



BETTY &  
BERTIE  
MOBILITY

# Zinnia CarbonLite

## PRODUCT MANUAL





**Thank you for choosing me, my name's Zinnia CarbonLite and I'm here to take care of all of your mobility needs!**

We hope you love the scooter as much as we do. To get your relationship off to the best start we've compiled all the information you'll need in this manual. As well as containing all operation guides we have also listed all safety checks and instructions. We advise all users to read and familiarise themselves with this information before operating the scooter. We also have online videos to help you familiarise yourself with Zinnia CarbonLite.

**PLEASE NOTE** - Don't throw away the box! You'll need this to return and for any warranty procedures. If you don't keep the box, a £50 fee will be charged for us to send you a new one.

## **CONTENTS**

1. Important Safety Measures
2. Dimensions
3. Repairs
4. Environment Protection
5. FAQs
6. Product Features
7. Folding & Unfolding Guide
8. Operating Instructions - Getting Started
9. Battery & Charging Information
10. Troubleshooting
11. Technical Specification
12. Warranty Exclusions

# 1. IMPORTANT SAFETY MEASURES

**WARNING: DO NOT TRY TO OPERATE THE SCOOTER BEFORE READING THROUGH THE SAFETY MEASURES.**

- **DO NOT lift the scooters from the handlebars.** If you damage the scooter lifting it like this you will void the warranty.
- The scooter is designed for one person use only.
- The product is equipped with a lithium-ion battery. Do not disassemble internal parts of the battery.
- This scooter is intended for use on pavements only. Do not use on roads.
- Speeds for driving on the pavement are capped by UK law at 6 km/h (4 mph). This is the pre-set maximum speed of the 'Slow' setting of your scooter **Do not use the other speed settings (medium / fast) unless on private property.**
- Do not drive up very sharp slopes. Do not drive over 300m on slopes with an incline above 9 degrees.
- The control system will cut off the power if the limited angle has been exceeded. If this happens restart the power.
- Do not operate when drinking alcohol. Avoid driving the scooter when fatigued or at night time
- Switch off the power when not in use. Do not use the scooter as a seat on a moving vehicle.
- The scooter can be safely used in parks and on grass, but avoid driving on ground that is so uneven as to destabilise the scooter.
- Avoid driving on pebbles, stones, soil and gravel surfaces. If you are unsure about the condition of the ground then we recommend you do not drive on it
- Electric scooters can go over obstacles up to the ground clearance of that scooter. Reduce speed when going over obstacles (such as speed bumps)
- Slow down when turning, going up a slope, over an obstacle and driving over rugged rock or soft ground.

# 2. ITEM DIMENSIONS



LENGTH	WIDTH	GROUND CLEARANCE	BACK HEIGHT	HANDLEBAR HEIGHT (MIN)	HANDLEBAR HEIGHT (MAX)
93 CM / 36 IN	49 CM / 19.2 IN	3.8 CM / 1.4 IN	83 CM / 32.6 IN	76.2 CM / 30 IN	96 CM / 37.7 IN
SEAT HEIGHT (OFF GROUND)	SEAT HEIGHT (OFF FOOTREST)	FOOTREST LENGTH	FOOTREST WIDTH	HANDLEBAR LENGTH	TYRE DIAMETER
53 CM / 20.8 IN	38 CM / 14 IN	47 CM / 18.5 IN	35 CM / 13.7 IN	36 CM / 14 IN	F: 6.3 IN R: 7 IN
SEAT WIDTH	SEAT LENGTH	ARMREST LENGTH	MAX CAPACITY	WEIGHT	RANGE
44 CM / 17 IN	40 CM / 15.7 IN	28 CM / 11 INCH	125KG / 19.7 STONE	19 KG (2.99 ST)	20 KM (12 MILES)

### **3. REPAIRS**

If your scooter needs a repair then please contact our office who will be able to help you. In order for your warranty to be valid all repairs must go via our Betty and Bertie office.

DON'T THROW AWAY THE BOX! A £50 fee will be charged for us to send you a new one if we need to collect the scooter for repair.

**Call Us: 0800 999 6606 OR Email Us: [info@bettyandbertie.com](mailto:info@bettyandbertie.com)**

### **4. ENVIRONMENT PROTECTION**

Please do not abandon an unwanted scooter and/or battery. Dispose of all such items responsibly with due regard for the environment. Your local authority will be able to advise if this is necessary.

### **5. FAQs**

#### **How do I claim back VAT?**

Purchase your scooter and give us a call or drop us an email and we can refund the VAT back to you if you can provide us with a reason for your VAT relief.

#### **How do I charge the battery?**

Remove the battery from the scooter and connect your charger to the port and plug the mains into the wall. Or use the adapter to charge the batteries while in use.

#### **How can I put this scooter in my car?**

Ensure the scooter is folded down and ensure to lift the scooter from the base as this will provide the most grip and distribute the weight evenly.

#### **Is this scooter waterproof?**

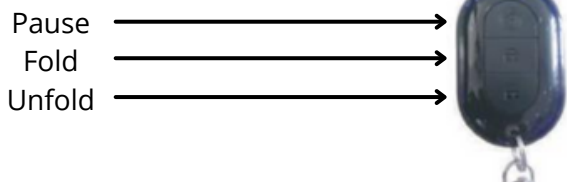
This scooter is not waterproof and we suggest drying it off with a cloth and removing the battery if in contact with heavy rain.

### **6. PRODUCT FEATURES**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
COLLAPSIBLE SEAT	REMOVABLE BATTERY	BRAKE LEVER	MUD GUARDS	ANTI TIP WHEELS
<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	
CONTROL PANEL	REMOVABLE ARMRESTS	HEIGHT ADJUSTMENT	PNEUMATIC TYRES	



#### **REMOTE CONTROL**



#### **HORN**

The beeping sound is activated when the horn button is pressed and held down.



#### **HANDLEBAR SET**

The handle bar set includes the Control Panel (pictured below with LCD display of battery power, speed, distance driven, temperature, key switch, speed controller and horn), the delta handle, and the directional control lever.

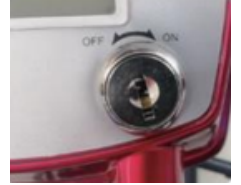
**Note:** The humidity of the surrounding environment can significantly affect operational function. Staying in low moisture surroundings during operation is highly recommended.



## POWER SWITCH

1. Power is on after the key is inserted and turned clockwise. The scooter is now ready to go.
2. Power is off if the key is turned anti-clockwise, and the scooter cannot be operated. Turn the power off with the key once the scooter has finished folding.

**Warning: The scooter will immediately stop if the power is switched off while driving, due to the electromagnetic braking system.**



## SPEED DIAL

Adjust your driving speed using the dial. With speed ranging from 0 to 6 km/h, turn towards the picture of a turtle to slow down, or towards the hare to speed up.

**Warning: Always keep the speed setting low when turning or reversing.**



## LCD DISPLAY

Battery power, voltage, mileage, speed and temperature are shown on the LCD screen while power is turned on.



## DIRECTIONAL CONTROL LEVER

1. Gently hold the delta handle with both hands.
2. Move the scooter forward by pulling the lever on the right with your fingers.
3. Move the scooter backwards by pulling the lever on the left.
4. A beeping sound will be emitted when the scooter moves backwards.
5. The control lever automatically moves to the centre position when released and the brake is then applied.



## TELESCOPIC HANDLE

To adjust the height of the steering column, pull up the plastic clipper, then push the clipper back down at the desired length.



## MANUAL MODE LEVER

Turning manual mode on and off can be done by switching the lever for manual or electric control. Manual mode can be used if the scooter has run out of battery, or if the key has been misplaced, and the scooter needs to be moved.

### Electric Control mode:

Pull back the manual brake lever to OFF for electric control. This will enable the electromagnetic brakes.

### Manual Control mode:

Push the manual mode lever forward to ON for manual control. This will disable the electromagnetic brakes.



**Note: If the manual mode lever is set to ON while the scooter is turned on, it will emit an audio alert. This is because the electromagnetic brakes are disabled, and the unit should not be driven in this condition.**

## **7. UNFOLDING AND FOLDING**

The scooter is designed to fold and unfold in three separate ways, which may be more or less suitable depending on the circumstances.

If your scooter is fitted with the optional armrests, on refolding the scooter using the remote, the front wheels may lift off the ground due to the additional weight.

To rectify this, push down on the front wheels once they are a few inches off the ground.

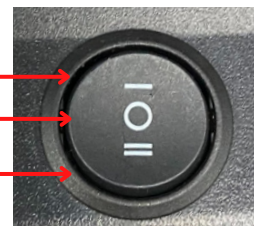
The ways of folding and unfolding your scooter are:

1. Automatic
2. Electric Switch

UNFOLD

KEY FOB

FOLD



### **ELECTRIC SWITCH**

This mode can be used if the remote key fob has been misplaced, is malfunctioning, or is out of battery. Use the switch located on the back of the scooter, by the batteries. Make sure the key is inserted and the power switch turned to ON before using the electric switch.

## **8. OPERATING INSTRUCTIONS – GETTING STARTED**

The scooter is designed to fold and unfold in three separate ways, which may be more or less suitable depending on the circumstances.

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The ways of folding and unfolding your scooter are:

1. Automatic
2. Electric Switch

### **BEFORE OPERATING**

1. Make sure the battery is fully charged.
2. Make sure you are familiar with the conditions of your planned route, including crowds, animals and potential obstacles.
3. Remember to make sure to keep away from uneven or slippery terrain.
4. Check to see if the key is fully inserted, and the brake lever switch is in the correct position (ON if folding / unfolding the scooter manually)
5. Remember to steer the scooter with both hands on the handlebar
6. Sound the horn to check it is working.

### **DRIVING**

1. Once the key has been inserted and the power switch turned to ON, unfold the scooter fully.
2. Check to make sure the seat is in the correct position and adjust the height of the steering column to a comfortable position.
3. Adjust the speed dial to the desired speed. (The speed dial sets the maximum speed the scooter will move at. The speed from standing still up to that maximum speed is controlled by increasing the pressure on the Control Lever).
4. Turn the key switch to ON, and place hands on the handlebar
5. Gently push the control lever with the thumb of your right hand
6. The brake will release automatically, and the scooter will move forward. Do not push the control lever too far or suddenly, as the speed will rapidly increase (up to the maximum speed set by you using the speed dial)
7. Turn the scooter right or left by turning the handlebars right or left accordingly.
8. The brake will be applied automatically when the directional control lever is in the centre position (or released) and the scooter will stop automatically.



## AFTER OPERATING

1. Make sure the scooter has come to a complete stop.
2. Turn off the power by turning the key switch to OFF
3. Carefully get off the scooter
4. Fold the scooter using one of the 3 choices for folding (by remote control, electric switch or manually). Then turn the power switch to OFF and remove the key.

**NOTE: When folding or unfolding, the scooter may tilt backwards, and the front wheels may rise off the floor. This is normal, and the scooter won't topple over – simply push the front wheels down to restore the normal position.**

## 9. BATTERY AND CHARGING INFORMATION

The scooter is designed for long, maintenance-free usage of the Lithium Ion battery, and to be charged with the 29.4V 2A charger provided.

- Fully charging the battery (charging for more than 12 hours) is good for the battery life.
- Charge it fully at least once every 3 months.
- If you won't be using your scooter for a long period of time, fully charge the battery and take it out of the scooter for storage.

### HOW TO CHARGE YOUR BATTERY:

#### IN USE CHARGING

1. Power off the scooter.
2. Open the cover of the charger cap, then insert the charger plug into the charge port of the scooter.
3. Connect the A/C power plug of the charger to a power outlet.
4. When the green light is displayed on the charger the charger is powered up.
5. Disconnect the charger when the battery is fully charged. Disconnect the AC power source before disconnecting the DC charging plug.
6. The charger will show a red light when the scooter is connected to the charger. If it is not on, please check if the power connection is set properly.
7. Full charge time is around 8 – 14 hours.



**WARNING: Make sure the charger plug is fully plugged into the charging port of the scooter.**

#### MANUALLY CHARGING

The batteries can be charged away from the scooter, or the charger can be plugged directly into the scooter with the batteries inserted.

To charge the scooter directly, connect the adaptor lead to the end of the charger and plug into the socket at the back of the scooter as seen above.



1. To remove the battery, grab the battery handle at the rear of the scooter, push forwards and pull upwards at the same time.
2. To replace the battery, place it back into the dock and push down until flat. Turn the key switch to the OFF position.
3. Then open the charging socket on the rear of the scooter and insert the plug.
4. To charge the battery directly, remove the battery from the dock and plug the converter cable (pictured below) into the miniature charging port on the battery (also pictured below), then plug the charging cable into the end of the converter cable, and into a power outlet.

## CHARGING LIGHTS

There are two LED lights on the charger. The red light indicates whether the battery is connected to a power outlet. The other light is the charging status indicator, which shows the battery is charging when red.

**Warning: The charger provided is the only one designed for the scooter's battery. We strongly suggest you do not use any other type of charger from other manufacturers.**

## HOW TO REACH MAXIMUM DRIVING DISTANCE

1. Make sure you have a full charge before driving
2. Try to avoid driving up steep hills, gravel or soft terrain
3. Only carry necessities to reduce the load of the scooter
4. Drive smoothly and without intermittent braking and sharp acceleration.

**Warning: Do not take the battery apart. Misuse of the battery that causes damage will void the warranty.**

**Note:** Initial battery performance may be reduced due to the effects of transportation, such as temperature variation. A high temperature causes battery power loss, while low temperatures lead to a longer charging time. It will take a few days for the battery to adapt to the environmental temperature before settling to normal levels after transportation.

## STEPS TO IMPROVE THE BATTERY PERFORMANCE

1. Make sure to charge the battery fully before first use. This should result in around 80% efficiency
2. Always charge the battery fully after using. Keep to lower speeds if using for the first time
3. Charging battery fully after the second time driving the scooter will increase efficiency to 90%.
4. After 4 or 5 full charges, the efficiency will reach 100%

## 10. TROUBLESHOOTING

The following key below indicates some errors that can be assessed through observation. If the problem persists, despite our advised resolution, consult a qualified individual.

NO. OF FLASHES	FAULT DESCRIPTION	POSSIBLE REASON
1	Low battery voltage or a battery connection problem	Check the battery connection, if there is no problem with the connection, try charging the battery
2	There is a problem with the motor connection	Check all connections between motor and controller
7	Directional control lever failure	Before turning on the power, make sure the control lever is in the neutral (parking) position.
9	Brake lever failure	Check the connection of the brake lever and the motor to ensure that the controller is connected securely

**Note:** Never apply oil or chemical substances for cleaning the plastic cover of the scooter. Wash with water to avoid damaging electrical components.

Always keep in a dry condition, especially the control panel, battery charger and all electric components. Dry any components which get wet before driving the scooter.



## **11.TECHNICAL SPECIFICATIONS**

<b>ITEM</b>	<b>PARAMETERS</b>
Dimensions (L x W x H)	(Unfolded): H: 83cm W: 49cm L: 93cm (Folded): 83cm W: 49cm L: 39cm
Handle bar height	54 - 76 cm
Net Weight (with armrests)	21kg
Gross Weight	19kg
Wheel Base	710mm
Wheel Diameter	F:16 / R:18 CM
Speed (1st Gear)	0-6 km (Adjustable)
Endurance	20 km
Braking mode	Electromagnetic
Load Capacity	140 kg
Height from the ground	83cm
Seat off-ground height	51cm
Maximum incline	8°±1°
Motor	24V, 180W
Charger	24V, 2A
Battery	Lithium
Colour	Red, Blue

## **12.WARRANTY EXCLUSIONS**

### **SCOPE OF WARRANTY DESCRIPTION**

Betty & Bertie will repair or replace the scooter or component when there is quality problem caused by manufacture under normal use if the problem is reported to them during the warranty period.

### **THE WARRANTY DOES NOT COVER YOUR SCOOTER IF ANY OF THE FOLLOWING APPLY:**

1. Failure to use and maintain in accordance with the correct operation methods in the instruction manual.
2. If spare parts are used from an unauthorised manufacturer.
3. Spare parts damage caused by accidents or incidents outside the control of Betty & Bertie.
4. Consumable parts such as tyres, bearings etc.
5. If the scooter is modified.

**Manufacturer and importer:** NSI (HQ) LTD,

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RH2 7QT

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