



26" Electric mountain bike



MODEL NO. BIK-28

USER MANUAL

Congratulations on purchasing a QFX Electric Mountain Bike. Your mountain bike is stylish and reliable and can take you anywhere you want to go with a long 20 to 25 mile range per charge. Use it for your daily commute and still have enough juice for fun leisure rides. A full charge takes only 4 to 5 hours so you're ready to go in no time. With front and back brakes and an LCD screen loaded with features, you know you'll be riding safely at all times of the day. Before taking the Electric Mountain Bike for a ride for the first time, please get acclimated to its speed, turning radius, and other riding characteristics to avoid injury. **Check your bike before each ride to make sure it has been maintained and is operating properly.** Please cycle safely, follow your local laws, and take it for a ride!

IMPORTANT: Take this bicycle to a qualified bicycle technician for assembly if you are not familiar with assembling a bicycle. For your safety, we recommend having a qualified technician test and inspect your bicycle after assembly. Operating a bicycle is inherently risky; before you ride, inspect your bicycle each time to ensure that it is in proper operating condition.

FEATURES

- LCD status screen
- Pedal assist or pure electric modes
- 21-speed Shimano gear shifter
- Black phone holder

IN THE BOX

- Electric mountain bike
- Lithium-ion battery set
- Battery charger
- Pedals
- Manual

SPECIFICATIONS

- Range: up to 25 miles per charge
- Weight limit: 330 lbs (150 kgs)
- Braking system: Disc brakes (front and rear)
- Motor: 250 W brushless electric motor
- Charge time: up to 4-5 hours (full charge)
- Battery: Lithium-ion 36 V, 8 AH

SAFETY FEATURES

- Front and rear disc brakes
- Speed limit: 15.5 mph (25 kmh)
- Easy to grip handlebars
- Power-off protection
- Brake levers with motor cut-off

THANK YOU FOR USING OUR E-BIKE

SPECIFICATIONS



- | | |
|--------------------------|---------------------|
| 1. FRAME | 10. CRANK |
| 2. SEAT POST | 11. PEDAL |
| 3. SADDLE | 12. PHONE HOLDER |
| 4. VERTICAL HANDLE STEM | 13. MOTOR |
| 5. BATTERY | 14. REAR DERAILLEUR |
| 6. LCD SCREEN | 15. RIM AND TIRE |
| 7. BRAKE LEVER | 16. REFLECTOR |
| 8. SUSPENSION FRONT FORK | 17. FENDERS |
| 9. DISC BRAKE | 18. REAR RACK |
| | 19. HEADLIGHT |

INSTRUCTION

BEFORE ASSEMBLING YOUR BICYCLE

- Check the markings on the outer box to make sure that it has been placed right side up.
- Carefully remove the frame and all other items listed in this manual (see "In the Box").
- Carefully remove and dispose of all protective packing materials. Take care not to damage the bicycle or any components.

ASSEMBLING THE STEM AND HANDLEBARS



1. Properly align the stem with the front fork and the frame, then use the 5 mm hex key to tighten the bolt shown in the picture above.
2. Use the 6 mm hex key to tighten the stem. (Ensure that the fork and stem are properly aligned.)
3. Hold the handlebars in place and then use the 5 mm hex key to tighten the four bolts. Do not tighten them all the way.
4. Adjust the position of the handlebar so that it is centered on the stem, then finish tightening the four bolts.

INSTALLING THE SADDLE



1. Flip the seat post lever open.
2. Place the saddle in the seat post and adjust its height. **IMPORTANT:** the saddle must be installed so that the max height markings are not visible.
3. Turn the seat post level to tighten/loosen the bolt. Do not overtighten; you should be able to comfortably flip the lever closed.
4. Flip the seat post lever closed.

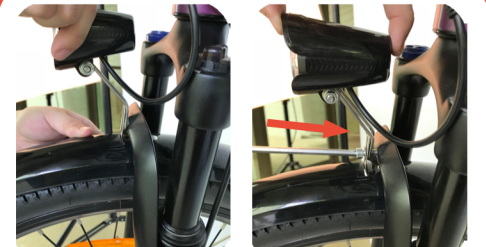
INSTRUCTION

INSTALLATION OF THE FRONT WHEEL



1. Identify the front fork. Make sure the bike is on a level and secure surface before continuing.
2. Seat the wheel in the fork. The disc brake should be on the left.
3. Thread the axle through the wheel and fork. While the wheel is centered between the forks, hold then end cap in place while turning the quick-release lever to tighten.
4. Flip the quick-release lever closed. Make sure that the wheel spins freely and true. If not, repeat step 3 until the wheel is perfectly centered.

INSTALLATION OF THE FENDERS AND HEADLIGHT



1. Identify the attachment point on the front fork. Align it with the headlight bracket and front fender, then screw a bolt through all three. Do not tighten the bolt.
2. Make sure the front fender and headlight are aligned properly with the frame and then finish tightening the bolt.

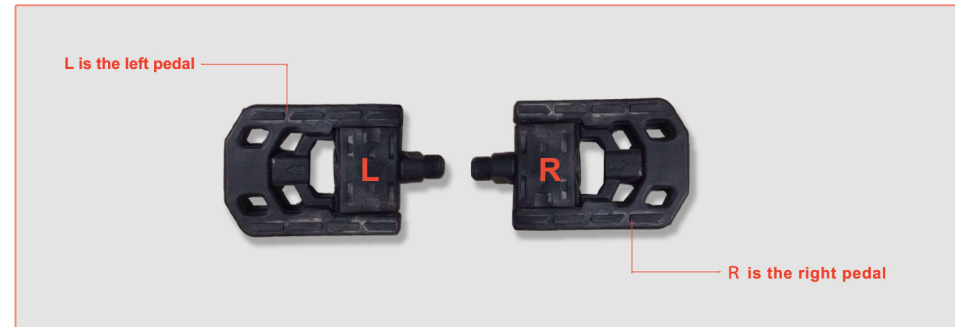
INSTRUCTION

INSTALLING THE PEDALS



1. Examine the pedals for markings to identify which is left (L) and which is right (R).
2. Identify the complimentary wrench that is included in the box.
3. Screw the right pedal into the right pedal crank arm; screw the left into the left arm.
4. Use the included wrench to finish tightening and securing the pedals to the crank arms.

PEDALS (LEFT AND RIGHT)



INCLUDED COMPLIMENTARY TOOLS



INSTRUCTION

ABOUT THE LCD SCREEN



1. Exterior Specifications

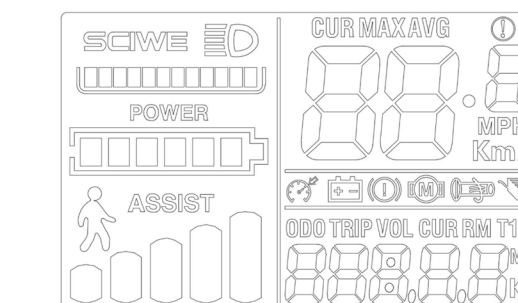
Casing Material: ABS

Display Material: High-impact acrylic (similar hardness value as tempered glass)

2. Functions

- Display**
Speed, Battery level, Error indicator, Total mileage, Single-ride mileage
- Available Controls and Settings**
Power switch control; adjustments for Wheel diameter, Idle time (auto-hibernation), Backlight brightness, Start mode, Drive mode, Voltage level, Controller current limit.
- Communications Protocol:** UART

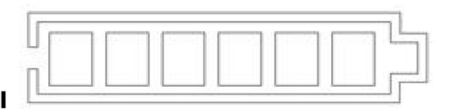
Initial Display View (initial display flashes at start for 1 second)



Display Details

INSTRUCTION

2.1 Light



2.2 Battery Level

2.3 Multi-Functions Display

Total Mileage: ODO
 Single Time Mileage: TRIP
 Error Code: Error
 Power: WATT
 Maintain Needed: Maintain

2.4 Vehicle Mode

Power: Strong Power Mode

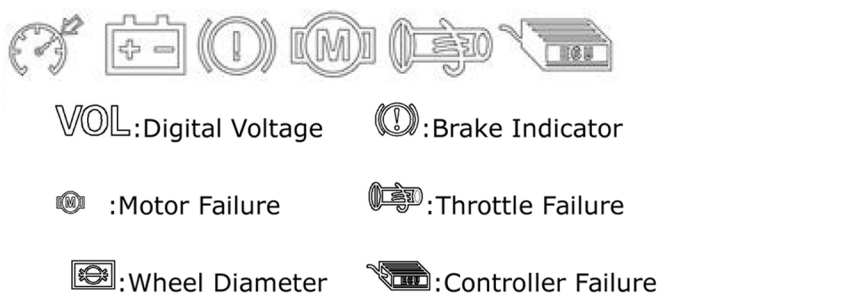
CUR MAX AVG
 MPH Km/h

2.5 Speed Display

Max Speed: MAX Average Speed: AVG
 Display unit: MPH or Km/h
 Note: the speed is calculated from a hall-effect sensor in the motor based on the diameter of the installed wheels. The signal is then sent to the LCD screen by the controller.

If you change the wheels, you will need to adjust the Wheel Diameter parameters in the Settings menu.

2.6 Error Display



INSTRUCTION

2.7 Settings

P00: Factory Setting. Set to 10 and scroll to next item, the controller will be restored to its original factory settings.
 P01: Backlight Brightness (1: darkest; 3: brightest)
 P02: Mileage Unit (0: KM; 1: MILE)
 P03: Voltage Class: 24V/36V(default) / 48V
 P04: Hibernation Time (set to 0 to disable auto-shutoff, all others set the duration in minutes.)
 P05: Power Gear – 0/3 Gear Mode: Gear 1: 2V Gear 2: 3V Gear 3: 4V
 1/5 Gear Mode: Gear 1: 2V Gear 2: 2.5V Gear 3: 4V
 Gear 4: 3.5V Gear 5: 4V
 Strengthened Function
 (Supported by some controllers.) Set the PWM signal for different PAS (Pedal Assistance Sensor) levels manually. The first level is equivalent to 3.7 mph (6.0 kmh). Some controllers use PAS analog voltage output (no communications protocol).
3-mode output voltage:
 Level 1 - 2V | Level 2 - 3V | Level 3: 4V
5-mode output voltage:
 Level 1 - 2V | Level 2 - 2.5V | Level 3: 3V | Level 4 - 3.5V | Level 5 - 4V

1. Non-communications status (for panel-controlled bikes without a controller)
 When the current speed exceeds the speed limit, the PWM motor output will cut off; when the current speed falls below the speed limit, the PWM motor output will activate and the riding speed will be set as the current speed ±1 kmh. (This only applies to the pedal-assisted speed and does not apply to the handlebar speed throttle.)

2. Communications status (for bikes equipped with a controller)
 The riding speed will be kept constant at the speed-limited value.

Note 1: There is an error range of ±1 kmh that is applicable to both the pedal-assisted speed and the handlebar speed throttle.
 Note 2: All values described above are metric measurements (kilometers). If the controller is set to imperial units (miles) then the values will be converted for display, but the underlying values are based on metric measurements. (For example, the speed value displayed on the panel may read miles but the speed limit value does not change accordingly.)

INSTRUCTION

P09: Zero / Non-zero start setting.
 0 - Zero Start | 1 - Non-zero Start
 P10: Drive Mode Setting
 0: Power Drive – The specific gear of the assist drive decides the assist power value. In this status the handlebar speed throttle does not work.
 1: Electric Drive – Speed is controlled from the handlebar. In this status the pedal-assist gear does not work.
 2: Power Drive + Electric Drive – Electric drive does not work in zero-start status.
 P11: Power Assist Sensitivity Range: 1-24
 P12: Assist Power Intensity Range: 0-5
 P13: Power Magnet Steel Number: 5 / 8 / 12pcs
 P14: Current Limit Value: 12A by default; Range: 1-20A
 P15: Unspecified
 P16: ODO Zero-Out: Press and hold the "UP" key for 5 seconds and the odometer (ODO) will be reset to zero.

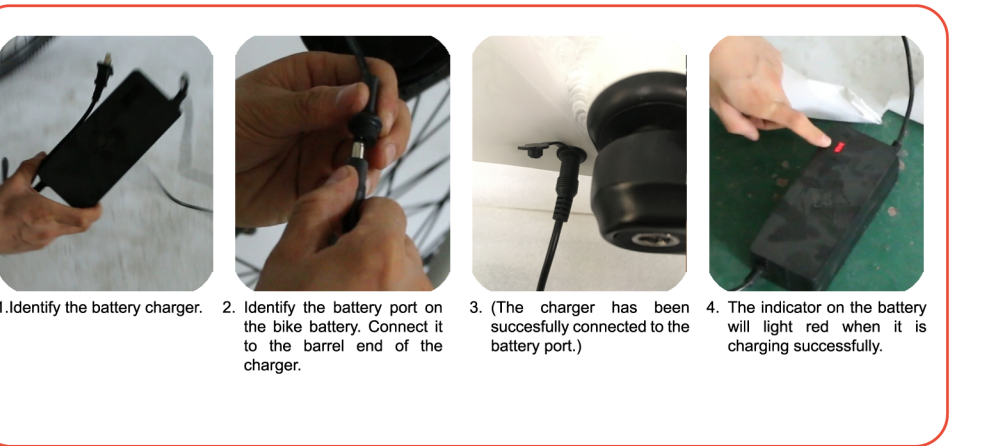
3. Introduction of Keys

- Press "M" to turn the controller on when it is off. When it is on, press "M" to change between the ODO/TRIP/RM/TM/ERROR screens. Press and hold "M" to turn the controller off.
- Press "+" to increase the PAS (pedal assist) level. Press "-" to decrease the PAS level.
- Press and hold "+" and "-" to access the Settings screen. While on the Settings screen: Press "M" to change between the available settings. After adjusting the value, press "M" to save the setting and change to the next one. You may also press and hold "M" to save the setting without changing to the next one (the screen will stop flashing). To exit the Settings screen, press and hold "+" and "-". (The controller will also exit the Settings screen automatically after 10 seconds.)
- The handlebar throttle is used to adjust the rotational speed of the motor. Twist the throttle to accelerate; release it to decelerate.

NOTE: The battery should be kept away from high temperatures, high humidity, and fire. Do not overcharge the battery; overcharging will reduce the operating life of the battery. Disconnect the charger from the battery as soon as possible when the battery is fully charged.

INSTRUCTION

Connecting the Battery to the Charger



Charging the Battery

Before using the battery for the first time, charge it for 6 to 8 hours until it is full. After this first charge, use the electric bike until the battery is fully drained; then charge the battery again for 8 to 9 hours. This initial cycle will optimize the lifetime performance of the battery.

Use the included charger only to charge the battery. Using unauthorized chargers not designed for this electric bike will void its warranty. Unauthorized chargers may permanently damage the battery as well as unexpected dangers.

To charge the battery:

- Check that the voltage of your power source matches the rated input voltage of the charger.
- Connect the output plug of the charger with the charging jack of the battery. Connect the plug into an AC power supply.
- Check that the power indicator light and the charge indicator lights are on. This shows that the battery is charging properly. When the light turns green, the battery is sufficiently charged.
- After the battery is fully charged, unplug the cable from both the AC power supply and the battery.

NOTE: The battery should be kept away from high temperatures, high humidity, and fire. Do not overcharge the battery; overcharging will reduce the operating life of the battery. Disconnect the charger from the battery as soon as possible when the battery is fully charged.

INSTRUCTION

Battery Care and Maintenance

- Keep the battery out of extreme temperatures.
- Operating temperature when charging: 32° - 113° F.
- Operating temperature when discharging: -4° - 113° F.
- Do not short circuit the discharge/charge terminals of the battery.
- Do not leave the battery charging overnight, or for long periods of time.
- To avoid damage to the battery, do not subject it to intense physical shock, severe vibration, or strong impacts.
- Do not expose the battery to water or other moisture. Protect the discharge/charge terminals from rain or water logging.
- Keep the battery away from children.
- When the battery is not in use for an extended period of time, remove the battery and store it safely.
- Do not disassemble the battery.
- If you have any questions about this battery or its usage, contact the Customer Service department.

Regular Maintenance

- Every 1 to 2 months, it is recommended that you check the following:
- Check that the handlebar and saddle post are correctly inserted and tightened.
 - Check that the wheel hub mounting nuts are correctly tightened.
 - Check that the wheel rims are not cracked and that no spokes are loose or broken.
 - Check that the tires are not worn or cut.
 - Check that the tires are correctly inflated.
 - Check that the battery contacts on the frame are not dirty or oxidized.
 - Check that the batteries are sufficiently charged.
 - Check that the front and rear brakes are working correctly.
 - Check that the cables are sufficiently greased, and that the brake pads are in good condition.
 - Check that the frame welds are in good condition, and are free of corrosion or oxidation.

INSTRUCTION

Product Storage and Transportation

If the bicycle and battery will not be used for 6 months or longer, it should be stored in an environment where:
 Temperature: 20 ± 5 °C (68 ± 9 °F) | Humidity: 65 ± 20% RH
 Voltage during storage must be maintained between 48 V ~ 54.6 V.
 Please run the battery through a charge/discharge cycle once every 3 months as follows:
 Standard charge and discharge. Wait for 5 minutes, then charge at 2 A to 54.6 V.

Product Transportation

During transport the battery is approximately in a 50% charged state. The battery should be kept from acute vibrations, crushing, exposure to sun, or soaking.

When charging the battery, it should be in an environment where the temperature is 0-45 °C (32-113 °F) as indicated in the specifications. The battery should be charged at a current below the maximum charge current indicated in the specifications; the charge voltage should be below the maximum charge voltage indicated in the specifications. The Maximum Charging Voltage is 54.6 V; the charger must be designed to meet this requirement. Use only the included charger to avoid damage to the battery. Do not charge the battery for longer than 10 hours. Reverse charging is prohibited.

When discharging the battery, it should be in an environment where the temperature is -20-55 °C (-4-131 °F) as indicated in the specifications. The battery should be discharged at a current below the maximum discharge current indicated in the specifications. Note that due to the self-discharge characteristics of the battery, it will enter a force-discharged state if it is not used for a long time. To prevent over-discharging the battery, it should be charged periodically to maintain its state above 48 V.

Others

Prevent internal short circuits.
 Disassembly is prohibited.
 Never incinerate to dispose. The battery may explode.
 The battery should never be exposed to liquids such as freshwater, seawater, or beverages.

INSTRUCTION

TROUBLESHOOTING

Issue	Potential Cause	Solutions
Failed speed change, or very low velocity.	<ul style="list-style-type: none"> Low Battery Voltage. Bad governor handle. Bad controller. 	<ul style="list-style-type: none"> Charge the battery. Replace the governor handle or controller.
Motor does not work when the power is turned on.	<ul style="list-style-type: none"> Bad governor handle. Bad electric door lock and contact point. Bad controller. 	<ul style="list-style-type: none"> Replace the governor handle or controller. Re-weld the contact part.
Inadequate mileage from charge.	<ul style="list-style-type: none"> Tires have low air pressure. Inadequate charging or charger failing. Damaged or expired battery. Frequent breaking and restarting. 	<ul style="list-style-type: none"> Pump the tires to proper pressure. Recharge the battery. Replace the battery or charger.
The charger no longer works with the battery.	<ul style="list-style-type: none"> Charger wiring is loose or damaged. The battery weld line is damaged or fell off. 	<ul style="list-style-type: none"> Weld the connecting line, or replace it.
The booster has no power assist.	<ul style="list-style-type: none"> The induced cartridge has poor contact or is damaged. The booster wiring is bad or damaged. 	<ul style="list-style-type: none"> Adjust the induced cartridge or replace it. Reconnect the booster or replace it.

Reference requirements §18 section 1 of the battery law

Batteries and accumulators must not be disposed of in your household waste container. You are required by law to return used batteries and accumulators. Used batteries may contain harmful substances that can do damage to the environment and to your health when stored or disposed of incorrectly. Batteries also contain important raw materials like iron, zinc, manganese, or nickel which can be recycled.

All batteries are marked with the symbol of the crossed out wheeelin bin.

The label with the crossed-out waste container means that you must not dispose any batteries and accumulators in your household waste. Under this sign, you will find more symbols with the following meanings:

Hg: Battery contains (mercury)
 Cd: Battery contains cadmium
 Pb: Battery contains lead

At excess of certain limits they are additionally marked with the chemical symbol of the metals (Hg= battery contains more than 0.0005 percent of mercury, Cd = battery contains more than 0.002 percent cadmium, Pb = battery contains more than 0.004 percent lead).

Manufacturer and product information

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PRODUCT NO: BIK-28
 MADE IN CHINA