ROXFORM Quick Gravion Start Guide





ROXFORM Gravion – Quick Start Guide

1. Hello & Welcome

- Welcome to the club!
- Legal Bit: UK EAPC rules (250W limit, 15.5 mph).

2. Get Set: Assembly & Adjustments

- Handlebars: Adjusting the angle and height safely.
- Saddle: Finding the perfect riding height (The heel check).
- Pedals: The "Green vs. Orange" rule (Left/Right threading).
- Safety Check: Tyres (30-80 psi) and Brakes.

3. Power Up: Battery & Charging

- The First Charge: The mandatory 24-hour rule.
- Charging: On-bike vs. Off-bike charging methods.
- Storage: The "Every 3 Months" rule for battery health.

4. The Cockpit: VLCD12 Display

- Meet the Screen: Speed, ODO, and Battery bars .
- Button Guide: Power, Mode, and Assist (+/-).
- Settings: How to switch from KM/H to MPH.

5. Ready to Ride

- Start Your Engine: Using the 5 levels of pedal assist.
- Braking: Important check (Left vs. Right lever).
- Walking Mode: Using the "Push Assistance" feature .

6. Keep It Rolling (Maintenance)

- Cleaning: Water safety (No high pressure!) .
- Regular Checks: Tyres, rims, and bolts.

7. Troubleshooting Cheat Sheet

- Error Codes: Decoding "E02" to "E10".
- What to do if the system doesn't wake up.



1. Hello & Welcome

Welcome to the Roxform Family! Congratulations on your new Roxform Gravion. You have chosen a high-tech, eco-friendly companion designed to make city commuting effortless. This guide is here to help you get set up and safe in no time.

The Legal Bit (UK Rules)

Your Gravion is built to comply with UK regulations as an EAPC (Electrically Assisted Pedal Cycle):

- No License Required: You do not need a driving licence, insurance, or road tax to ride this bike.
- Speed Limit: The motor assistance will cut off automatically at 15.5 mph (25 km/h).
- Power: The hub motor is rated at 250W, meeting all legal safety standards.



2. Get Set: Assembly & Adjustments

Let's get your Gravion ready for the road.

Step 1: Handlebars & Stem

- Adjusting the Angle: Use an Allen key to loosen the clamp bolt on the stem. Position the handlebars to your preferred angle for a comfortable, upright riding posture, then retighten securely.
- Height Adjustment: You can raise the stem for better comfort.
 - Warning: Ensure the "Minimum Insertion" safety mark on the stem is hidden inside the frame. It must never be visible.

Step 2: Saddle Height

- The Heel Check: Sit on the bike and place your heel on the pedal at its lowest point. Your leg should be fully straight.
 When you pedal normally with the ball of your foot, your knee should be slightly bent.
- Secure It: Use the quick-release lever to lock the saddle in place. It should require some force to close properly.

Step 3: The Pedals (Watch Out!)

Your pedals are specific to the Left and Right sides. Installing them wrong will damage the threads.

- Right Pedal (R): Marked Orange or "R".
 - Action: Turn it CLOCKWISE to tighten (towards the front wheel).
- Left Pedal (L): Marked Green or "L".
 - Action: Turn it COUNTER-CLOCKWISE (anti-clockwise) to tighten.

Step 4: The Safety Check (UK Brake Setup)

Before your first ride, confirm the controls are set up for UK roads:

- Right Lever: Controls the Front brake.
- Left Lever: Controls the Rear brake.
 - Note: Always double-check this before riding, as some European models differ. Your Gravion is configured for the UK.
- Tyres: Check the pressure is between 30 psi (Min) and 80 psi (Max)

3. Power Up: Battery & Charging

Your Gravion is equipped with a high-capacity Lithium-ion battery. Treating it correctly from day one is essential for its lifespan.

The Golden Rule: The First Charge

- Important: Before your very first ride, you must charge the battery for 24 hours .
- Why? This conditions the battery cells for optimal performance.
- Routine Charging: After the first use, never leave it charging for more than 24 hours. Unplug the charger once the light turns green.

How to Charge

You have two convenient ways to top up the "juice":

- 1.On the Bike: Locate the charging port on the battery (under the rubber tab marked A), plug in the charger, and connect it to the wall socket.
- 2. Off the Bike: Unlock the battery with the supplied key, slide it out of the rear carrier, and charge it indoors .
 - Tip: Always charge at room temperature (between \$o^{\circ}C\$ and \$45^{\circ}C\$).

Charger Indicators

- Red Light: Charging in progress.
- Green Light: Battery is fully charged (approx. 4-6 hours).

Winter Storage (Crucial!)

If you are storing the bike for winter or a long holiday:

- Charge the battery to around 60-80% before storage.
- The 3-Month Rule: You must fully charge the battery at least once every 3 months. Failure to do so can permanently damage the cells and may void your warranty.

4. The Cockpit: VLCD12 Display

Your Gravion features the smart VLCD12 display, giving you full control over your ride .

Button Basics

The control pad on the left handlebar has 4 key buttons:

- Power Button: Turns the bike ON/OFF and controls the lights.
- Plus (+): Increases motor assistance.
- Minus (-): Decreases motor assistance.
- Mode (i): Switches trip information .

Controlling the Bike

- Power On: Press and hold the Power button for 1 second to wake up the system .
- Lights: With the system on, press the Power button briefly to switch the front/rear lights and screen backlight on or off.
- Assist Levels: Use (+) and (-) to cycle through levels 1 to 5.
 - Level 1: Minimum power (max range).
 - Level 5: Maximum power (for hills).
 - Level 0: Motor off, pedal power only.

Settings: Switching to Miles (MPH)

If your display shows KM/H and you prefer MPH for UK roads:

- 1. Turn the display ON.
- 2. Press and hold the (i) and (-) buttons together for 4 seconds to enter Settings .
- 3. Press the (i) button repeatedly to scroll to Page 3 (Speed Unit) .
- 4. Press (+) to toggle between KM/H and MPH.
- 5. Press and hold (i) to save and exit.



- 1. Power Assist "+" Key Used to increase the assistance level.
- 2. Power Assist "-" Key Used to decrease the assistance level and to activate the 6 km/h walk-assist function.
- Mode KeyUsed to toggle between modes.
- 4. Power Key (On/Off Button)
 Used to switch the system on or off and to control the headlight.

5. Ready to Ride

Your Gravion is assembled and charged. Now, let's hit the road safely.

Starting Off

- Instant Boost: The motor kicks in as soon as you start pedalling. Always squeeze the brakes before placing a foot on the pedal to prevent the bike from shooting forward unexpectedly.
- Gears vs. Motor: Use the mechanical gears (right handlebar shifter) just like a regular bike. Shift into a lower gear for hills to make pedalling easier and save battery life.

Braking (UK Standard)

- Right Hand: Front Brake.
- Left Hand: Rear Brake.
- Pro Tip: On slippery surfaces (wet leaves, rain, gravel), always apply the Left (Rear) brake first to avoid the front wheel slipping.

Walking Mode (Push Assistance)

If you need to push the bike up a ramp or through a pedestrian zone, you don't have to struggle with the weight.

- How to activate: Press and hold the (-) button .
- What happens: The motor will provide a gentle assist (approx. 4 mph / 6 km/h) to help you walk alongside the bike. Release the button to stop.

6. Keep It Rolling (Maintenance)

Regular care keeps your Gravion running smoothly and validates your warranty.

Cleaning (Do's & Don'ts)

- NO Pressure Washers: Never use a high-pressure jet wash.
 Water can force its way into the electronic components (motor, battery, display) and cause permanent damage.
- The Right Way: Use a damp cloth to wipe down the frame and display.
- Chemicals: Do not use alcohol, petroleum, or abrasive solvents.

Regular Checks

- Tyres: Check pressure regularly (30–80 psi). Under-inflated tyres drain the battery faster.
- Bolts: Briefly check that the wheel nuts and handlebar stem are tight before every ride .
- Brakes: Ensure the brake levers don't touch the handlebars when squeezed. If they feel loose, adjust the cable tension .

7. Troubleshooting Cheat Sheet

If your VLCD12 display shows an "E" code, refer to this table to understand what is happening.

Error Code	Meaning	Action / Solution
E02	Temperature Protection	The motor or controller is too hot. Stop and let the bike cool down
E03	Short Circuit	Electrical fault. Check cables or contact your dealer.
E04	Throttle/Handleb ar Fault	The throttle or control buttons might be stuck or damaged .
E05	Motor Phase Loss	Connection to the motor is loose. Check the motor cable plug.
E08	Undervoltage	The battery is empty. Charge it immediately .
E10	Hall Sensor Failure	Internal motor sensor fault. Contact your authorised service centre.

Warning: Do not attempt to open the motor, battery, or controller casing yourself. This will void your warranty and may cause electric shock.

You're All Set!

Enjoy your new Roxform Gravion. Ride safe, respect the rules of the road, and enjoy the journey!

