

Acer Momentum

Acer Momentum Electric Cycle User Manual

Model: Momentum

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, maintenance, and care of your Acer Momentum Electric Cycle. Please read this manual thoroughly before your first ride and retain it for future reference. The Acer Momentum Electric Cycle is designed for urban travel and extended routes, offering advanced electric mobility with a focus on performance and reliability.

2. SAFETY INFORMATION

Always prioritize safety when operating your electric cycle. Failure to follow safety instructions can result in serious injury or damage to the product.

- Always wear a helmet and appropriate safety gear.
- Familiarize yourself with local traffic laws and regulations for electric bicycles.
- Perform a pre-ride inspection before each use, checking brakes, tires, and battery level.
- Do not operate the cycle under the influence of alcohol or drugs.
- Avoid riding in adverse weather conditions or on excessively rough terrain beyond the cycle's design capabilities.
- Ensure the battery is securely locked in place before riding.

3. PACKAGE CONTENTS

Upon unpacking, verify that all components are present:

- Acer Momentum Electric Cycle
- Battery Charger
- User Manual (this document)

4. PRODUCT OVERVIEW

The Acer Momentum Electric Cycle features a robust design with integrated electric components for enhanced riding experience.



Figure 4.1: Full view of the Acer Momentum Electric Cycle, highlighting its overall design and key components like the frame, wheels, and integrated battery.

Key Components:

- **Frame:** Premium aluminum alloy frame with advanced lock-in/lock-out hydraulic suspension.
- **Motor:** 36V 250W Bafang rear hub motor.
- **Battery:** In-frame 9Ah removable lithium battery.
- **Display:** King Meter LCD display with password protection.
- **Gears:** Shimano 7-speed gears.
- **Brakes:** Dual mechanical disc brakes.
- **Tires:** 27.5" × 2.1" anti-puncture all-terrain tires.

5. SETUP

5.1 Initial Assembly and Inspection

The Acer Momentum Electric Cycle typically requires minimal assembly. However, it is crucial to perform a thorough inspection before the first ride.

1. **Handlebar Adjustment:** Ensure the handlebar is securely tightened and aligned with the front wheel.
2. **Seat Post Adjustment:** Adjust the seat height for comfortable pedaling, ensuring the seat post is inserted past the minimum insertion line.
3. **Tire Pressure:** Check tire pressure and inflate to the recommended PSI indicated on the tire sidewall.
4. **Brake Check:** Verify that both front and rear brakes engage properly and stop the wheels effectively.

5.2 Battery Installation and Charging

The cycle is equipped with an in-frame removable battery. Ensure it is fully charged before initial use.



Figure 5.1: Close-up view of the in-frame 9Ah removable lithium battery, which provides a range of 40-50 km on a single charge.

1. **Battery Insertion:** Carefully slide the battery into its designated slot within the frame until it clicks securely into place. Use the provided key to lock it.
2. **Charging:** Connect the charger to the charging port on the battery or frame, then plug the charger into a standard electrical outlet. The indicator light on the charger will show charging status. Charge until the indicator signals a full charge (typically 4-6 hours).
3. **Removal:** Unlock the battery with the key and carefully slide it out for external charging or storage.

6. OPERATING INSTRUCTIONS

6.1 Powering On/Off and King Meter LCD Display

The King Meter LCD display provides real-time ride data and controls the electric assist system.

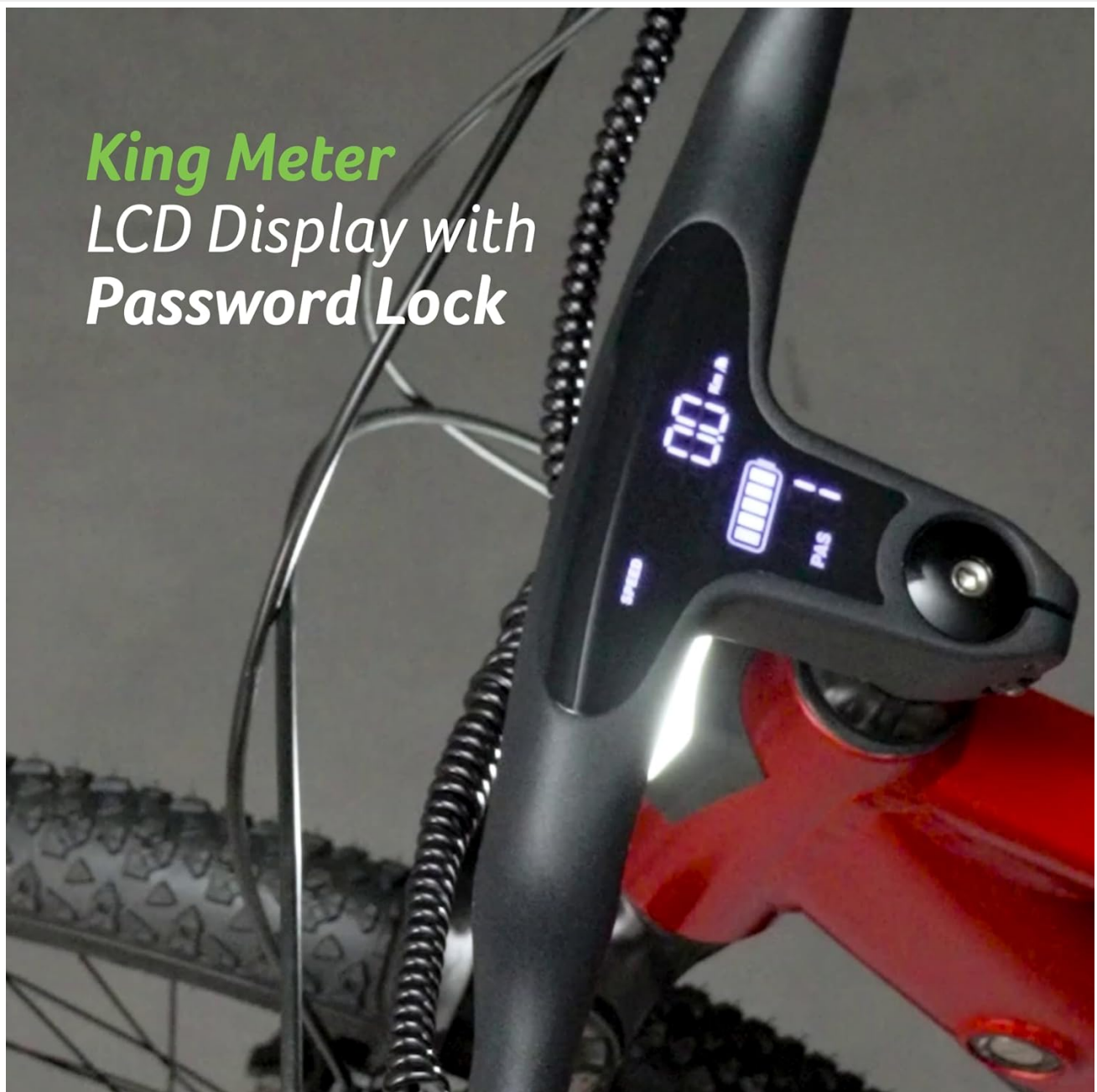


Figure 6.1: The King Meter LCD display, showing speed, battery level, and other ride data. It features a password lock for security.

1. **Power On:** Press and hold the power button on the King Meter LCD display. The display will illuminate.
2. **Password Protection:** If enabled, enter your password using the display buttons to unlock the system.

3. **Power Off:** Press and hold the power button again until the display turns off.

6.2 Electric Assist Modes

The Acer Momentum offers both Pedal Assist (PAS) and Throttle modes.

- **Pedal Assist (PAS):** When engaged, the motor provides assistance as you pedal. The level of assistance can be adjusted via the LCD display.
- **Throttle Mode:** Use the throttle control to engage the motor without pedaling. This mode is typically used for quick acceleration or maintaining speed without effort.

6.3 Gear Shifting

The cycle is equipped with Shimano 7-speed gears for adapting to various terrains.

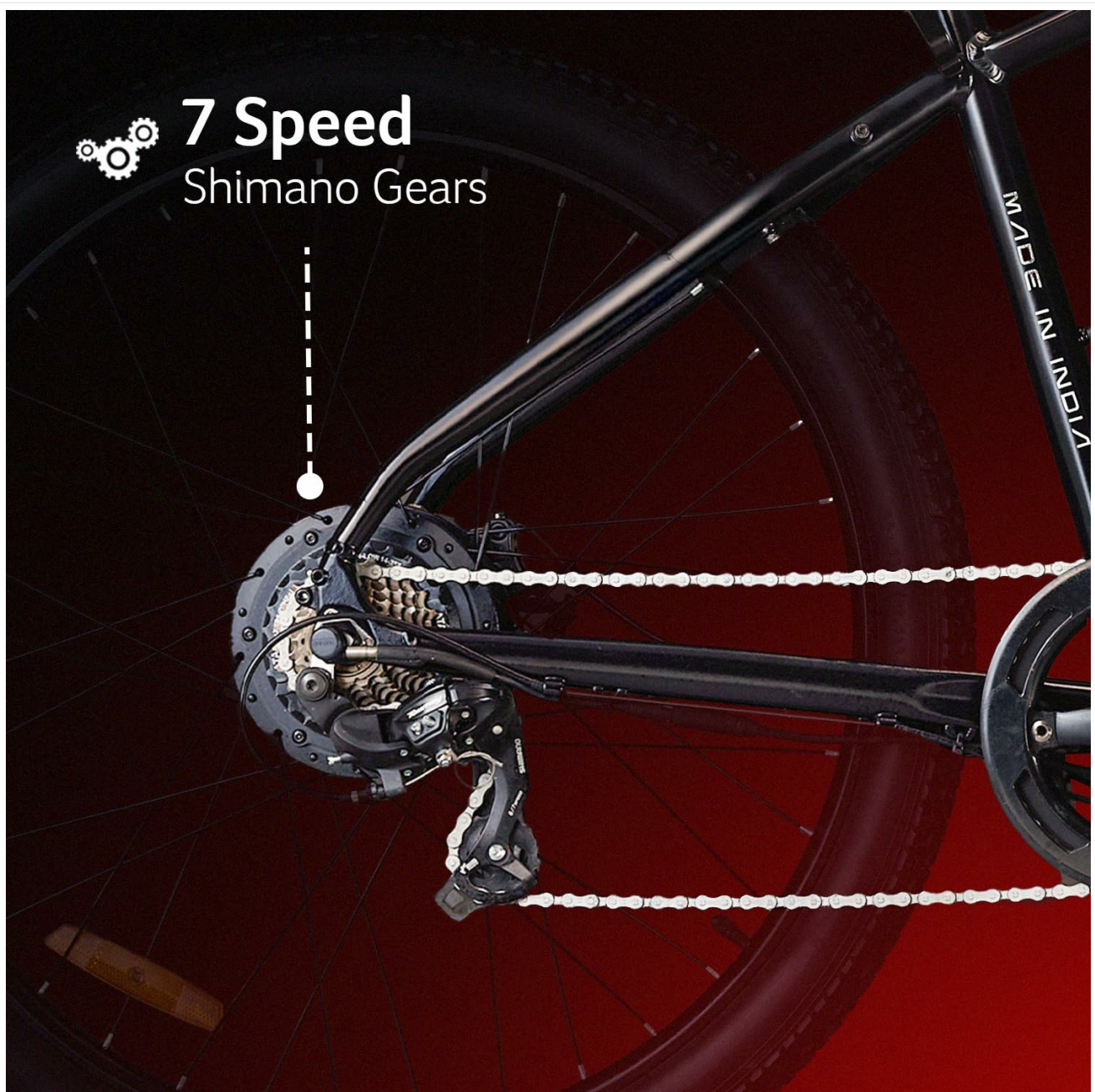


Figure 6.2: Close-up of the rear wheel showing the Shimano 7-speed gears and the Bafang hub motor, which provides electric assistance.

Use the gear shifter on the handlebar to change gears. Shift to lower gears for climbing hills and higher gears for flat terrain or descents. Always shift gears while pedaling lightly to ensure smooth transitions and prevent damage to the drivetrain.

6.4 Braking System

The Acer Momentum features dual mechanical disc brakes for reliable stopping power.

- The left brake lever typically controls the front wheel brake.
- The right brake lever typically controls the rear wheel brake.
- Apply both brakes simultaneously and gradually for controlled stopping. Avoid sudden, hard braking, especially with the front brake, to prevent skidding.

6.5 Hydraulic Suspension

The front hydraulic suspension enhances comfort on varied surfaces.



Figure 6.3: Detail of the front hydraulic telescopic suspension, designed to absorb shocks and provide a smoother ride.

The suspension can be locked out for more efficient pedaling on smooth roads or unlocked for absorbing shocks on rougher terrain. Refer to the suspension fork manufacturer's instructions for specific adjustment procedures.

7. MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your electric cycle.

- **Battery Care:** Charge the battery regularly, even if not in use, to maintain its health. Store the battery in a cool, dry place. Avoid fully discharging the battery frequently.
- **Tires:** Check tire pressure before each ride. Inspect tires for wear, cuts, or punctures.
- **Brakes:** Regularly inspect brake pads for wear and ensure brake levers operate smoothly. Adjust brake cables as needed.
- **Chain:** Keep the chain clean and lubricated to ensure smooth gear changes and prevent rust.
- **General Cleaning:** Clean the cycle with a damp cloth. Avoid using high-pressure washers directly on electrical components.
- **Fasteners:** Periodically check all bolts and nuts for tightness, especially on critical components like handlebars, wheels, and seat post.

8. TROUBLESHOOTING

This section addresses common issues you might encounter with your electric cycle.

Problem	Possible Cause	Solution
Motor not assisting	Low battery, system off, loose connection, PAS level too low	Charge battery, power on system, check connections, increase PAS level
Display not turning on	Battery not installed correctly, battery discharged, loose cable	Reinstall battery, charge battery, check display cable connection
Brakes feel weak	Worn brake pads, loose cable, air in hydraulic system (if applicable)	Inspect/replace pads, adjust cable tension, consult service center
Gears not shifting smoothly	Dirty chain, misaligned derailleur, stretched cable	Clean and lubricate chain, adjust derailleur, consult service center

For issues not listed or if solutions do not resolve the problem, please contact customer support.

9. SPECIFICATIONS

Detailed technical specifications for the Acer Momentum Electric Cycle.

Feature	Specification
Bike Type	Electric Bike
Brand	Acer
Model Name	Momentum
Motor	36V 250W Bafang Hub Motor
Battery	9Ah in-Frame Removable Lithium Battery
Range (Pedal Assist)	40–50 km

Feature	Specification
Display	King Meter LCD with Password Protection
Gears	Shimano 7 Speed Gears
Brakes	Dual Mechanical Disc Brakes
Suspension	Front Hydraulic Suspension
Tires	27.5" x 2.1" Anti-puncture All-terrain Tyres
Frame Material	Aluminum Alloy
Item Weight	22 Kilograms
Power Source	Batteries
Wattage	250 Watts
Lithium Battery Energy Content	324 Watt Hours
Country Of Origin	India

10. WARRANTY

The Acer Momentum Electric Cycle comes with the following warranty coverage:

- **Frame:** Lifetime warranty.
- **Battery and Electrical Components:** 2-year warranty.
- **General Warranty:** 1-year warranty on other components, unless specified otherwise.

Please retain your proof of purchase for warranty claims. The warranty covers manufacturing defects and does not cover damage due to misuse, accidents, or normal wear and tear.

11. SUPPORT

For technical assistance, warranty claims, or any other inquiries, please contact Acer customer support:

- **Email:** ecycle@acerelectric.in
- **Phone:** +91 86554 23061

Manufacturer: Vajram Electric Mobility Limited