

Pioneer Plus Fat Tire / Pacer Plus Electric Bike - User Manual

Welcome to your new **Pioneer Plus Fat Tire / Pacer Plus Electric Bike**! This guide will help you get started and ensure that you're familiar with all the bike's key features and settings for the best riding experience.

1. Powering On and Off

- **Power On:** Hold down the power button on the display remote for 3 seconds to turn on the display.
 - **Parking (P) Mode:** If the motor is inactive for 3 seconds, the bike will automatically enter "P" mode to disable pedal assist and throttle for safety. To unlock "P" mode, squeeze the brake.
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2. Pedal Assist and Speed Settings

- **Select Pedal Assist Level:** Use the "+" and "-" buttons to choose between pedal assist levels 0 to 5.
 - Level 1 provides minimal assistance, while level 5 offers maximum assistance.
 - Level 0 disables pedal assist.
 - **Switch Pedal-Assist Mode:** Press the "i" button to switch between **cadence sensor** and **torque sensor** modes for different pedal assistance preferences.
 - **Adjust Speed Limit:** Hold the "i" button for 5 seconds to toggle between a top speed limit of 20 mph and 28 mph.
 - **Start Riding:** You can start pedaling with or without assistance, or use the throttle for acceleration. Enjoy your ride!
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3. Lighting

- **Activate Headlight:** Once the display is on, hold down the "+" button for 3 seconds to turn on the headlight.

4. Settings and Customization Options

Your Pioneer Plus bike allows you to adjust several performance settings. To access the settings menu, follow these steps:

- Press and hold the "+" and "-" buttons simultaneously for 3 seconds to access the settings.
- Use the "+" or "-" buttons to scroll through options and adjust the settings. The modified parameter will blink.
- Press and hold the "i" button to save and exit the menu, or after 10 seconds of inactivity, the system will automatically save your settings and exit.

Key Settings (P01 - P17)

1. **Wheel Diameter:** Set the wheel size (in inches) for accurate speed readings (range: 0-30.5 inches).
 2. **Backlight Brightness:** Adjust the screen brightness (Level 1 is dimmest, Level 3 is brightest; default is 2).
 3. **Unit Toggle:** Choose between kilometers (KM) or miles (MI); default is kilometers.
 4. **Voltage:** Set voltage level (36V or 48V); default is 36V.
 5. **Sleep Time:** Auto-off feature after inactivity (0 = no sleep, or choose between 1-60 minutes).
 6. **Assistance Levels:** Choose between 3-level adjustable mode or 5-level adjustable mode.
 7. **Speed Limit:** Set the top speed (0-100 km/h, 100 means no limit; default is 24 km/h).
 8. **Start Mode:** Select between **zero-start** or **non-zero start** (0 = zero start, 1 = non-zero start).
 9. **Drive Method:**
 - 0: Pedal assist only (throttle is disabled).
 - 1: Electric drive only (throttle controls the bike).
 - 2: Both pedal assist and throttle coexist.
 10. **Pedal Assist Sensitivity:** Adjust the sensitivity of pedal assist (range: 0-24).
 11. **Pedal Assist Strength:** Set the pedal assist start strength (range: 0-5).
 12. **Pedal Assist Magnetic Disc Type:** Choose between 5, 8, or 12 magnets for your pedal assist sensor.
 13. **Controller Current Limit:** Set the current limit for the controller (default is 15A; range: 1-30A).
 14. **Undervoltage Point:** Set the controller's undervoltage value.
 15. **Cruise Control Settings:** Reserved for advanced users.
 16. **ODO Reset:** To reset the odometer, hold the "+" button for 5 seconds.
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5. Error Codes and Troubleshooting

Your bike features a system to alert you of any malfunctions. Here are the error codes you may encounter:

- **00:** Normal state
 - **02:** Brake malfunction
 - **03:** Assist sensor malfunction
 - **06:** Battery undervoltage
 - **07:** Motor malfunction
 - **08:** Throttle malfunction
 - **09:** Controller malfunction
 - **10:** Communication reception fault
 - **11:** Communication transmission fault
 - **12:** Battery Management System (BMS) communication fault
 - **13:** Headlight malfunction
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6. Important Notes

- **Speed Limit & Unit Conversion:** When switching between kilometers and miles, the display automatically converts your speed. However, the speed limit setting does not convert—ensure to set it manually when changing units.
 - **PWM Control:** When in pedal-assist mode, the bike will automatically adjust the speed when it exceeds or falls below the set limit to maintain a consistent ride experience.
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You're now ready to experience the adventure with your **Pioneer Plus Fat Tire / Pacer Plus Electric Bike**. Happy riding!