# User Manual



FB-NOVABIKE FBNB2201

# **Contents**

2
<b>3</b> 3
<b>4</b> 4
<b>4</b> 4 4
<b>5</b> 5 5 5 6 6 6 6 7
<b>7</b> 7
8 8 8 8 9 9

# 1. Warranty conditions

Our products are guaranteed for one year against manufacturing defects. The warranty does not cover labor, normal wear and tear, accidental breakage or breakage due to lack of maintenance or improper use. The main components of the bicycle are covered by the warranty, but not the accessories. Products used for commercial purposes are not covered by this warranty.

The warranty is void in case of improper assembly of the bike, abuse, neglect, lack of maintenance, misuse, or accidents, as well as improper charging of the battery or use of any charger not supplied by e-nova.

In no case shall Novaterr, our directors, officers, employees, affiliates, agents, contractors, interns, suppliers,

service providers or licensors be liable for any injury, loss, claim, or any direct, indirect, incidental, punitive, special, or consequential damages of any kind, including, without limitation lost profits, lost revenue, lost savings, loss of data, replacement costs, or any similar damages, whether based in contract, tort (including negligence), strict liability or otherwise, arising from your use of any of the service or any products procured using the service, or for any other claim related in any way to your use of the service or any product, including, but not limited to, any errors or omissions in any content, or any loss or damage of any kind incurred as a result of the use of the service or any content (or product) posted, transmitted, or otherwise made available via the service, even if advised of their possibility. Because some states or jurisdictions do not allow the exclusion or the limitation of liability for consequential or incidental damages, in such states or jurisdictions, our liability shall be limited to the maximum extent permitted by law.

# Safe disposal of the product

The appliance and its accessories must not be disposed of with normal household waste at the end of its life cycle. Please refer to your local rules and regulations for safe disposal of the bike and its components, with a special attention to safe disposal of the battery.

#### 2. Safety Instructions

Read the instruction manual thoroughly and follow the safety instructions in particular very carefully before the use of bicycles

- Always obey traffic regulations.
- Do not use if you are not familiar with the bike and operating instructions before riding
- Wear a bicycle helmet whenever riding a bicycle.
- Check the bicycle brakes before each use, and keep in mind that the braking distance may vary depending on the surface you are riding on (wet or icy conditions for instance).
- Check your bicycle's tire pressure at regular intervals. Having the correct tire inflation pressure is 3.5bar. Incorrect tire pressure can lead to tire damage and shorten operating distance significantly.

#### 2.1 Electrical Safety

# ★★CAUTION!★★

- Keep electrical appliances out of the reach of children. The utilization of the battery and battery charger should be done only under adult supervision.
- To avoid injury and or damages, use only the original charger to charge the battery.
   Using the wrong charger battery may lead to an explosion and cause personal injury and property damage.
- Use only batteries approved for this product and accessories. Use of supplies from third parties may result in fire, electrical shock, and damage to the bike or personal injury.
- Do not expose the bike electrical equipment to moisture, water or other liquids. If electrical parts are exposed to water, disconnect the charger from the wall outlet immediately and stop using the charger.
- Do not expose the battery to fire or extreme heat. Risk of explosion!
- Unplug the charger from the wall outlet when not in use.
- Remove the charger by pulling the plug, not the cord, to avoid damage to the cable.
- Do not use the charger if the plug or cord is damaged, or if the charger is otherwise defective.
- The charger and the battery do not contain any user-serviceable parts. Do not attempt to disassemble or repair the charger or battery on your own.
- · Do not short-circuit the battery.
- Clean the electrical product only with a dry cloth.
- Avoid using an extension cord with the charger. Use an extension cord only if you are absolutely sure of the compatibility of the extension cord with the charger.
- Before you plug in the charger, check that the power supply voltage is consistent with the marked voltage on the charger.
- It is recommended that the battery is charged at a temperature ranging from 10 to 30°C.
- If you charge the battery immediately after use, allow the battery to cool down for 30 minutes before charging.
- To prevent fire risks from overcharging the battery, disconnect the charger after the battery is fully charged.

- If not used regularly, the battery must be recharged every two months.
- Please keep the battery in a dry, cool and ventilated place. Avoid high temperatures, cold temperatures, and/or high humidity environments.

**IMPORTANT!** Please read this manual carefully and strictly follow the instructions to assemble, operate and maintain this product. Failure to do so will void the warranty and expose the user to risks of injury.

Before first use, be sure to carefully ensure that the bicycle is assembled correctly. Make sure in particular that the pedals, saddle, brakes, handlebars, wheels and any part are securely installed. NOTE: Never ride your bicycle while under the influence of alcohol, medicine or other substances. This may impair your ability to react efficiently and to use your bike safely. Please always follow the safety regulations in force in your area.

#### 3. Features

- Height-adjustable seatpost, suitable for different rider heights.
- The bike can be operated with or without the electrical assistance.
- Maximum weight of the rider: 136kg/300lb

#### 3.1 Electrical System

- · Battery: 48 Volt lithium-ion (Li-ion) 10.4 Ah
- Engine: 48 V, 750W, brushless
- The electrical assistance system is controlled by the speed sensor installed in the pedal system.
- Top speed: 42 km/h (limited)
- Range: Up to 47km in ideal conditions

# 4. Parts of the Bicycle

#### 4.1 Parts

- 1. Frame
- 2. Changeable battery
- 3. Seat lock lever
- 4. Brake lever
- 5. Tyre
- 6.36V\*350W motor
- 7. Pedal
- 8. Headlight



#### 4.2 The saddle and seatpost

You may want to adjust the saddle height.

Please note that the seatpost must not be raised above the limit inscription marked on the seatpost. Failure to follow these instructions may lead to serious personal injury.

- 1. Open the seat lock lever.
- 2. Adjust the seatpost to the desired height. Do not exceed the safety limit indication.
- 3. Close the lock lever and make sure that the seatpost remains firmly in place.

Now get on your bike and place the ball of your foot directly on top of the pedal spindle, when the crank is at the bottom of the rotation. Your leg should be just slightly bent. If your leg is too bent you will need to raise the seatpost, and if your leg is too straight you should lower the post.

You can also adjust the angle of the saddle, loosen the screw below the saddle, then adjust the position, and tighten the screw back in place. Ensure that the saddle remains firmly in place.





#### 5. General Terms of Use

#### 5.1 IMPORTANT! Before riding your bicycle:

- Check that the seatpost and handlebars are tightened securely.
- Check that all bolts, nuts and fasteners are properly tightened. Pay special attention to the engine mounts, the front fork, seatpost, saddle and handlebar.
- Check that the brakes and brake levers are working properly.
- Check that all reflectors and lights are in place and operating properly..
- Make sure that the battery is fully charged. Check the battery charge level of the control unit LED display.

#### 5.2 Throttle

The bike is equipped with a throttle function and a pedal assist function. The throttle function is activated in a similar way as on a motorcycle. Twist the right handlebar and the bike will accelerate. Make sure that you are ready for the acceleration and that you are using the throttle in a secure way. For a safer use, you should always turn off the bike after each use (by using the On/Off button on the control unit).

#### Please note that:

- When you release the throttle or when you brake, the power supply to the motor is shut off immediately.
- When you start moving, or you ascend a hill, you can use throttle and pedal assist at the same time. You can also pedal without pedal assist. This means that you can save battery by pedaling more, or you can still operate your bike even though the battery is empty.
- Tum off the ignition and remove the key whenever you stop using your bike.
- Please make sure that you turn off the power first from the control panel for preventing unintended acceleration.

#### 5.3 Battery and Charger

- Do not touch the battery terminals when the battery is charging. And, do not let the battery terminals come in contact with metal or other conductive objects.
- When you charge the battery, position the battery in a safe place away from reach of children.
- Only use the supplied charger to recharge the battery.
- Never open, repair or modify the charger/battery by yourself.
- Prevent liquids, metal objects, or metal chips from entering the charger.
- Avoid shocks and dropping the charger.
- Do not cover the charger during the charging process. The charger heats up during charging.
- If you notice any strange odor or overheating during the charging, stop charging immediately.
- To maintain the health of your battery, recharge and drain the battery at least once a month. Do not use the battery nearly empty, avoid driving the battery to 0% charge, and recharge the battery fully before each use.
- Battery capacity may be reduced in cold weather. This is completely normal.
- Do not leave the charger connected to the battery and power source for more than 10 hours.

#### **5.4 Removing the battery**

To remove the battery, unlock the battery using the key. Insert the key into the lock and turn it counterclockwise, then remove the battery. When you're done, put the battery back in place and lock.



#### 5.5 Charging the battery

You can charge the battery when it is on the bike, or you can remove the battery and charge it in a more convenient place.

To charge the battery, first pull out the charging connector cover, then connect the AC charger to the charging plug on the battery and then plug the charger into an AC outlet.





#### 5.6 Battery level

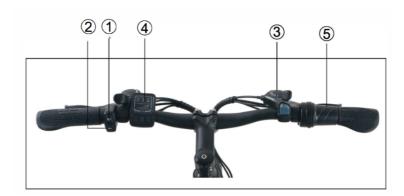
You can easily check directly from the battery by pressing the button located on the batter



#### 5.7 Brakes

- Do not brake too sharply or abruptly. Otherwise, you may fall from the bicycle.
- The left brake lever controls the front wheel brake, and the right brake lever controls the rear wheel brake.
- To reduce the effect of inertia, it is recommended to shift your weight backward while braking.
- If the brake pads are worn out,replace the brake pads as soon as possible.
- Before riding, always check the brakes
- Remember that the braking distance can be extended considerably in slippery conditions.

#### 5.8 Button and Display



- 1 Headlight Button
- ②Bell
- 3Shifter
- **4**LED Control Unit
- (5) Throttle

#### 5.9 Control Unit

The throttle and pedal assist will not work when the display is just on.

The throttle is activated by twisting the right handlebar, while the pedal assist is activated when you set the controller to step 1 (low), 2 (medium), or 3 (high).



#### 6. Maintenance and repairs

#### **IMPORTANT!**

- Do not attempt to open the battery casing, motor or control unit. Failure to do so may result in personal injury and will void the warranty.
- Your bike is equipped with a derailleur which tightens the chain automatically. If the chain starts to look slack and/or jumps off the front plateau, you can manually tighten the chain by loosening first the rear axle nuts slightly, adjusting the tension on the chain. Make sure that the chain is rotating freely and tighten the rear axle nuts back on. Take the bike for service in a specialized bike shop in your area if you are unsure about those steps.

# 7. Troubleshooting

Problem	Solution
Low top speed	Charge the battery fully and test again.
Power switched on but the engine does not work	Remove and reinstall the battery.
Low Range	Verify tire pressures. Range can be affected by weather (especially cold weather), road conditions, and charge on the bike (weight of the rider for instance), Tire pressure. Verify the pressure in both tires. Perform a full battery charge and test again
Power switched on; the bike does not work	The control unit or the motor might need to be replaced
Power switched on; the bike works only with throttle	The controller, the motor or pedal sensor might need to be replaced
Throttle unresponsive	View battery charge level and recharge fully if necessary The control unit or the motor might need to be replaced
The bike goes away by itself	Check that the throttle is not jammed. Lubricate or replace the throttle grip
The bike does not start after stop	Check that the brake lever is released completely
The charger is connected, the signal light does not turn on	Make sure that the AC outlet is powered correctly
The charger connected to the battery but the battery is not charging	Check that the battery is not fully charged already Check that the charger is properly connected

# 7.1 Technical Specifications

7.1 recnnical Specifications	
Model	FB-NOVABIKE
Product Code	FBNB2201
Туре	Pedelec
Weight	32kg
Permissible Gross Weight	Maximum 120 kg
Dimensions (W $\times$ D $\times$ H) mm	1540x300x880
Maximum Speed	42km/h (Limited)
Maximum Mileage	38-47 km
Display	5 step, LCD
Battery	48 V, Li-ion, 10.4 Ah
Chargers	100V~240V/42V*2A
Charging time	3~4 hours
Brakes	Disc Brake
Motor	48V×750W, starting at about 25km/h the motor power supply is interrupted
Pedal sensor	Speed sensor

# 8. Assembly guide

#### 8.1 Take out the bike from the original packaging

- 1) Remove all the parts from the original packaging. Check if the parts are damaged before assembly.
- ② The seatpost, saddle and handlebars are tied to the Ebike, and the front wheel is tied to the front fork legs. (Use scissors to cut the cable tie for assembling use) In addition, there are pedals, charger, charger cable and assembly tools in the cardboard box.



#### 8.2 The front wheel

- 1 Tear off the front fork packaging and install the front wheel on the front fork.
- 2 Pay attention to the orientation of the front wheel: the front wheel disc is on the same side as the front fork disc brake seat. Make sure that the axle is attached to the front fork on both sides.
- ③ Install the quick release, loosen the screw, the quick release handle should be on the same side as the disc brake. On the other side, install the spring and nut.
- 4 Tighten the nut and turn the quick release handle upward tightly, Make sure that the quick release handle is firmly in place and that the front wheel is locked.
- ⑤ After the front wheel is assembled, turn the front wheel manually to check whether the front wheel rotates smoothly.



#### 8.3 The handlebar and seatpost

- ① Hold the seatpost upright and pre-lock the upper screws of the stem.
- 2 Loosen the 4 screws of the front cover of the stem, then take the handlebar and put it into the stem to lock the handlebar, pay attention to the corresponding middle position of the handlebar (left and right hand side should be at equal distance from the center of the stem), and correct rotation angle of the handlebars. Tighten the screws of the front cover of the stem.
- 3 Rotate the handlebar to make sure that the handlebars are perpendicular to the direction of the front wheel. This will ensure that the stem and direction column are well aligned. Tighten the upper screws of the stem.



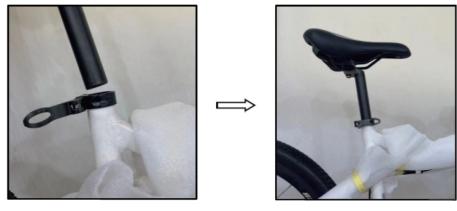






#### 8.4 The seatpost and saddle

- ① Loosen the quick release and insert the saddle into the seatpost.
- ② Straighten the angle of the saddle so that it is in line with the bike frame, and adjust the height to a suitable height (be careful not to exceed the seatpost safety line) and lock the quick release handle.



#### 8.5 The pedals

- ① Take out the pedals, pay attention to the left and right pedals. The letter R is printed on the right pedal (drive side), and a letter L on the left pedal (non-drive side).
- 2 Place the right pedal on the drive side crank and thread the pedal spindle clockwise. Place the left pedal on the non-drive side crank and thread the pedal spindle counterclockwise. Make sure both pedals are locked into position using a 15 mm wrench.



#### 8.6 The battery

- 1) Take out the battery, align it with the notch on the left, and slide it in to the left. The battery is flush with the plastic part. You will hear the sound of the key lock, when it is locked.
- ② Check whether the battery is locked. Do not move the key, and push the battery to the right to see if it can be moved.





# 8.7 The front light

- 1 Take the screw out and pass the screw through the center hole of the front light corresponding to the front fork gantry, paying attention to the gasket on the screw head.
- 2 Take 4 mm hex key, fix the front screw and lock the screw, pay attention to the position of the front light.





