4x pinch bolts alternating until all 4 are torqued to 20Nm.
 - a. Note: as you tighten down the pinch bolts, the chain will get tighter. This is expected.
8. Using a tape measure or ruler, apply a 1kg force to the midpoint between the cogs and measure the total travel up + down from the same spot on the chain. Once this distance measures 12-22mm, the chain is properly tensioned. If you fall outside of this range, repeat steps 5-8 until you fall within this range.
 - a. WARNING: an overtight or too loose of a chain can cause damage and premature wear. And will void your warranty.



QK MODULAR RACK

QuietKat's new Modular Racking System allows you to cater your bike for your particular needs. It's the ultimate options for carrying your gear. Or remove it all together!

TO INSTALL THE STANDARD MODULAR RACK:

1. Drop the rack feet into the 4 mounting locations on the seat stays.
2. Hand tighten all 4 M8 mounting bolts and washers.
3. Press down firmly on the rack to ensure that the rack is seated in the frame.
4. Torque the 4 M8 mounting bolts using the 5mm hex tool to 20Nm.



FENDERS

The rear fender comes partially installed on all 2024 hardtails.

FINISH THE INSTALL OF THE FENDERS:

1. The chainstay and seatstay mounting bolts should already be installed.
2. Once the rear rack is installed (see QUIETKAT MODULAR RACK INSTALLTION), simply screw down into the fender, with the included spacer between the rack and the fender.
 - a. The fender holes are threaded so there's no need to reach under and try to tighten a nut!



CHAPTER 2 | HOW TO CHARGE AND POWER ON

BATTERY

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

1. 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. NEVER charge your ebike using an extension cable or power strip
 - 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.
2. 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 to release the battery.
 - i. Be careful, the battery can fall out the bottom of the frame once you pull the switch.
 - c. It helps to have the wheel perfectly straight to get the battery out.
3. To charge the battery, remove the rubber plug from the charging port.
4. Plug the charger into the bike.
5. Plug the charger into the power outlet and wait until the light on the charging unit is illuminated.
6. 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 4-10 hours to fully charge (depending on model and power).
7. 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.
8. During normal use you can charge it after every ride regardless of battery level. For storage information see steps below.
9. 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.
10. Always charge in dry, ventilated conditions away from sunlight, ideally 50-80 degrees Fahrenheit.
11. Only use the original charger, DO NOT use any aftermarket chargers or charging accessories.
12. 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 and battery label 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.
- d. When the power comes on the power level will be set to ECO, and therefore engaged for throttle or pedal assistance.
- e. Use the + or – key on the keypad to change your pedal assist power level.
- f. To turn off, press and hold the power button again for a couple seconds.

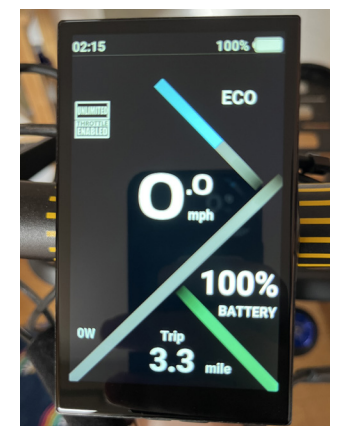
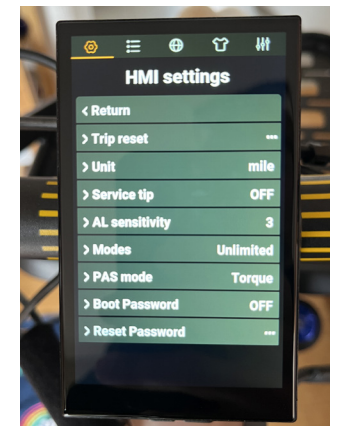


Three Button Keypad

- Power Button – Turns power and display on and off
- (+) Increases power assist setting
- (-) Decreases power assist setting

The display, or analyst defaults to showing the following information:

- Current speed
- Current class and throttle status
- Trip distance
- Battery level
- Power level
- Watts from the battery
- USB charging - Port located on bottom of display
- Hold the (+) and (-) buttons to access the settings screen. Toggle through the settings with (+) and (-) and select options with the power button.



CHAPTER 3 | ABOUT THE BIKE

APEX XD MID DRIVE - 5 SPEED INTERNALLY GEARED HUB

USE CASE:

The Apex XD is the ultimate workhorse. Designed to haul the biggest loads up the steepest hills.

SUMMARY:

You'll notice that by the looks of it, there is only one gear on the mid drive bikes. Don't be fooled! We're rolling out the brand new, 5 speed, internally geared, automatically shifting hub. This hub automatically sets the gear based on your speed so you don't have to worry at all about shifting. It feels a lot like an automatic transmission in your car. Hit the throttle or stomp on the pedals and the hub does the rest for you.

The benefits of this hub can not be understated: No more derailleur getting caught on brush or tall grass, no more adjusting the shifting when the cable stretches or the chain gets worn, and no more shifting down into first gear as you approach a stop.

RIDING THE BIKE:

There is a slight learning curve coming from a traditional derailleur and cassette drivetrain. This is most evident when coming down a hill at speed with a steep climb ahead of you. Since you're going fast, the hub will be in a high gear. However, once you hit the hill climb, you'll want the hub to be in a low gear for maximum torque. The solution is to coast into the hill, then once the bike speed has decreased to around 8mph, get back on the power. If you are powering up a hill before you realize your in too high of a gear, you can let off the power then back on and it will downshift.

Climb mode was designed to give you full power, but limit the speed to keep the hub in first gear. However, if you are going downhill or pedaling, you may unintentionally reach the speed where the hub shifts to a higher gear.

APEX HD HUB DRIVE - 2 SPEED INTERNALLY GEARED HUB MOTOR

USE CASE:

The Apex HD is the silent efficient and cost effective option perfect for more mellow terrain and rolling hills.

SUMMARY:

This two speed hub motor allows the simplicity of single speed with the versatility of multiple gears. The hub automatically shifts a higher gear at around 11mph.

Again, the same benefits of the an internally geared, automatic shifting hub: No more derailleur getting caught on brush or tall grass, no more adjusting the shifting when the cable stretches or the chain gets worn, and no more shifting down into first gear as you approach a stop.

RIDING THE BIKE:

Since the hub is direct drive, you will only feel the gear shift is using pedal assist. When under throttle only, it may not always be possible to feel the bike shifting gears. You'll also note that there is an additional 22T rear cog in the accessory box. This bike has been geared for off-road use with the larger 26T rear cog, but if you find yourself looking for less pedaling torque and the ability to pedal to higher speeds, you can take your bike to a certified bike shop and have them

DROPPER POST

Your 2024 QuietKat Apex comes standard with a suspension + dropper post. This means that the dropper seat post also has 50mm of suspension built in for ultimate comfort! Easily lower and raise your seat with the press of a lever. This allows you to be in an optimal pedaling position when moving and still stay in the saddle with your feet on the ground when stationary.

USING THE DROPPER + SUSPENSION SEAT POST

1. Your bike will ship with the dropper fully lowered. To raise the dropper simply unweight the saddle, then press the dropper thumb lever.
 - a. Note: this may already be installed on the left side of the handlebars.
2. To lower the dropper, push or sit on the saddle while depressing the thumb lever.
3. You can temporarily adjust the seat height to any position along the travel of the dropper by releasing the thumb lever at the corresponding height.
4. The suspension function is built into the post. Your weight will compress the dropper when you hit bumps!
 - a. Note: if the seat post is all the way down, you will not have any suspension function. Therefore, it is recommended that you leave at least 50mm of seat post extended when riding.

WHEN AND HOW THE DROPPER CAN BE USED

- If you are only using the throttle and want a more upright riding position, lower the dropper
- If you are riding technical terrain standing on your pedals and want the saddle out of the way, lower the dropper
- If you are pedaling the bike and want optimal pedaling performance, raise the dropper
- If you are approaching a stop and don't want to stand on the ground without your bottom on the saddle, lower the dropper

ADJUSTING THE DROPPER

The dropper height is set from the maximum height you want the saddle for pedaling.

1. Make sure the dropper is fully extended by depressing the thumb lever on the left side of the bars.
 - a. Note: it should measure 125mm of stanchion if fully extended.
2. Get on the bike and pedal around. You are shooting for an efficient pedaling position of the knees. This is personal preference, but your knee should be bent 30-40 degrees when your pedal is at the bottom of the stroke.
3. If this isn't the case out of the box, loosen the seat collar with a 4mm hex tool and adjust the height as necessary.
 - a. Note: as you pull out the seat post, you should push the dropper cable housing into the frame at the bar side and as you lower the seat post you should pull the dropper cable out of the frame at the bar side matching the distance of the pull/push.
4. Re-tighten the seat collar to 7Nm and retest the seat height.
5. Once you are happy with your saddle height, the dropper height setup is complete.

If the suspension built into the seatpost is too hard or soft, you can adjust it using a shock pump.

1. Access the Shrader valve at the top of the seat post on rear drive side.
2. Factory preset is 250psi and the recommended range is 150-350psi. More pressure is firmer, less pressure is more plush.
3. If you want to adjust the pressure, you MUST use a shock pump. A standard bicycle pump will not work.
4. Test your saddle before your ride to ensure it will behave as expected.

INSTALLING AND SETTING UP THE BIKE WITHIN THE QUIETKAT APP

Head to the google play or app store.

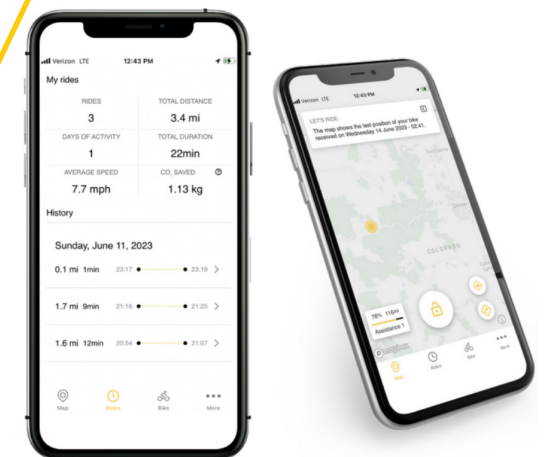
Download the app.



The app will walk you through a tutorial.

The barcode you will need to scan is located above the bottom bracket between the seat tube and down tube.

SCAN BARCODE HERE



CHAPTER 4 | 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:

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

STORAGE OF THE BATTERY:

- a. 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.
- b. To ensure a longer battery life cycle, it is recommended to discharge and recharge the battery every 2-3 months.
- c. Best way to discharge your battery is to ride your bike.
- d. Deep cycling is not necessary for lithium and can harm the overall life cycle of the Lithium-Ion cells.
- e. 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.
- f. Do not leave the battery connected to a charger during its storage period or prolonged periods of time.
- g. Do not store the battery in temperatures exceeding 40°C (104°F) or below -20C (-4F). Lithium-Ion can be stored in cool or cold environments but must always be warmed up to room temperature before charging.
- h. 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. Try to minimize time spent near 0 or 100% state of charge. This can reduce lifetime of the battery. Re-charge the battery as soon as possible.
 - c. Do not try to utilize a battery pack that has turned off automatically until it has been recharged.
 - d. 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).
 - e. 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 CCI4 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 lower power setting and only toggle to higher power as needed, the lower the power level of the motor, the further the range of the bike will be.
 - c. Use climb setting 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 5 | 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 positioning for comfort.
- c. Adjust the handlebar, shifter, dropper, and brake levers positions 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.
- e. Lube the chain to reduce friction and increase shifting precision.
- f. Ensure all bolts are tight from the front to the back of the bike.

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.
 - 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 gears for wear/damage.
 - i. Ensure the chain flows freely around the front chainring and rear cog. Inspect the teeth in the front chainring as well as rear cog. It is typical for grease and dirt to build up along the sides of the chainring, cassette cogs, and rear cog.
 - 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.
- e. Check tires for wear and or damage.
 - i. Ensure that there are no cuts, gashes, or holes in the sidewalls of the tires. Tire blow-outs can be a serious safety hazard. DO NOT ride the bike if you identify any damage to the tires.
 - ii. Check the wear of the tread on the tires. If tires are worn consider replacing them before riding the bike. Worn tires can result in reduced traction and can be a safety hazard.



CHAPTER 6 | VPO 2.0™ (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.

VPO™ 2.0 builds on the groundbreaking first Variable Power Output (VPO™) program. With VPO™ 2.0, we’ve added even more versatility and a fresh look.

We’ve added 3 more PAS settings: Climb, Stealth, and Off.

***Off:** Select off if you want no power from the motor, but still want to have the screen powered on.

***Climb:** Select Climb if you want to have maximum power, but remain in gear one on the internally geared hubs.

***Stealth:** Select Stealth if you want low power to creep up on prey at an extremely low speed. This mode is also great for bike path use where the rolling resistance is low and you want to get a workout!

ECO: Select ECO if you want the bike to ride more like a traditional bike. The power should just offset the weight of the bike under normal riding conditions. This setting will give you the maximum range and will require some input from the rider.

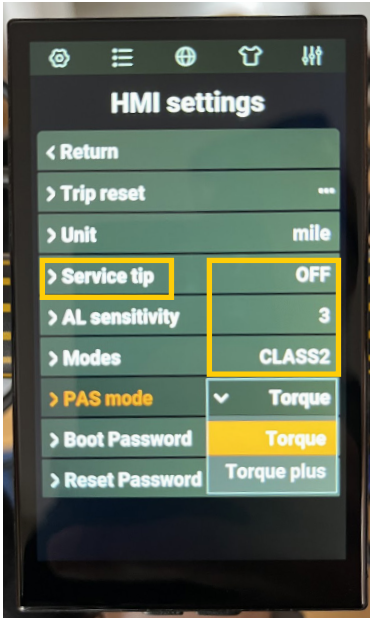
Trail: Select Trail if you want slightly more power from the motor, but with that, slightly smaller range.

Boost: Select boost if you want maximum power and speed and are not as concerned about range.

Another new feature with VPO 2.0 is the ability to adjust the rate at which the PAS delivers power. Since both hub and mid drive Apex models are torque sensing, we’ve added two different ride modes with different levels of output power for the same input power.

Torque: Standard torque response. This will feel very natural and expected output for how much force is being input on the pedals.

Torque plus: Higher torque response. This will feel like you are getting much more power from the motor than you are putting in through the pedals.



VPO™ 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 VPO 2.0, 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™ 2.0?

A: Upon boot up, check bottom left side of screen. If you don’t see Class 1, Class 2, Class 3, or Unlimited, your bike does not have VPO™ 2.0.

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: Toggle down to stealth mode for the lowest power option. Additionally, you can set the speed limit in the settings as low as you'd like!

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

A: Please check out peopleforbikes.org.



CHAPTER 7 | 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 8 | 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 9 | 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 10 | TROUBLESHOOTING

APEX XD MID DRIVE & APEX HD HUB DRIVE

Problem	Solution
5 speed hub not shifting or getting stuck in highest gear	Chain may be too tight. If chain is found to be too tight and loosening the chain to spec doesn’t fix the issue, the hub may be permanently damaged. Contact QuietKat customer experience for support.
Handlebars not able to turn all the way left and right	The 24' bikes have a turn-stop headset which prevents the handlebars from turning all the way through. If you had a crash and now the handlebars can’t turn about 70 degrees evenly from straight, you may have rotated the turn stop mechanism. In order to correct, forcefully turn the handlebars the direction that is limited until it’s about 70 degrees. You should now have freedom of motion in both directions evenly.
Seatpost dropper not staying up or not actuating down	1st Try loosening the barrel adjuster at the dropper lever. 2nd remove the lever from the bars and loosen the seat tube collar. Pull the seat post out of the frame while gently inserting the dropper cable into the frame at the head tube. Inspect the cable connection at the bottom of the dropper post for damage. Try manually actuating the dropper. If none of this works, the dropper may have failed. Replace and or service the dropper per KS’s manual. To re-insert the seat post, make sure you gently pull on the lever side cable as you insert the post to the desired max height. You don’t want the cable getting snagged or jammed in the frame.
After a sustained ride or in hot temperatures, my bike power is significantly reduced	This is a safety feature to prevent damage to the electronics. Power is de-rated to 500w.

CHAPTER 11 | ERROR CODES

APEX XD MID DRIVE & APEX HD HUB DRIVE

Error	Description	Possible Causes	Troubleshooting	Solutions
04	The throttle has not returned to its correct postion	Throttle is stuck in the open/on position	Check if the throttle is stuck on the brake lever	Reposition throttle away form brake lever
		Throttle may be stuck on brake lever	Check if the throttle is stuck on the display keypad	Reposition Throttle away from display Keypad
		Throttle may be stuck on display keypad	Check for damage to the Throttle	Replace the Throttle
		Throttle may be damaged		Replace the Controller
05	Throttle fault	Throttle may be damaged	Inspect throttle for damage Inspect throttle wire for damage	Replace the throttle Replace the controller
07	Over Voltage Protection	Damaged controller Battery issue	Inspect the controller for damage Inspect battery for damage Measure output current from battery	Update Firmware on the controller (using BESST Tool) Replace the battery Replace the Controller
08	Error with the hall sensor	Loose connection Bent/broken connection pins Dirt/Debris in connection pins Motor wire damage Hall sensor on the stator of the motor is failing	Inspect the motor connection Inspect the motor wire harness for damage Inspect the motor for damage	Ensure the motor connection is correct Replace the motor Replace the motor/ controller connection
09	Fault with motor phase winding	Motor wire damage Phase winding of the motor is failing	Inspect the motor connection Inspect the motor wire harness for damage Inspect the motor for damage	Ensure the motor connection is correct Replace the motor
10	Over temperature of motor	Throttle is stuck in the open/on position Throttle may be stuck on brake lever Throttle may be stuck on display keypad Throttle may be damaged	Check if the throttle is stuck on the brake lever Check if the throttle is stuck on the display keypad Check for damage to the Throttle	Reposition throttle away form brake lever Reposition Throttle away from display Keypad Replace the Throttle Replace the Controller
11	Motor temperature sensor fault	Throttle may be damaged	Inspect throttle for damage Inspect throttle wire for damage	Replace the throttle Replace the controller
12	Over current of motor	Damaged controller Battery issue	Inspect the controller for damage Inspect battery for damage Measure output current from battery	Update Firmware on the controller (using BESST Tool) Replace the battery Replace the Controller

Error	Description	Possible Causes	Troubleshooting	Solutions
13	Battery temperature sensor fault	Loose connection Bent/broken connection pins Dirt/Debris in connection pins Motor wire damage Hall sensor on the stator of the motor is failing	Inspect the motor connection Inspect the motor wire harness for damage Inspect the motor for damage	Ensure the motor connection is correct Replace the motor Replace the motor/ controller connection
14	Over temperature of controller	Motor wire damage Phase winding of the motor is failing	Inspect the motor connection Inspect the motor wire harness for damage Inspect the motor for damage	Ensure the motor connection is correct Replace the motor
15	Controller temperature sensor fault	Error with the temperature sensor inside the controller	Inspect the controller for damage Turn off the system and restart Make sure the controller is within temp range	Ensure the controller is within operating temperature (0°C 40°C) and restart the system. Replace the Controller.
21	Speed sensor fault	The speed sensor is unable to measure the speed of the bike	Inspect the alignment of the speed sensor Inspect the speed sensor for damage Inspect the speed sensor connection Inspect the speed sensor wiring	Make sure the speed sensor and speed sensor magnet are correctly aligned. Ensure the speed sensor is connected to the controller correctly. Replace the Speed Sensor.
25	Torque signal fault	The torque sensor is unable to measure force	Inspect the controller for damage Inspect battery for damage Measure output current from battery	Ensure the torque sensor is connected to the controller correctly. Replace the Torque Sensor.
26	Torque sensor signal fault	The torque sensor speed signal has an error	Inspect the torque sensor connection Inspect the torque sensor wiring Inspect the torque sensor for damage	Ensure the torque sensor is connected to the controller correctly Replace the Torque Sensor.
27	Over current of the controller	The controller has an error with the current	Inspect the controller for damage Turn off the system and restart	Restart the System Replace the Controller
30	Communication Failed	There is a communication problem within the electrical system	Ensure all connections are secure Inspect all connections for damage Inspect all wiring for damage Inspect all electrical components for damage	Repair any loose/damaged connections Repair any dmaged wiring Replace Display Replace EbBus Replace Controller Replace Motor Wiring / Motor

Error	Description	Possible Causes	Troubleshooting	Solutions
33	Brake detection circuit is fault	The brake sensor cut-off is engaged	Ensure brake connections are secure Test the system with brake sensors unplugged	Repair any loose/damaged connection Replace the brake sensor Replace the brake lever/ brake sensor
35	Detection circuit for 15V has error	15V error	Ensure all connections are secure Inspect the controller for damage	Replace the Controller
36	Detection cicuit on the keypad has an error	Display Keypad has an error	Ensure all connections are secure Inspect the keypad for damage	Repair any loose/damaged connections Replace the Keypad Replace the Display/Keypad
37	WDT cicuit fault	WDT circuit has an error	Inspect the system for damage	Restart the System Replace the Controller
41	Total Voltage from the battery is to high/low	Problem with the Battery Cells	Remove the Battery from the Bike	Replace the Battery
42	Total Voltage from the battery is to high/ low	Problem with the Battery Cells	Remove the Battery from the Bike	Replace the Battery
43	Total voltage of the batttery cells is to high	Problem with the Battery Cells	Remove the Battery from the Bike	Replace the Battery
44	Total voltage of the single cell is to low	Problem with the Battery Cells	Remove the Battery from the Bike	Replace the Battery
45	Battery temperature is to high	The battery has exceeded its maximum operating temperature	Inspect the battery temperature	Remove the Battery and allow the battery to return to normal operating temperature (-20° C -50° C) Replace the Battery
46	Battery temperature is to low	The battery has exceeded its minimum operating temperature	Inspect the battery temperature	Remove the Battery and allow the battery to return to normal operating temperature (-20° C -50° C) Replace the Battery
47	SOC of the battery is too high	The battery BMS has exceeded its maximum SOC	Remove the Battery from the Bike	Replace the Battery
48	SOC of the battery is too low	The battery BMS has exceeded its minimum SOC	Remove the Battery from the Bike	Replace the Battery



CHAPTER 12 | 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. Not if properly taken care of. 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.





QUIETKAT

VERSION 1 - 03/20/2024