

## VERPAL HC820N

# VERPAL HC820N Series Lightweight Carbon Fiber Electric Wheelchair Instruction Manual

Model: HC820N

## 1. INTRODUCTION

Thank you for choosing the VERPAL HC820N Series Lightweight Carbon Fiber Electric Wheelchair. This manual provides essential information for the safe and effective operation, maintenance, and care of your new mobility device. Please read this manual thoroughly before using the wheelchair and keep it for future reference.

## 2. SAFETY INFORMATION

Your safety is paramount. Always adhere to the following safety guidelines:

- Always fasten the seat belt before operating the wheelchair.
- Ensure the anti-tip wheels are properly adjusted for stability.
- Avoid operating the wheelchair on excessively steep inclines beyond its rated capacity (12° maximum).
- Do not exceed the maximum weight capacity of 264 lbs (120 kg).
- Regularly inspect tires, brakes, and battery connections for wear or damage.
- Keep hands and clothing clear of moving parts.
- Use caution when operating near traffic or in crowded areas.

## 3. PRODUCT OVERVIEW

The VERPAL HC820N is a lightweight, portable electric wheelchair designed for enhanced mobility and convenience. It features a durable carbon fiber frame, powerful dual motors, and intuitive controls.

### Key Features:

- **100% Premium Carbon Fiber Structure:** Provides excellent durability and reduces overall weight to 31.5 lbs (14.3 kg).
- **Ultra-light & Portable:** Folds easily for transportation and storage. Folded dimensions: 29.7 x 15.1 x 28.5 inches.
- **User-Friendly Control:** Ergonomic joystick with LED headlights, quiet mode, and horn.
- **Spacious Comfort:** Extra-wide seat (up to 47cm wide, 51cm armrest spacing) for extended use.
- **Quick-Fold Compact Design & Tool-Free Battery:** Rapid folding and easy battery removal/replacement.

- **All-Terrain Capability:** 400W brushless DC motor, 12° climbing ability, 2-foot obstacle clearance, and 12-inch solid PU rear wheels.

## Product Components:



Figure 1: VERPAL HC820N Electric Wheelchair with key dimensions and included accessories. The image displays the wheelchair from a side view with measurements for height, width, and depth, alongside an exploded view of the folded chair and a list of items in the packing list: Electric Wheelchair x1, Battery x1, Charger x1, User Manual x1, LED Light x1.

## 4. SETUP

### 4.1 Unboxing and Initial Inspection

Carefully remove all components from the packaging. Inspect for any signs of damage. Ensure all listed accessories are present.

Video 1: Unboxing and initial setup of the EW209 electric wheelchair. This video demonstrates how to carefully remove the wheelchair and its accessories from the packaging, including the footrests, controller, battery, charger, toolkit, and user manual. It also shows the process of attaching the footrests and installing the battery.

## 4.2 Assembly

1. **Unfolding the Wheelchair:** Gently pull the backrest upwards until the frame locks into place.
2. **Attaching Footrests:** Insert the footrests into the designated slots on the front frame until they click securely. Adjust the height as needed.
3. **Mounting the Controller:** Attach the joystick controller to either the left or right armrest, securing it with the provided fasteners.
4. **Installing the Battery:** Ensure the battery is charged. Align the battery with the contact position under the seat and slide it in until it locks. Press the power button on the battery to activate it.
5. **Adjusting Anti-Tip Wheels:** Ensure the anti-tip wheels are in the correct position for stability, especially on inclines.
6. **Cushion Installation:** Place the seat and backrest cushions onto the wheelchair, securing them with any attached Velcro straps.
7. **Fasten Seat Belt:** Secure the seat belt across the user's lap before driving.

Video 2: Aotedor Electric Wheelchair Operation Video. This video demonstrates various setup steps including attaching footrests, mounting the controller, removing and installing the battery, switching between manual and electric modes, adjusting anti-tip wheels, lifting armrests, using the storage package, one-step folding, and fastening the seat belt.

## 5. OPERATING INSTRUCTIONS

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### 5.1 Powering On and Off

Press the On/Off button on the joystick controller to power the wheelchair on or off. The battery indicator lights will illuminate.

### 5.2 Joystick Control

The responsive 360-degree joystick allows for easy and precise control. Gently push the joystick in the desired direction to move. The wheelchair features adjustable speed settings (5 speeds) and sensitivity for various environments.

# 360° Control Joystick



## LED Light with USB Port

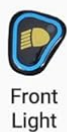


Figure 2: Close-up of the 360° control joystick, highlighting its LED light with USB port, power switch, horn, mute button, speed adjustment, 5-speed display, and power display.

### 5.3 Speed Adjustment

Use the acceleration (+) and deceleration (-) buttons on the joystick to adjust the speed. The current speed level is indicated by LED lights.

### 5.4 Manual and Electric Mode Switching

To switch between electric and manual mode, locate the red levers near the rear wheels. Push the levers up for electric mode and down for manual mode. In manual mode, the wheelchair can be pushed by an attendant.

Video 3: Demonstration of the VERPAL electric wheelchair's features, including 3-second quick folding, high-quality carbon fiber frame, powerful brushless motors, and the electric/manual switch. It also shows the joystick's left/right switching capability and responsive 360-degree operation.

## 5.5 Driving on Various Terrains

The VERPAL HC820N is designed for all-terrain use, capable of handling grass, slopes, speed bumps, lawns, and gravel roads. The 400W brushless dual motors provide reliable power for climbing inclines up to 12° and overcoming obstacles up to 2 inches high.



Figure 3: The VERPAL HC820N Electric Wheelchair demonstrating its all-terrain capabilities, including a 12° maximum climbing ability and 2-inch obstacle clearance. The image shows a person in the wheelchair on a ramp.

Video 4: Outdoor driving demonstration of an electric wheelchair (model 7003), showcasing its ability to navigate various outdoor terrains.

## 5.6 Maneuverability

The compact design and precise joystick control allow for smooth indoor maneuverability and tight turns, making it suitable for navigating narrow doorways and crowded spaces.

Video 5: Aotedor Electric Wheelchair for Adults. This video highlights easy seating, smooth indoor maneuverability, one-step folding, easy car

loading, 15 miles long endurance, all-terrain confidence, 12° incline climb, intelligent electromagnetic brake, tight turns, and smart storage.

## 6. FOLDING AND TRANSPORT

### 6.1 One-Step Folding

The wheelchair features a quick, one-step folding mechanism. Simply lift the lever at the back of the seat and push the backrest forward to fold the chair compactly.



Figure 4: The VERPAL HC820N Electric Wheelchair showcasing its portable design and quick folding capability, with images demonstrating its compact storage in a bedroom, car trunk, and airplane overhead compartment.

### 6.2 Transporting

Once folded, the wheelchair is compact and can be easily lifted and stored in a car trunk or carried for travel. Its lightweight carbon fiber construction makes it manageable for transport.

Video 6: Zurcheel Lightweight Foldable Electric Wheelchair. This video demonstrates the wheelchair's features including one-touch folding, easy car storage, riding over speed bumps, all-terrain capability, intelligent electronic brake, manual switch, cushion removal, anti-tip assist wheels, battery removal, and two ways to charge.

## 7. CHARGING THE BATTERY

The lithium battery provides a driving range of up to 12.5 miles (20 km) on a single charge. Charging is simple and can be done in two ways:

1. **Direct Charging:** Plug the charger directly into the charging port on the joystick controller.
2. **Off-Board Charging:** Remove the battery from the wheelchair and plug the charger directly into the battery pack.

Ensure the charger's indicator light shows a full charge before use. Always charge the battery after every use to maintain optimal performance and lifespan.



**VERPAL**

# 5+ YEARS

1500+Cycles 2xLifespan 5xSafety

Lithium Battery

Up to  
**12.5 Miles**  
Driving Range

**0 - 3.2 Mph**  
Adjustable Speed

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Figure 5: The VERPAL HC820N Electric Wheelchair highlighting its lithium battery, offering up to 12.5 miles driving range and an adjustable speed of 0-3.2 mph. The image also emphasizes the battery's 5+ years lifespan with 1500+ cycles.

## 8. MAINTENANCE

### 8.1 Cleaning

Wipe down the frame and seat with a damp cloth. Avoid using abrasive cleaners. Cushions can be removed for cleaning.

### 8.2 Battery Care

Store the battery in a cool, dry place. Avoid extreme temperatures. Charge the battery regularly, even if not in use, to prolong its life.

### 8.3 Wheel and Brake Inspection

Regularly check the wheels for wear and tear. Ensure the brakes are functioning correctly. The intelligent electromagnetic brake system provides reliable stopping power.

## 9. TROUBLESHOOTING

Problem	Possible Cause	Solution
Wheelchair does not power on.	Battery not installed correctly or discharged.	Ensure battery is fully inserted and charged. Check battery power button.
Wheelchair does not move.	Manual mode engaged or joystick not responding.	Switch to electric mode. Check joystick connection.
Reduced range or power.	Low battery charge or aging battery.	Fully charge the battery. Consider battery replacement if performance does not improve.

## 10. SPECIFICATIONS

Feature	Specification
Product Dimensions (Unfolded)	35.2"D x 37.4"W x 24.8"H
Folded Dimensions	29.7 x 15.1 x 28.5 inches
Weight (with battery)	31.5 lbs (14.3 kg)
Frame Material	Carbon Fiber
Motor Power	400W Brushless Dual Motor
Max Speed	3.2 mph (5.1 km/h)
Driving Range	Up to 12.5 miles (20 km)
Battery Type	Lithium-ion (24V 10AH)
Max Climbing Ability	12°
Max Obstacle Clearance	2 inches
Weight Capacity	264 lbs (120 kg)
Seat Width	17.7 inches (45 cm)

Feature	Specification
Armrest Spacing	20.1 inches (51 cm)

## 11. WARRANTY AND SUPPORT

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For warranty information, please refer to the specific warranty card included with your product or contact VERPAL customer support. If you encounter any issues or have questions regarding your wheelchair, please reach out to our customer service team for assistance.