

Ebike Owner's Manual



TURRLS

Ride1Up Turris Owner's Manual

Thank you for purchasing a *Ride1Up TURRIS* ebike! Please fill out the information below. This is for your records only. Your serial number is the number stamped on the headtube of the e-bike.

OWNER'S NAME:	
DATE OF ASSEMBLY:	
BIKE SERIAL NUMBER:	

IMPORTANT - READ ALL INSTRUCTIONS AND WARNINGS BEFORE YOU ASSEMBLE OR USE THIS E-BIKE. FAILING TO DO SO COULD CAUSE DEATH, SERIOUS PERSONAL INJURY, PROPERTY DAMAGE AND/OR A VIOLATION OF THE LAW. IT IS YOUR RESPONSIBILITY TO UNDERSTAND AND ABIDE BY ALL LAWS RELATED TO THIS E-BIKE. RETAIN INSTRUCTIONS FOR FUTURE REFERENCE AND TO PROVIDE TO OTHER USERS AND/OR FUTURE OWNERS. YOU MUST BE EIGHTEEN (18) YEARS OR OLDER TO RIDE THIS E-BIKE.

California Proposition 65 Warning – Certain components in this product and its related accessories contain chemicals known to state of California to cause cancer, birth defects or other reproductive harm. Wash hands after handling.

Need service or support? Visit our website https://support.ride1up.com for quick answers or call/email us directly. Our support team are ready to help you, M-F: 9AM-5PM.

Ride1UP Customer Support Contact:

Phone: 1-877-RIDE1UP

Contact Us: https://ride1up.com/contact/

For the most up-to-date and effective assembly resources on your TURRIS, please scan the QR code below for the digital assembly tutorial and video:



RIDE[UP

Model: Turris

Table of Contents

1. Safety Notes	6
1.1 Personal Safety	6
1.2 E-bike Safety:	6
1.3 Electrical Safety	6
1.4 Brake Safety:	7
1.5 Maintenance	7
1.6 Additional Warnings	7
1.6 Additional Warnings (Continued)	8
1.7 Notable Bike Parts	8
2. What's in the Box?	9
3. Installation Steps: Assembling Your Bike	11
3.1 Fork/Headset Assembly	11
3.1 Fork/Headset Assembly (Continued)	12
3.2 Front Wheel Assembly	13
3.3 Saddle/Seat Post Assembly	14

	3.4 Seat Clamp Assembly	. 14
	3.5 Pedal Assembly	15
	3.6 Detailed Torque Settings	15
	3.7 Adjust Derailleur and Shifter:	15
	3.8 Test and Adjust Front and Rear Brakes	16
4. Bat	tery Connection & Removal	. 17
5. E-b	ike Basics & Care	. 18
	5.1 E-bike Basics:	18
	5.2 Battery Basics & Care	19
	5.3 Battery Basics & Care	19
6. Tro	publeshooting Problems	. 20
	6.1 Motor Not Working	20
	6.2 Kickstand	20
	6.3 Charger:	21
	6.4 Derailleur/Gears	21
7. Cha	arging the Battery	. 21
	7.1 Battery Basics & Care	22
8. KD2	21C LCD Display Instructions	. <i>2</i> 3
	8.1 Power On/Off	23

	8.2 Pedal Assist Level Operating	24
	8.3 Speed & Mileage Mode Switch	24
	8.4 Backlight On/Off	24
	8.5 Walk/Push Assist (4mph)	24
	8.6 Change Settings	24
9. Err	or Code Troubleshooting	2 5
	9.1 Error Codes/Source of the Error:	25
10. W	arranty Information	26
	10.1 How to Handle Warranty Claims	26

IMPORTANT: READ ALL INSTRUCTIONS BEFORE USE. RETAIN INSTRUCTIONS FOR FUTURE REFERENCE. WARNING: Basic safety precautions should always be observed when using an electrical appliance to reduce the risk of fire, electrical shock, or serious injury.

1. Safety Notes

1.1 Personal Safety:

It is the owner's/rider's responsibility to properly assemble their bike and inspect all components and ensure all nuts and bolts are tightened for safety or to trust a 3rd party to do so. This is important for all bikes and even more critical for safety on an electric bike. Failure to do so may result in serious injury and/or death.

This e-bike is intended for use on paved roads or paths only. Using the e-bike for any other purpose may result in serious injury. Before you ride this e-bike in a busy area or on public roads, practice riding in a safe area free of hazards. Take time to learn the e-bike's controls and power. It is your responsibility to identify and follow all local laws and regulations, including fitting your e-bike with any additional equipment necessary to comply with local laws. At night your e-bike MUST have white front lights and red rear lights lit. It MUST also be fitted with a red rear reflector and amber pedal reflectors. Use caution when loading your e-bike into a car or when mounting it on a bicycle carrier. You must avoid damaging the wires of the electrical components during riding, transporting, and storing your electric bike.

1.2 E-bike Safety:

You must be eighteen (18) years old or over to ride this e-bike. Your e-bike is designed for a maximum permitted overall weight (rider + cargo) of 300lbs. Your bike must be inspected or assembled by someone experienced with bike mechanics prior to use. Proper assembly and inspection of all nuts and bolts are vital for safety and for your warranty coverage as damages due to improper assembly are not covered under warranty. Improper assembly of critical components could lead to serious injury and or death. Do not submerge your e-bike in water. Be aware that the speed at which you are traveling may be faster than you are used to, especially when accelerating.

1.3 Electrical Safety:

Only use the charger supplied by Ride1UP. Do not store the bike or battery plugged into a wall outlet. Unplug the battery before leaving the bike alone. Never modify the charger in any way. The charger has been designed for a specific voltage, always check that the outlet's voltage is the same as that stated on the rating label. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack; never use the charger with another appliance or attempt to charge this product with another charger. Before use, check the charger cord for signs of damage. A damaged or entangled charger cord increases the risk of fire and electric shock. Keep the charger cord away from hot surfaces and sharp edges. Do not handle the charger with wet hands. Do not store or charge the appliance outdoors. The charger must be removed from the socket before removing the battery, cleaning or maintaining the appliance.

1.4 Brake Safety:

Regularly check your brakes for signs of wear and tear and functionality. Before every ride, quickly test and visually check your brakes. Any worn parts must be repaired or replaced immediately. Be careful while getting used to the brakes. Never brake with only your front brake. Practice emergency stops in a place clear of traffic until you are comfortable controlling your e-bike. Wet weather reduces your braking power and the grip of the brakes. Reduce your speed and be aware of longer stopping distances when cycling in wet conditions. Braking on unpaved surfaces will differ. Be sure to practice braking on different surface types. Ensure that braking surfaces and brake pads are free of wax, grease and oil. Do not pedal and brake at the same time as this will cause excessive wear.

1.5 Maintenance:

Make sure all screws, nuts and bolts are tightened securely before riding. Failure to do so may result in serious injury and/or death. Many parts on your e-bike are subject to a higher degree of wear due to their function and depending on their use. Have your e-bike checked regularly at a professional bike shop and have any worn parts replaced. Ensure the battery is removed from the bike before carrying out any maintenance. You must always use genuine replacement parts when performing maintenance on your e-bike. Regularly check the tire pressures (See sidewall of your tire for correct psi range) and regularly check the tread depth of tires.

After an accident or crash you must take your e-bike to a bike repair specialist to make sure that it is safe to ride. Be aware that damage may not be visible. Failure to do this may result in serious injury. Any form of crack, scratches or change of coloring in highly stressed areas indicate that the life expectancy of the part has been reached and it should be replaced immediately.

1.6 Additional Warnings:

Routine maintenance checks are required on your e-bike. Check all important connections, brake functionality, and ensure axle nuts are secured before riding. Failure to do so may result in serious injury and/or death. Do not ride your bike at night without working front lights and rear taillights. Failure to do so may result in serious injury and/or death.

The e-bike is intended for use by those at least eighteen years of age. Use by anyone below the age of eighteen is prohibited. Have installation/assembly checked by a professional bike mechanic or completed entirely by a bike mechanic prior to riding. All bolts and nuts should be checked. Failure to do so could result in serious injury and/or death. When operating your e-bike: Do not wear earplugs, headphones, headsets, or use a cell phone while riding. Never hitch rides on other vehicles. Never hold an item which interferes with your grip on the handlebars & never be under the influence of alcohol or drugs while riding.

ALWAYS wear a helmet when riding your e-bike. Failure to do so may result in serious injury and/or death. It is your obligation to check all applicable laws for bicycle rules governing operation, equipment, use and appropriate places for operation. Do not exceed local speed restrictions. Maintain your brakes such that you can at least execute a one-braked-wheel skid on dry, level, clean pavement.

1.6 Additional Warnings (Continued):

Never configure your e-bike such that the handlebars are higher than a rider's shoulders. In addition to front and rear reflectors, you must also ensure that the e-bike is equipped with side reflectors. Never ride your e-bike without the seat provided with the e-bike.

This e-bike is not meant for downhill riding or rocky trails. The e-bike is for paved or smooth surfaces only. Do not ride your e-bike in unsafe weather conditions or when the road surface is comprised, with ice, snow, water, sand, or anything else that could cause a loss of traction. Failure to follow this rule may result in serious injury and/or death.

Keep your e-bike and packaging away from children. Lithium-Ion batteries can be extremely dangerous if stored or used improperly. Please learn proper care of your battery at http://batteryuniversity.com/. Damage to your lithium battery from misuse could result in serious injury, hazardous smoke and fires, and/or death.

Special precautions must be taken if you transport your e-bike with you during air travel, or if shipped by air courier. Be sure to follow all requirements of airlines and air couriers regarding lithium batteries if you take your e-bike with you during air travel, or if you ship your e-bike by air courier.

1.7 Notable Bike Parts:



2. What's in the Box?

Figure 1: Bike frame, bike box, saddle, additional box of parts (Figure 2), front wheel, axle skewer, stem and handlebars, all zip tied together and padded.



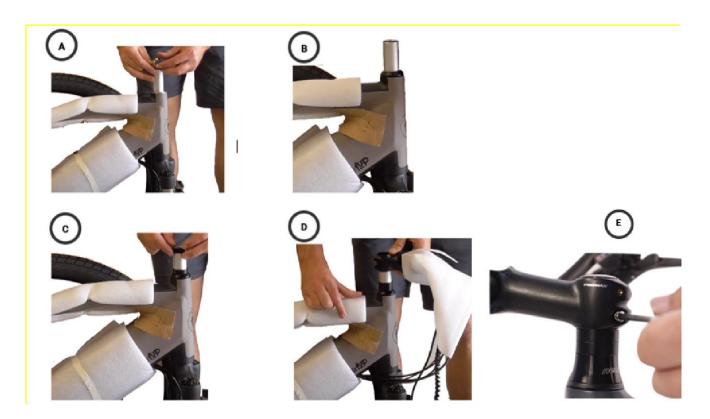
Figure 2: Saddle and separate box with: saddle, fender, pedals, charger, and toolkit.



2

3. Installation Steps: Assembling Your Bike

3.1 Fork/Headset Assembly



PLEASE COMPLETE STEPS IN ORDER.

- Check wire and cable routing before installing fork in headtube. Compare to video or pictures in manual or on our website.
- Make sure your fork is not on backwards. The brake goes on the left.
- Slide the fork steerer tube through the headtube.
- Ensure the sealed bearings are in place on the top and bottom of the headtube.
- Place the split (plastic) compression ring down in place (A). The lip of the compression ring should fit in between the steerer tube and the upper headset bearing (the compression ring is the only split ring).
- Install the cone or angled spacer with the rubber dust cover on the bottom (B).
- Install the two 10mm spacers.
- Check the routing of the cables again before installing stem with handlebars. You may need to flip your handlebars for proper routing. Slowly slide the stem onto the fork steerer tube. (D).
- Installing the top cap and bolt:
 - Pull the fork up so it is properly seated against the bearings and push the stem down to increase pressure on the headset.

3.1 Fork/Headset Assembly (Continued)

- Place the top cap on top of the stem and carefully tighten the compression bolt until you feel some resistance when rotating the stem. (Do not over tighten or you will cause the star nut in the fork steerer tube to come out)
- If properly assembled and tightened. The fork should turn smoothly, but should not shift up and down relative to the headtube. It should not feel loose or shift front to back or side to side.
- Once top cap is tightened, align stem and tighten pinch bolts (Figure E). Please refer to the Detailed Torque Specifications in section 2.3 below to ensure that the bolts are torqued to the specified range.
- Tighten the bar clamp of the stem using the 4 bolts to secure the handlebars. The gap of the clamp should be the same at the top and bottom
- Do not stress, stretch, or kink your hydraulic brake line. Do route it inside the front of the fork on the left side of the wheel.

WARNING: ◆ IT'S VITAL TO TIGHTEN THE BAR CLAMP TO AVOID THE MOVEMENT OF THE HANDLEBARS, AS WELL AS THE COMPRESSION CAP, ENSURING FORK IS INSTALLED CORRECTLY. THIS SHOULD BE COMPLETED BY SOMEONE FAMILIAR WITH BIKE MECHANICS

3.2 Front Wheel Assembly:



- Do not touch the brake pads or rotors with your fingers. The oil will contaminate them and cause noises when braking.
- Align the disc rotor so it fits between the brake pads. Do not force it. (Figure 1)
- Place the front wheel axle onto the fork dropouts. (Figure 2)
- Install the quick release skewer. The narrow part of the cone springs should face inward. (Figure 3)
- Rotate to tighten and then hand tighten the axle skewer quick release arm. Line up the disc rotor to make sure there is space on each side, so they don't rub. Then make sure the wheel is secure.
 (Figure 4)

WARNING ◆ IT IS VITAL THAT THE QUICK RELEASE HAVE BEEN TIGHTENED. IF THEY ARE NOT PROPERLY ALIGNED, THE WHEEL MAY COME OFF, CAUSING SERIOUS INJURY AND/OR DEATH.

3.3 Saddle/Seat Post Assembly:



- Open the seat clamp and insert the seat post to or past the minimum insertion point. (Figure 5 & 6)
- Adjust the suitable height and rotate the clamp to tighten and then shut it. (Figure 7)

3.4 Seat Clamp Assembly:



- Slide saddle into seat post clamp.
- Using the provided hex wrenches, tighten the bolts to 14 nm of torque (unless otherwise marked on the seat post).
- The seat post angle is adjustable. Ensure each bolt is correctly torqued. If left loose or over-tightened, a seat post bolt could snap.

3.5 Pedal Assembly:

NOTE: ◆ THE LEFT AND RIGHT PEDALS ARE UNIQUE.



- The left pedal (marked "L") must be installed in the left crank arm. It is reverse thread, rotate counterclockwise to install and tighten.
- Screw each pedal into a crank by hand. They should screw in easily to start. Do not force them.
- The right pedal (marked "R") must be installed in the right crank arm. It is standard thread, rotate clockwise to install and tighten.
- Use a wrench no wider than the flats on pedals to finish tightening the pedals in place.

NOTE: ♦ THERE ARE TWO PEDALS INCLUDED IN THE BOX WITH YOUR BIKE. THE PEDALS SCREW INTO THE ENDS OF THE CRANKS WITHOUT EXTRA NUTS, SCREWS OR PINS. FAILURE TO USE THE CORRECT PEDAL ON THE CORRECT SIDE WILL RESULT IN A STRIPPED CRANK ARM.

3.6 Detailed Torque Settings:

- Saddle Clamp Bolts: 14nm (unless otherwise marked on seat post).
- Crank Arms: 39nm (pre-installed).
- Handlebar Clamp: 5-7nm (unless otherwise marked on stem). Tighten evenly in a cross pattern so the gap at each bolt is the same.

3.7 Adjust Derailleur and Shifter:

Rear derailleurs have 3 adjustment screws (2 are the high and low limit screw), plus the barrel adjuster at the derailleur and the barrel adjuster on the handlebars

It is critical that the low and high limit screws are properly adjusted. If they are not, the chain may come of the largest cog, into the spokes and cause permanent damage to your derailleur, derailleur hanger, motor cable, spokes, and rim. The motor is so powerful that if this happens it can quickly destroy or damage the components mentioned.

Verify your shifter and derailleur are properly adjusted. When you first assemble your bike, your derailleur may need to be tuned if you hear any noise while shifting or if it is not shifting smoothly. Or lastly, if the chain is shifting past the largest or smallest cog.

3.7 Adjust Derailleur and Shifter (Continued):

Adjusting your derailleur properly will be done best by a mechanic, however it can be accomplished by following a helpful video. Please check our support pages at www.Ride1UP.com for the latest tips and video on how to do this properly.

It is normal to need to adjust your derailleur once again after logging some miles on the bike as things settle (spring and cable tension involved in shifting).

3.8 Test and Adjust Front and Rear Brakes:

After Assembly, you must test your front and rear brake. You can then adjust them as needed. How you install the front wheel and brake caliper can affect whether the disc brakes rub when first assembling. After assembly, you may need to adjust the front and rear brake. Look in line with the brake pads and slowly tighten the quick release axle while ensuring the rotor stays in the exact middle between the pads. The disc rotor is one of the most exposed malleable components during shipping. If it is bent, it can sometimes be trued (bent back) or replaced with a new disc rotor. If unsure how to properly adjust your brakes, please check our website for a recommended video. If you are unable to access our website, you should take the bike to your local bike shop for an assembly inspection and/or tune up. The bike shop will be able to inspect the bike for safety and adjust your brakes.

4. Battery Connection & Removal



- Insert the key into the battery key hole.
- Turn the key in a clockwise direction (At 90 degrees).
- The battery is heavy, use both hands to avoid dropping and damaging the battery.
- With one hand holding the battery in, gently rotate the knob to the left or right and carefully use both hands to remove the battery.
- If the knob feels stuck, do not force it, simply take the weight off of the latch and it will release easily.
- Replace battery with key in the same position, then turn key to lock.
- Charging port is on the right side of the battery at the top of the down tube.

NOTE: ♦ ALWAYS KEEP THE CHARGER PORT COVERED TO PROTECT AGAINST MOISTURE, WHICH CAN DESTROY THE BATTERY.

5. E-bike Basics & Care

5.1 E-bike Basics:

Your Turris e-bike will arrive with an LCD 3-button display installed. The middle button turns on and off the bike. Simply hold the button down.

- It is best practice, for safety, to only turn on your electric bike once you have lifted your leg over the bike and are straddling the frame. You should turn it on before you begin riding, but only once you are ready to ride.
- It is also best to turn off the bike when you are done riding after you dismount from the seat, but before you lift your leg over the bike to get off. If you stop to look at something or talk with someone, please turn off your bike for safety.
- Once the bike is powered on, the throttle is active, if pushed it will cause the bike to accelerate.
- If PAS is on and at 1 or higher, if the pedals are bumped and move forward when next to or moving the bike, power will be sent to the motor and the bike will accelerate.
- Turning it on and off as described above will minimize the chance of the bike accelerating unintentionally.
- The + button increases pedal assist and the button decreases pedal assist and can be set to off if you press the button when on low.
- The headlight is turned on by holding down the + button.
- The throttle and pedal assist can be used simultaneously.
- You can turn the pedal assist off by pressing the button past low, until no number is showing, and ride only using the throttle if you like. The bike pedal assist uses a cadence sensor, which reacts a little delayed based on the spinning of the pedals. It will take some time to get used to this and manipulating the motor to engage and disengage when expected takes a little practice. You can adjust the sensitivity in the display settings.
- A quick backpedal or slight engagement of the brake lever instantly stops the motor. You can
 adjust the sensitivity of the cadence sensor and other pedal assist settings by referring to the LCD
 manual. We also have videos on our website and YouTube channel guiding you through this
 process.

NOTE: ♦ DO NOT CHARGE YOUR BATTERY WHEN THE BATTERY'S TEMPERATURE OR THE SPACE IT IS STORED IN IS BELOW FREEZZING (32 DEGREES F).

5.2 Battery Basics & Care:

NOTE: Never charge your battery when it's temperature or the space it is stored in is below freezing. Failure to follow this rule could result in serious injury, death, and property damage.

The chargers do stop charging when the battery is fully charged. When charging your battery, do not charge near any potentially flammable material. Charge in a safe fire-resistant space. If you are storing the e-bike for more than a day, do not leave it plugged in. It is best to leave it charged to 80% but unplugged. The button on the top of the battery works as a charge gauge. It is not an on-off button. When riding always plug the charger port with the rubber cover. If moisture gets in, the battery can be destroyed. Everyone is encouraged to learn a little bit more about the basics of lithium ion battery care and proper treatment. For extended life, charge your battery to 80% and use it until it is at 20%. Depending on the charge level when plugged in, it takes 3-6 hours for the battery to fully charge when using the standard charger supplied with the bike. Charging for 1-2 hours will keep it near 80% depending on last usage. You can check the charge percentage on the display. If storing for longer periods, it is a good idea to store your battery with a 40-80% charge. Check the battery once a month. If the battery drops to 25%or lower, charge it up to 40-80%. Recommended storage temperatures are 50°-77°F and will provide the best performance out of the battery. Storage should be done in a dry area.

5.3 Battery Basics & Care:

(5.3.a) Fenders: If you are experiencing rubbing or rattling fenders, this can be fixed. Firstly, the front fender tab that attaches to the fork can be mounted on the back to provide more spacing, or the front for a tighter fit. The fender arms are also malleable and sometimes need to be bent with the wheel off to be centered with the wheel.

(5.3.b) Bent Derailleur Hanger: Before your first ride, it is very important to check the alignment of the derailleur and derailleur hanger. If the derailleur hanger is bent inward, your derailleur may over shift and the chain will get caught between the motor and the cog. Since the derailleur is installed on the bike out of the box, the derailleur can become bent in transit. It is a light-weight malleable aluminum. Bent derailleur hangers can be a relatively common issue during the period of bike ownership, typically when they are impacted or while transporting the bike. The derailleur hanger can be fixed by straightening the derailleur hanger with a tool. After the hanger is straightened, the derailleur/gears can be indexed (under adjustments) to remove any additional clicking or grinding noises. If you cannot fix the derailleur hanger, new ones can be found online. Ride1UP will cover the cost to straighten your derailleur hanger or replace if necessary if it arrived bent.

(5.3.c) Noise When Riding: Refer to the three issues above. Gears, fenders, and brakes are the most common sources of riding noise. Additionally, the front hub can sometimes make a squeaking noise if it does not have enough grease. Pay attention to the noises. They are usually symptomatic of a minor issue that could cause more problems later. It is best to determine what is causing the noise

and resolve the issue. If you are unsure of the cause, please review our support page at www.Ride1UP.com. You can also share a clear video without wind noise to Support@Ride1UP.com.

6. Troubleshooting Problems:

6.1 Motor Not Working:

One of the worst problems to experience. What needs to be done? Determine the source, or cause of the issue(s). What to look for:

(6.1.a) Display Settings: Perhaps a setting was accidentally changed. Try resetting the display by conducting a factory reset. Review the display manual or display support page on www.Ride1UP.com to reset the display. Steps to complete this procedure are listed on the last page of this owner's manual.

(6.1.b) Cables: is a connection loose? Look for kinked, loose, or damaged cables. Check the quick disconnect connections, especially the one on the chain stay. Consider disconnecting them, inspecting both ends, properly aligning (ensuring the pins are not bent) them and then carefully plugging them back in.

(6.1.c) Accident: After a crash or if the bike is dropped, and the motor cable is damaged where it exits the axle, the motor may no longer function. This requires replacement motor parts and a more time consuming/costly repair. Reach out to customer support if you see damage to the cable.

(6.1.d) EBS: Electronic Brake Shut-Off. Another possible cause is that the electronic brake shut-off sensors are firing when they shouldn't be. This can happen typically when there is damage to the brake levers or the cables themselves causing a miscommunication with the internal controller. The best way to identify this issue is to unplug these cables from the internal controller and test. You can find the diagram for the internal wiring at the end of this document. There is also a video demonstrating removal of the controller on our YouTube channel/website link.

6.2 Kickstand:

Does the bike sit too low with the kickstand? The kickstand length is adjustable. Loosen the bolt on the bike and slide to the desirable length. Check the bolt tension when first assembling as well to make sure the bolt does not rattle loose. Is there a clicking noise with the kickstand? Make sure it is parallel with the chainstay and fully tightened (8mm hex wrench). If it shifts, it will hit the crank arm when pedaling.

6.3 Charger:

Green light indicates the charger is powered but not charging. Red light indicates charging. Do not charge near anything flammable or store the e-bike long-term while plugged in. If you are having issues with the battery not charging, try riding the bike again, draining some battery, and try using a different outlet. Then reach out to support if the issue does not resolve.

6.4 Derailleur/Gears:

Adjusting the gears on a bike so that there is no chain noise can be tricky for a novice. If you are not able to watch a video explaining how to index the gears, the best thing to do is to take the bike to a local bike shop for assistance. It is critical that your derailleur is properly tuned/adjusted. If it is not, when shifting into 1st gear the chain and derailleur may go into the wheel which will quickly damage it if the powerful motor is running.

7. Charging the Battery:

WARNING ◆ DO NOT LEAVE CHARGING BATTERY UNATTENDED

The battery's voltage is indicated by the 4 LED lights located on the top of the battery & also on the display unit located on the handlebars. Your battery must be charged in an ambient temperature, on a non-flammable & dry surface, away from any sources of heat, humidity or flammable materials. Also, it must not be covered.

If you ever see a spark while charging your battery. Please inspect the charging port of the battery and the tip of the charger. Please contact Support@Ride1UP.com and share pictures.

Follow the steps when charging battery:

Step 1. Turn the bike off. The LCD will be off.

Step 2. Plug the charger (which is off) into the socket and then insert the charger plug into the battery, which is also off. Make sure the charger's tip is not stressed or supporting the weight of the charger. Do not wiggle the charger's tip in the charging port of the battery.

Step 3. The chargers LED indicators light up in the following manner:

- The red LED lights on: The battery is being charged. (Figure A)
- The red LED light becomes **green:** The battery **is fully charged** and you can unplug the charger. (Figure B)



NOTE: It takes 3-6 hours for the battery to be fully charged when using the standard charger supplied with the bike.

Do not leave the battery unattended while plugged into the charger.

Do not store the batteries connected to the charger.

Do not wiggle the tip of the charger in the battery port.

7.1 Battery Basics & Care:

NOTE: Never charge your battery when it's temperature or the space it is stored in is below freezing. Failure to follow this rule could result in serious injury, death, and property damage.

The chargers do stop charging when the battery is fully charged. When charging your battery, do not charge near any potentially flammable material. Charge in a safe fire-resistant space. If you are storing the e-bike for more than a day, do not leave it plugged in. It is best to leave it charged to 80% but unplugged. The button on the top of the *battery* works as a charge gauge. It is not an on-off button. When riding always plug the charger port with the rubber cover. If moisture gets in, the battery can be destroyed. Everyone is encouraged to learn a little bit more about the basics of lithium ion battery care and proper treatment. For extended life, charge your battery to 80% and use it until it is at 20%. Depending on the charge level when plugged in, it takes 3-6 hours for the battery to fully charge when using the standard charger supplied with the bike. Charging for 1-2 hours will keep it near 80% depending on last usage. You can check the charge percentage on the display. If storing for periods longer periods (a week or more), it is a good idea to store your battery with a 40-80% charge. **Check the battery once a month**. If the battery drops to 25% or lower, charge it up to 40-80%. Recommended storage temperatures are 50°-77°F and will provide the best performance out of the battery. Storage should be done in a dry area.



8. KD21C LCD Display Instructions:

8.1 Power On/Off

Press and hold MODE button for 2 seconds to power on and off. The Display automatically shuts down when the bike is not used for 10 minutes.

- It is best practice for safety, to only turn on your electric bike once you have lifted your leg over the bike and are straddling the frame. You should turn it on before you begin riding, but only once you are ready to ride.
- It is also best practice for safety to turn off the bike when you are done riding after you dismount from the seat, but before you lift your leg over the bike to get off. If you stop to look at something or talk with someone, please turn off your bike for safety.

- Once the bike is powered on, the throttle is active, if pushed it will cause the bike to accelerate. If
 PAS is on and at 1 or higher, if the pedals are bumped and move forward when next to or moving the
 bike, power will be sent to the motor and the bike will accelerate.
- Turning it on and off as described above will minimize the chance of the bike accelerating unintentionally.

8.2 Pedal Assist Level Operating

The assist level ranges from Level "0" to Level "5". Level "1" is the minimum power and Level "5" is the maximum. To change the assist level, press the UP or DOWN buttons until desired level is displayed in the top right corner.

8.3 Speed & Mileage Mode Switch

Pressing the MODE button displays the following in this order: RUNNING SPEED→TRIP DISTANCE→TRIP TIME→ MAXIMUM SPEED→AVERAGE SPEED→MOTOR POWER.

8.4 Backlight On/Off

Press and hold UP button for 2 seconds to turn on/off the display backlight and headlights if wired.

8.5 Walk/Push Assist (4mph)

Press and hold DOWN button for 2 seconds enters the walking mode until released.

8.6 Change Settings

Once the e-bike is powered on, holding both the UP and DOWN buttons for 2 seconds will access the general settings. To store the selected settings and exit, hold the MODE button. To cancel the operating and not store the settings data, hold the DOWN button. This will return you to the previous menu. If there are no operations in one minute, the display will exit the settings state. The settings can only be accessed when the e-bike is parked.

NOTE: ♦ THE DISPLAY MAY VARY BASED ON GENERATION. PLEASE REFER TO OUR ONLINE USER MANUAL BASE FOR UPDATED OR PREVIOUS MODELS.

9. Error Code Troubleshooting:

In the event of a problem with the electrical components of your bike, the display will show an error code. The error code may only appear briefly when the problem occurs. If an error occurs and you can do so safely, glance at your screen to see if an error code is present. Compare the code with this list below and how to resolve:

9.1 Error Codes/Source of the Error:

Code	Error	Source of the Error
21	Current Abnormality	The battery is not supplying the required voltage to power the display and motor. Use the display to view the real-time voltage being output from the battery. It can also be checked using a multimeter. If the battery is old and has been charged / discharged many times, it may need to be replaced.
22	Throttle Abnormality	When you press and release the throttle, it should return to the original position. Remove any obstructions. Check the throttle and throttle cable for damage, such as a cut or frayed cable.
23	Motor Sensor	Check the cable that connects the rear hub motor to the rest of the system and make sure it is free from grit or contaminants and is firmly connected. This error might appear if you don't reconnect the cable after removing the rear wheel (for example, after changing a flat tire, or transporting your bike in the trunk of a car). At least one of the motor wires has been damaged or is disconnected.

24	Motor Communication	Check the motor cable connection point by the chainstay, and where the motor cable connects to the internal controller. The wire might be disconnected or damaged, reconnect the motor cable. Another possibility: Damage to the motor cable as it exits the axle, perhaps if the wheel was dropped on the cable.
25	EBS (electronic brake shut-off)	Disconnect electronic brake shut offs. Likely a magnet sensor issue. This can happen often after a crash or when the bike is dropped. See video on Ride1UP YouTube channel, or under instructional videos on the support page to resolve.
30	Communication Error	A problem with the connection from the internal controller to the display. The display is not receiving vital information.

10. Warranty Information:

NOTE: (full warranty terms listed on website)

All Ride1UP electric bikes come with a One-Year Limited Warranty from date of purchase. Defective items or parts will be replaced and shipped to the holder of the warranty only. Warranties are not transferable to parties other than the original purchaser. All purchases must be made directly from Ride1UP.com. If purchase was not made on Ride1UP.com, you must register your product at ride1up.com/bikes or by emailing support@ride1up.com with the original receipt of purchase.

The warranty covers product defects only that were already present at time of handover. It does not cover normal wear and tear, product misuse, act of God, accident, commercial use, alterations, modifications, improper assembly, water damage, extreme riding, installation of electrical or mechanical components that have been modified, altered, or replaced with third-party parts, operator error and improper follow-up maintenance. The warranty is only upheld if the user has followed all the rules in the owner's manual. Ride1UP reserves the right to make judgment determinations of proper use based on the evidence provided and may require photos and/or videos of the items in question. Damages resulting from improper assembly are not covered by the warranty. The components that are covered are: Frame, Fork, Saddle, Stem, Headset, Tires, Battery, Derailleur, Shifters, Brakes, Hubs, Freewheel or Cassette, Chain, Internal Controller, Display, Grips, and Motor.

10.1 How to Handle Warranty Claims:

In the event the E-bike is damaged during shipping, we will file a claim with the shipping company for major damage and send a replacement part when necessary. Minor scratches to components don't necessitate replacement or any refund, but for major aesthetic damage a credit may be issued, or replacement sent if

the item is severely damaged. We will not cover any damage caused when owner sets up their own shipping option including using a freight forwarding or similar service.

Ride1UP will cover labor and parts involved in handling the guarantee within the 30-day period after purchase. It is the owner's responsibility to immediately inspect your bike on receipt, maximum within 3 days. Shipping claims are time sensitive. To quickly resolve the issue, the owner must send an email with a photo and/or video if appropriate to support@ride1up.com.

After the first 30-days, Ride1UP will ship replacement parts of defective items within one year at no charge. The owner will be responsible for labor. Warranty parts will be shipped within the U.S. only at our cost. It will be necessary to send an email with a photo and/or video as requested to support@ride1up.com so we can determine if it is covered under the warranty.

Ride1UP reserves the right to make judgment determinations of proper use based on the evidence provided and may require additional photos and or videos of the item or issue in question.