The Complete E-Bike Battery Guide

Your Advanced Owner's Guide

By GIN E-Bikes 💙

🙌 You've Got the Bike — Now Master the Ride

We're thrilled to have you as part of the e-bikes family. Whether you're commuting, exploring, or just cruising for fun, this guide is here to help you ride smarter, safer, and longer.

Maximise your range, extend your battery's life, and ride with confidence. This guide covers real-world tips to keep your e-bike powered and protected.

Your E-Bike Battery Guide

How to Charge, Store, and Care for Your Battery for Long-Term Performance

Your battery is the heart of your e-bike — it's what gives your ride power, range, and freedom. Taking proper care of it will ensure you get the best possible performance for years to come.

Here's everything you need to know.

🔌 Charging Your Battery

Best Charging Practices:

- Always use the charger provided with your e-bike. Third-party chargers can damage the battery or reduce lifespan.
- Charge at room temperature (ideally between 10°C–25°C). Avoid charging in cold garages or hot sun.
- **Unplug when full** most batteries take 4–6 hours to charge. Leaving it plugged in too long isn't dangerous, but can reduce long-term efficiency.
- You don't need to drain it to 0% modern lithium-ion batteries prefer to be topped up regularly. Charge when it reaches around **20–30%**.

• Charging overnight is fine if you unplug in the morning — but avoid leaving it for days.

A Charging Don'ts:

- Don't charge immediately after a ride. Let it cool down for 30–60 minutes first.
- Don't use damaged chargers or cables.
- Avoid charging in wet or humid environments.

Battery Range Tips

The range you get depends on several factors:

| Factor | How It Affects Range |
|----------------|--|
| Assist level | Higher levels = more power used |
| Rider weight | Heavier loads reduce range |
| Terrain | Hills and rough paths drain battery faster |
| Wind & weather | Headwinds or cold temperatures reduce efficiency |
| Tire pressure | Low pressure = more drag = less range |

Want to Maximize Range?

- Use lower assist levels (PAS 1-2) when cruising on flat ground.
- Pedal more and throttle less.
- Keep your tires inflated to the recommended PSI.
- Travel light remove unnecessary cargo.
- Choose flatter, smoother routes when possible.

Battery Warnings & Error Signs

Here are signs your battery might need attention:

- **Doesn't hold charge well** anymore (i.e., range suddenly drops).
- Not charging at all even when plugged in properly.
- **Overheating during charge** (it should get slightly warm, not hot).
- Display shows battery error codes (check your bike's display manual).

% If you notice any of these, stop using the battery and contact our support team right away.

🗊 Storing Your Battery Properly

Not riding for a while? Here's how to store your battery safely:

🚺 Do:

- Store in a dry, cool place (not outside, not in direct sunlight).
- Keep charge between **50–70%**.
- Recharge the battery **once every 4–6 weeks** if not in use.
- Detach it from the bike for long-term storage.

X Don't:

- Store fully charged or fully empty for months.
- Keep the battery somewhere **below 0°C** or above 40°C.
- Leave it exposed to humidity or rain.

Cleaning and Handling Tips

- Remove the battery before cleaning your bike.
- Use a **dry cloth** to gently wipe the battery casing.
- Keep terminals clean and dry don't spray water near them.
- Always handle with care **don't drop** your battery or subject it to heavy shocks.

Battery Lifespan and Replacement

Most high-quality e-bike batteries (like yours!) last **500–800 full charge cycles**, which typically means **3–5 years** of regular riding.

After that, you may notice:

- Decreased range
- Longer charging time
- Slight battery swelling (rare)

When it's time to replace it, contact us directly to **purchase an official replacement** — avoid third-party knock-offs which may void your warranty or cause damage.

🧠 Did You Know?

- Keeping your battery in top shape can save you hundreds of pounds over time.
- Cold weather can reduce range by up to 20–30% this is normal, and range improves in spring.
- Our batteries are designed to **cut off power** before deep discharge this protects the cells automatically.

Need Help or Inspiration?

We're always here if you need:

- Setup help
- Range advice
- Warranty support
- Upgrade suggestions

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Happy Riding, − The GIN E-Bikes Team ♥