Rakowe GT-20

Rakowe GT-20 Electric Bike User Manual

Model: GT-20

1. Introduction

Thank you for choosing the Rakowe GT-20 Electric Bike. This manual provides essential information for the safe assembly, operation, and maintenance of your new e-bike. Please read this manual thoroughly before your first ride to ensure optimal performance and safety.
For any questions or support, please refer to the contact information provided in the Warranty and Support section.

2. Safety Information

Your safety is paramount. Always wear a helmet and appropriate safety gear when riding. Adhere to all local traffic laws and regulations. Regular maintenance is crucial for safe operation.

- **Pre-Ride Check:** Before each ride, inspect brakes, tires, battery charge, and all fasteners.
- **Helmet Use:** Always wear a certified helmet.
- **Traffic Laws:** Obey all road signs, signals, and traffic laws.
- **Weather Conditions:** Exercise caution in wet or slippery conditions.
- **Weight Limit:** Do not exceed the maximum weight recommendation of 330 pounds.
- **Battery Safety:** Use only the provided charger. Do not modify the battery.

3. Package Contents

Upon unpacking, verify that all items are present:

- Rakowe GT-20 Electric Bike (90% pre-assembled)
- Charger
- Riding Bag
- Tool Kit

- User Manual (this document)

4. Assembly

The Rakowe GT-20 Electric Bike arrives 90% pre-assembled. The remaining assembly typically involves attaching the front wheel, handlebars, pedals, and seat. Refer to the included tool kit for necessary tools.

4.1. General Assembly Steps

1. Carefully remove the bike and all components from the packaging.
2. Attach the front wheel, ensuring the quick-release skewer or axle nuts are securely tightened.
3. Install the handlebars, aligning them correctly and tightening the stem bolts.
4. Attach the pedals, noting that the left pedal (L) and right pedal (R) have different threads. Tighten firmly.
5. Insert the seat post into the frame and adjust the seat height for comfortable riding, then secure the quick-release clamp.
6. Perform a thorough safety check of all bolts and connections before your first ride.

Image: The Rakowe GT-20 Electric Bike, fully assembled, showcasing its design and components.

5. Components Overview

Familiarize yourself with the key components of your Rakowe GT-20 Electric Bike.

5.1. Motor

The e-bike is equipped with a Peak 1000W high-speed brushless motor, providing up to 80NM of torque and a maximum speed of 30 MPH. It is capable of conquering inclines up to 30 degrees.

Image: Detailed view of the 1000W peak brushless motor, highlighting its power specifications including 80NM torque, 30 MPH max speed, and 30-degree slope capability.

5.2. Tires and Suspension

The GT-20 features 20 x 4-inch fat tires, designed for various terrains including roads, mountains, sand, and snow. It includes a high-strength front suspension and a mid-mounted rear shock absorber for enhanced comfort and stability.

Image: Close-up of the 20x4 inch fat tires, illustrating their robust design for all-terrain adaptation, including features like 4mm thickened stab-proof construction, 50cm tire diameter, and 10cm extra wide tread.

Image: A composite image detailing practical components: an ergonomic seat, the professional 7-speed gear system, sturdy fenders, the mid-mounted shock absorption system, and the front fork suspension.

5.3. Drivetrain and Brakes

The e-bike is equipped with a Shimano 7-speed derailleur for smooth gear changes and dual mechanical disc brakes (front and rear) for reliable stopping power.

5.4. Display and Lighting

An LCD display provides real-time riding data. Bright lights are included for safe rides, featuring a 1500-lumen headlight.

6. Battery Information

The Rakowe GT-20 is powered by a UL2849 certified 48V 15.6Ah/748Wh removable lithium-ion battery.

6.1. Charging the Battery

- The battery can be charged while installed on the bike or removed for convenience.
- Connect the charger to the battery charging port, then plug the charger into a standard power outlet.
- A full charge typically takes 5-6 hours. The charger indicator light will change when charging is complete.
- Always use the original charger provided with your e-bike.

6.2. Battery Range

The battery provides an estimated range of up to 45 miles in pedal-assist (PAS) mode and 25 miles in pure electric (throttle) mode. Actual range may vary based on terrain, rider weight, speed, and riding style.

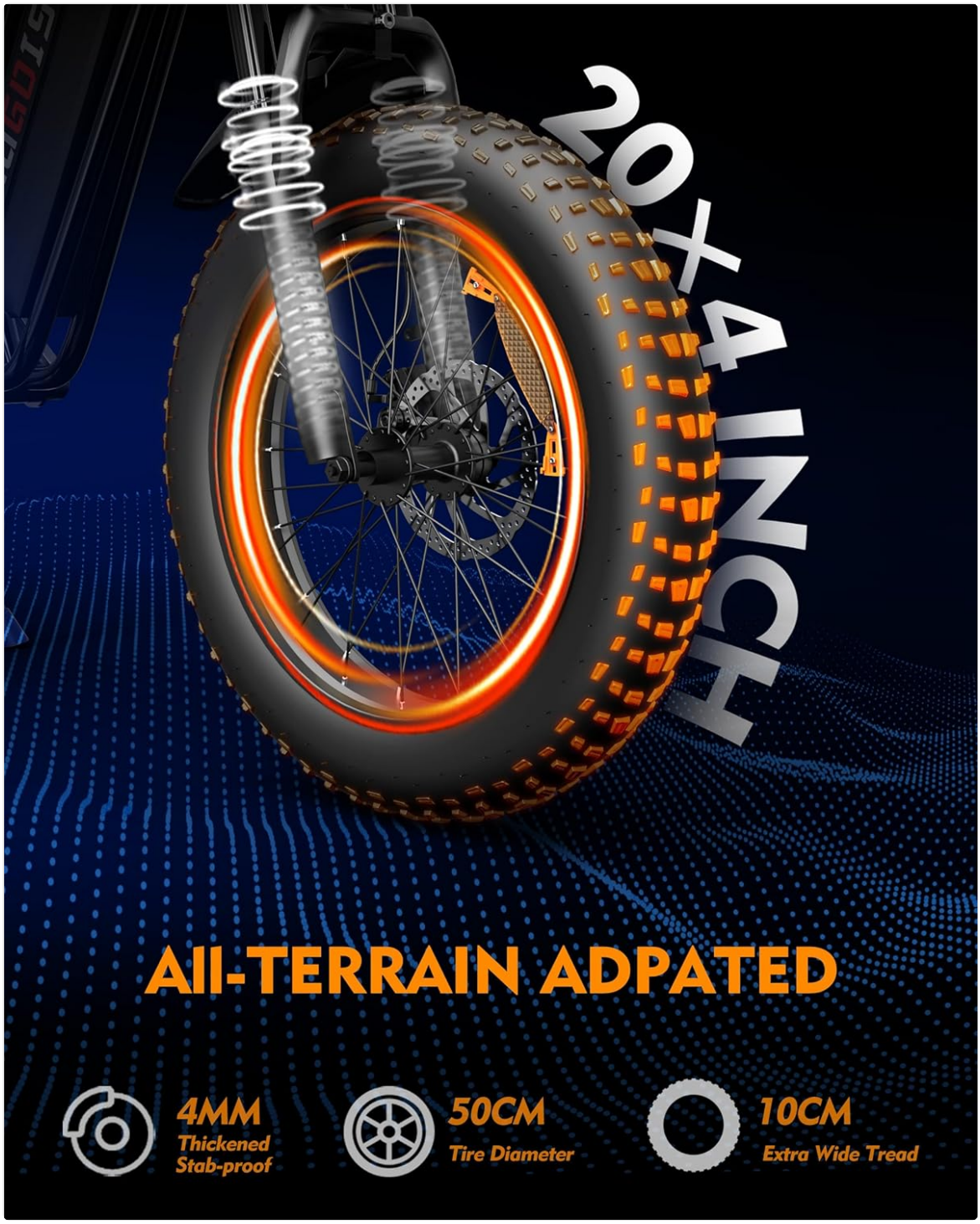

Image: Illustration of the 48V 15.6Ah (748Wh) removable lithium-ion battery, highlighting its 45-mile range, UL2849 certification, 5-6 hour charge time, and Battery Management System (BMS).

7. Operating Instructions

7.1. Powering On/Off

To power on the e-bike, press and hold the power button on the LCD display. Repeat to power off.

7.2. Riding Modes

The Rakowe GT-20 offers three distinct riding modes:

- **Pure Electric Mode (Throttle):** Engages the motor directly via the throttle for propulsion without pedaling. Max speed 30 MPH, range up to 25 miles.
- **Pedal-Assist System (PAS) Mode:** Provides motor assistance as you pedal. You can select from 5 speed levels. Max speed 30 MPH, range up to 45 miles.
- **Normal Bike Mode:** The motor is off, and the bike operates like a traditional bicycle.

Image: Visual representation of the three riding modes: Bike Mode (no assist), PAS Mode (pedal-assist, up to 45 miles), and Throttle Mode (pure electric, up to 25 miles), all capable of reaching 30 MPH max speed.

7.3. Speed Levels (PAS)

In Pedal-Assist mode, use the controls on the LCD display to select one of the 5 available speed levels. Each level provides a different amount of motor assistance.

7.4. Gear Shifting

Utilize the Shimano 7-speed derailleur for smooth gear changes. Shift gears according to terrain and desired pedaling effort. Lower gears are for climbing, higher gears for speed on flat terrain.

7.5. Braking

The e-bike is equipped with dual mechanical disc brakes. Apply both front and rear brakes simultaneously for effective and controlled stopping. Avoid sudden, hard braking, especially at high speeds or on loose surfaces.

8. Maintenance

Regular maintenance ensures the longevity and safe operation of your Rakowe GT-20 Electric Bike.

- **Tire Pressure:** Check tire pressure before each ride. Maintain pressure within the recommended range printed on the tire sidewall.
- **Brakes:** Regularly inspect brake pads for wear and ensure brake levers provide firm and responsive stopping power. Adjust as needed.
- **Chain:** Keep the chain clean and lubricated to prevent rust and ensure smooth shifting.
- **Fasteners:** Periodically check all bolts, nuts, and quick-release levers for tightness.
- **Cleaning:** Clean the bike with a damp cloth. Avoid using high-pressure washers directly on electrical components.
- **Battery Care:** Store the battery in a cool, dry place. If storing for extended periods, charge it to 50-70% every few months.

9. Troubleshooting

This section addresses common issues you might encounter with your e-bike.

Problem	Possible Cause	Solution
Bike does not power on	Battery not charged or not properly seated; power button not pressed correctly.	Ensure battery is fully charged and securely installed. Press and hold the power button.
Motor not assisting	PAS level set to 0; throttle not engaged; brake levers engaged; loose motor connection.	Increase PAS level. Check throttle. Ensure brake levers are fully released. Inspect motor cable connections.
Short battery range	Under-inflated tires; frequent use of pure electric mode; heavy loads; cold weather.	Maintain correct tire pressure. Use PAS mode more often. Reduce load. Battery performance decreases in cold weather.
Brakes feel weak	Worn brake pads; loose brake cable; air in hydraulic system (if applicable).	Inspect and replace brake pads. Adjust brake cable tension. Consult a professional for hydraulic brake issues.

If you encounter issues not listed here or require further assistance, please contact customer support.

10. Specifications

Key technical specifications for the Rakowe GT-20 Electric Bike:

Feature	Detail
Model Name	GT-20
Bike Type	Electric Bike
Motor	Peak 1000W High-Speed Brushless Motor
Max Speed	30 MPH
Torque	80NM
Battery	48V 15.6Ah / 748Wh Removable Lithium-ion (UL2849 Certified)
Charging Time	5-6 hours
Range (PAS Mode)	Up to 45 Miles
Range (Pure Electric Mode)	Up to 25 Miles
Tires	20 x 4.0 inch Fat Tires (Puncture-resistant)
Frame Material	High Carbon Steel
Suspension	Dual (Front Fork & Mid-mounted Rear Shock)
Brakes	Dual Mechanical Disc Brakes (Front and Rear)
Gears	Shimano 7-Speed Derailleur
Display	LCD Display
Headlight	1500-lumen
Maximum Weight Recommendation	330 Pounds
Recommended Height	5.2 - 6.2 feet
Included Components	Charger, Riding Bag, Tool Kit, User Manual

Image: Side view of the Rakowe GT-20 Electric Bike with key dimensions indicated, including overall length (64 inches), handlebar height (44 inches), seat height (33 inches), and wheel diameter (22 inches).

11. Warranty and Support

The Rakowe GT-20 Electric Bike comes with a **12-month warranty** (also stated as 1 year warranty in specifications). This warranty covers manufacturing defects under normal use.
For warranty claims, technical support, or any questions regarding your e-bike, please contact Rakowe customer service. Refer to the product packaging or the official Rakowe website for current contact information.
Please retain your proof of purchase for warranty validation.