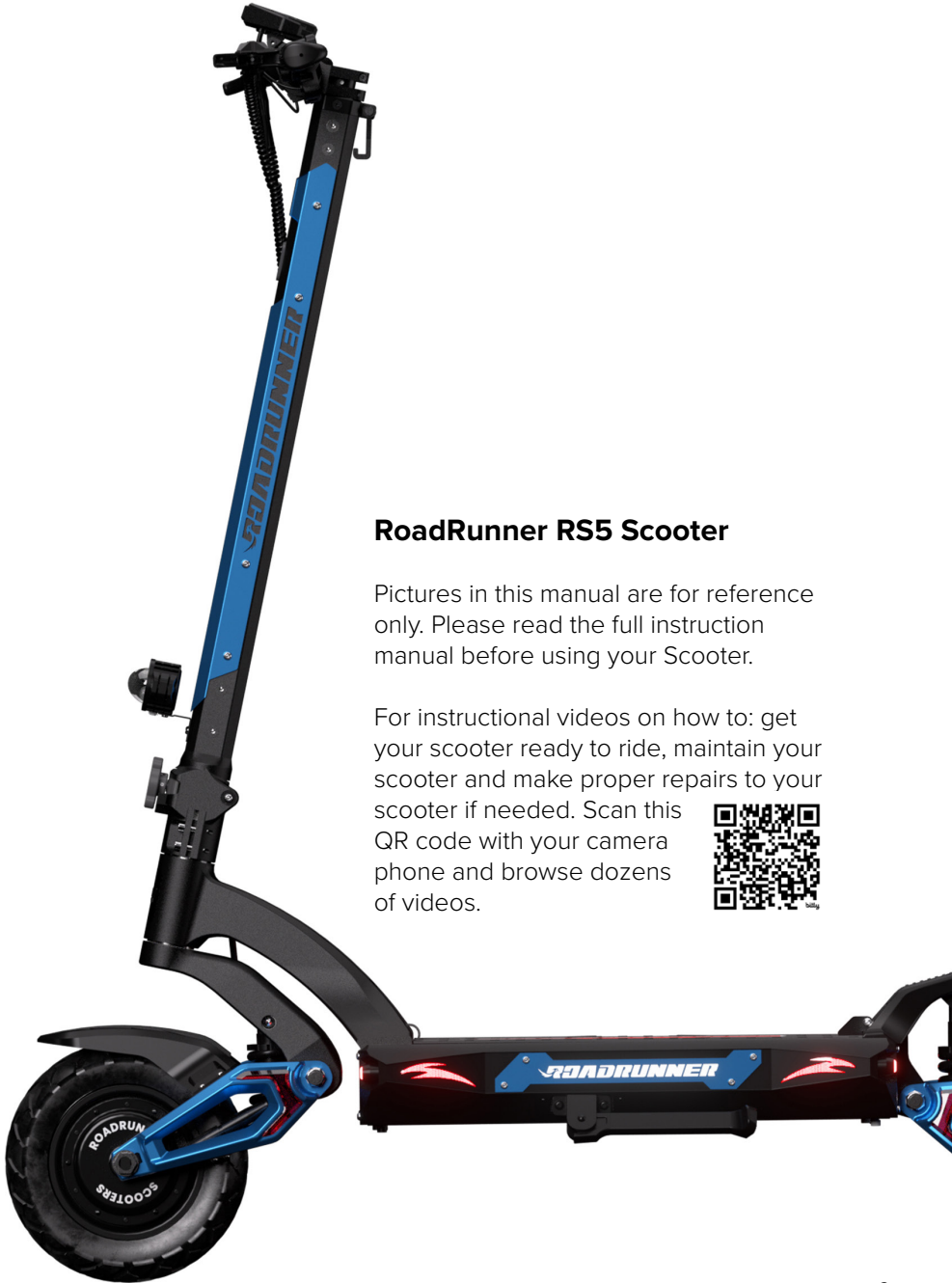




 **RS5 MAX**

ROADRUNNER RS5 ELECTRIC SCOOTER

Owner's Manual



RoadRunner RS5 Scooter

Pictures in this manual are for reference only. Please read the full instruction manual before using your Scooter.

For instructional videos on how to: get your scooter ready to ride, maintain your scooter and make proper repairs to your scooter if needed. Scan this QR code with your camera phone and browse dozens of videos.





ROADRUNNER RS5 ELECTRIC SCOOTER OWNER'S MANUAL

Congratulations on your purchase of the RoadRunner RS5 electric scooter!

This manual contains important information regarding the setup, operation, and maintenance of your scooter. Please read this manual carefully before using your scooter to ensure safe and proper operation.



Table of Contents

GETTING STARTED

- 5 What's in the Box
- 6-7 Scooter Specs

INSTALLATION + OPERATION

- 8 Charging the Scooter
- 9 Battery and Charger Information
- 10 Battery Installation
- 11-12 How to lock and fold the stem
- 13 Handlebar Installation
- 14 Handlebar Controls and Instruments
- 15 LCD Display
- 16 Multi-Function Control Module
- 17 Parameter Settings (P-Settings)
- 18 Operating Instructions
- 19 Error Codes

PERFORMANCE FEATURES + CARE INSTRUCTIONS

- 21
- 22-25 2-Piston NUTT Hydraulic Brakes
- 26-29
- 30 Safety Instructions
- 31 Warranty Policy
- 32 Contact Us



What's in the Box

- _____ **RS5 Scooter**
- _____ **Front and Rear Fenders**
- _____ **Scooter keys (2)**
- _____ **Decklid keys (2)**
- _____ **Allen Wrench Tool**
- _____



Scooter Specs

Product name	RoadRunner RS5 Electric Scooter
Product model	RS5
Folded Dimensions	51" (l) x 12" (w) x 24" (h)
Upright Dimensions	55" (l) x 12" (w) x 49" (h)
Deck Plate	20" x 9"
Deck to Handlebars	41"
Ground to Deck	10"
Weight	88 lbs (with battery installed) 70 lbs (with battery removed)
Max load	330 lbs
Max speed	Up to 50 MPH (depending on environment, climb, weight and driving habits)
Range: RS5 MAX	Up to 60 miles (depending on environment, climb, weight, and driving habits)
Max climb	32° incline



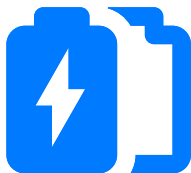
Scooter Specs

Suspension	Front and Rear Hydraulic Spring Shocks
Tire	10" x 3.5" Pneumatic Tubeless Hybrid Tire
IP Rating	IP67
Brake system	NUTT 2-Piston Hydraulic Disc Brakes
LED display	Headlights, cruise, brake, gear, and battery level indicator
Light system	LED Headlight, Rear LED Brake Lights, Front and Rear Running Lights
Turn Signals	Rear and Side Deck Turn Signals
Lithium battery: RS5 MAX	 52V 32ah LG Lithium Ion battery
Speed Controller	1 x 70 amp Sine Wave
Charger	100-240 V, 50/60Hz, 3.0A Output: 58.8V - - 2.0A



Charging the Scooter

USING CHARGING PORTS ON SIDE DECK OF SCOOTER



01

Plug the charger into a 120V power supply (wall outlet, power strip, etc.)

02

Open the waterproof cover on the charging port on the side deck, then plug the charger into the scooter.

03

A red light means the Scooter is charging; green means it is fully charged.

04

Cover the charging port once the charger is removed.

USING CHARGING PORTS ON BATTERY:

01

Open deck lid of scooter. Unplug the quick-connect plug attached to the battery and remove battery from scooter.

02

Plug the charger into a 120V power supply (wall outlet, power strip, etc.)

03

Open the waterproof cover on the charging port on the battery, then plug the charger into the charging port.

04

A red light means the Scooter is charging; green means it is fully charged.

05

Cover the charging port once the charger is removed.

For faster charging, a second charger (2A) can be used in the second charging port to charge the battery at twice the rate.
DO NOT USE TWO FAST CHARGERS AT THE SAME TIME!

Note: Dual fast (5A) charger support is available on the RS6 ULTRA and RX7 models.



Battery and Charger Information

Your RoadRunner RS5 scooter comes with an LG Lithium-ion battery and a smart charger.

Important: Only use the provided charger and battery with your RS5. Using non-approved chargers or batteries can cause damage, and RoadRunner is not responsible for such damages.

Maximum Voltage for full charge: 58.8 V

Minimum Voltage before battery dies: 42 V

WARNING:

NEVER LEAVE SCOOTER UNATTENDED
WHILE BATTERY IS CHARGING!

Charger Details:

The smart charger automatically stops charging and the indicator light turns green when the battery is fully charged. Charging takes approximately 9-10 hours with one charger or 4-5 hours with two chargers. If the battery fails to charge, please contact RoadRunner Scooters for assistance. Note that damage caused by weather or improper handling is not covered under warranty.



Battery Installation

01

Use deck lid keys to unlock and open the deck lid.

02

Slide the quick connect plug inside the deck towards the front of the scooter to make room for the battery.

03

Position the battery directly above the compartment, ensuring it is aligned horizontally. Lower the battery straight down without angling it.

04

Connect the quick connect plug to the battery.

05

Close and lock the deck lid.





How to lock and fold the stem

HOW TO FOLD THE SCOOTER:

01

Unscrew the folding knob on the front of the stem until the silver clasp is clear of the stem.

02

Release the black safety pin on the side of the stem.

03

Fold the stem down towards the deck.

04

Insert the folding hook into the opening in the footplate.

05

Push the hook towards the front of the scooter until it latches securely under the footplate.





How to fold and lock the stem

HOW TO UNFOLD THE SCOOTER:

01

Release the folding hook from the latch under the footplate.

02

Pull out the black safety pin on the side of the neck and raise the stem to an upright position.

03

Push the black safety pin back in to lock the stem in place.

04

Screw the folding knob into the stem, ensuring the metal clasp is fully engaged.

05

Verify that the stem is secure and wobble-free.



Handlebar Installation

HOW TO:

01

Using a number 4 hex key, remove all four bolts from the handlebar bracket and set them aside with the top bracket.

02

Place the handlebar on the lower bracket, centering it properly.

03

Align the top piece of the handlebar bracket over the handlebar and bottom bracket. Reinsert the four bolts and tighten them evenly.

04

Adjust the handlebar angle for easy access to the brakes, control module, and throttle. Ensure the handlebar is secure and does not rotate or shift.

05

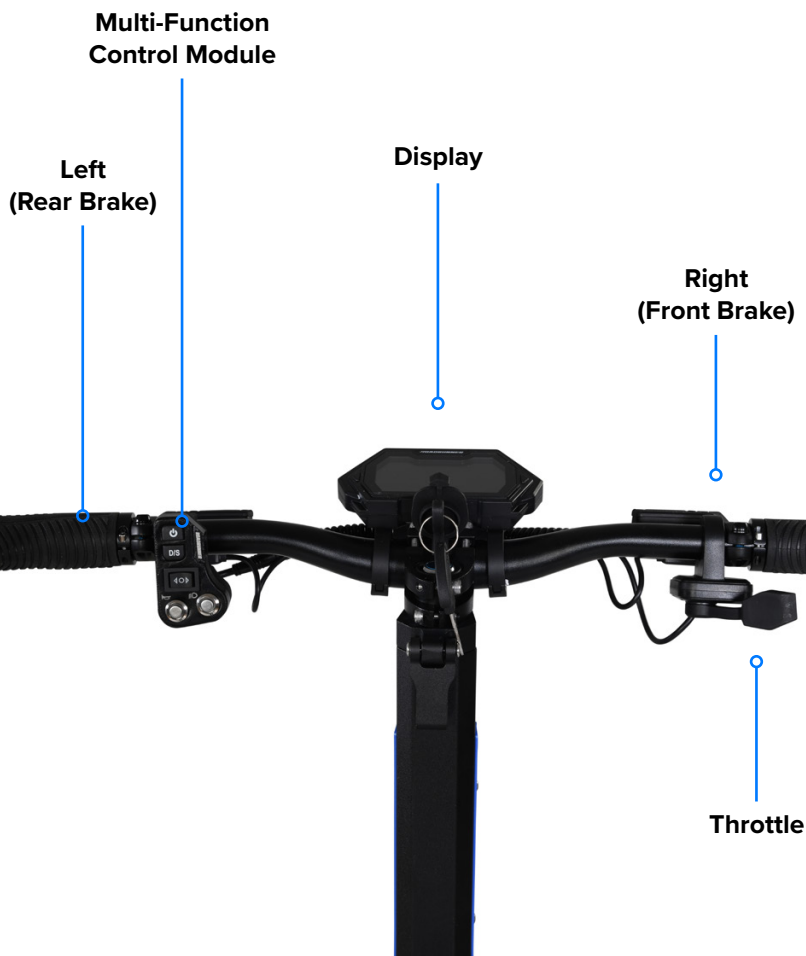
Adjust the display to the desired angle and tighten the display bracket.

06

Position the control module, brakes, and throttle to your preferred angles, then tighten all components securely.



Handlebar Controls + Instruments



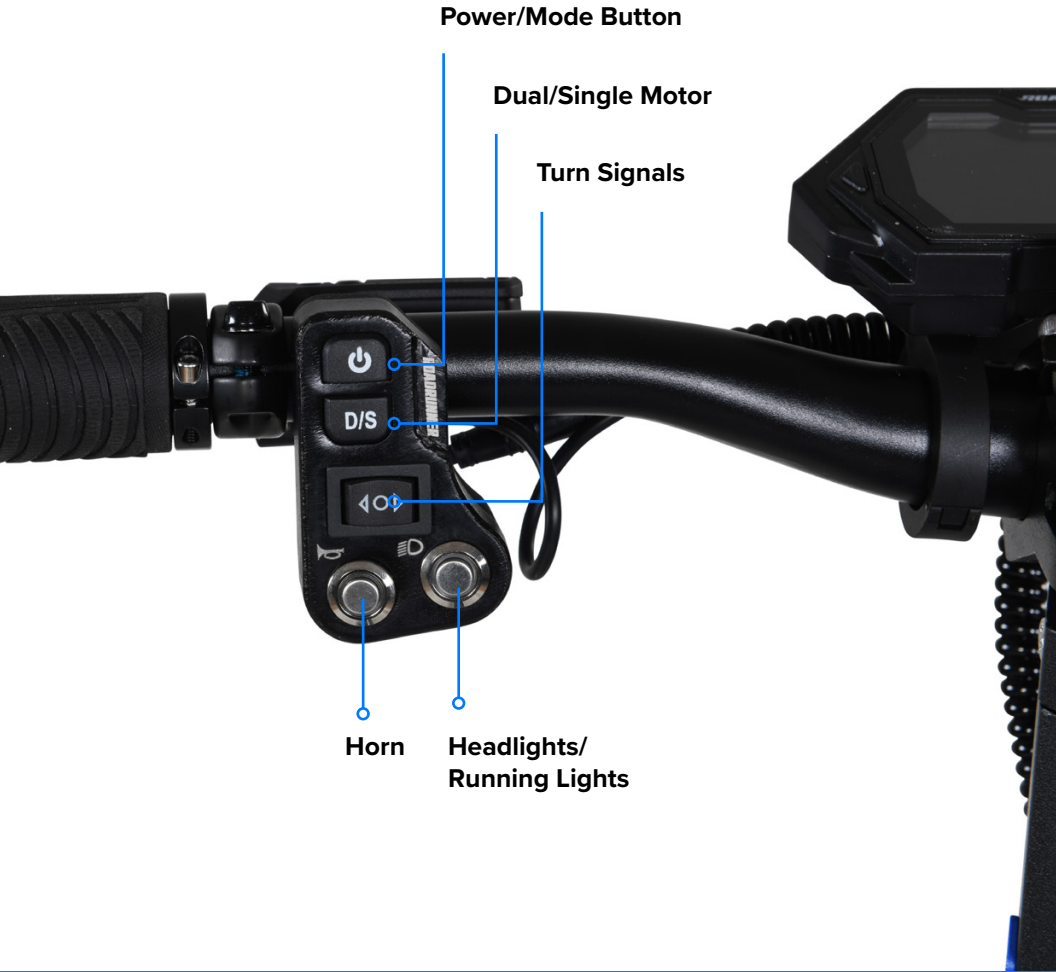


LCD Display





Multi-Function Control Module





Parameter Settings (P-Settings)

To make changes to any P-settings, press the power button quickly three times in row.

Once the selected values begin flashing, quickly press the power button just once to cycle through the options. Press the power button to exit the current P settings or to advance to the next P-setting. P-settings will automatically exit if there is no activity for 8 seconds.

Example: to modify KM vs. miles, press the power button quickly three times in row to enter P1. Once the selection flashes, press the power button once to select 0 (KM) and once more to select 1 (miles). Once you've made your selection, press the power button to proceed to the P2 setting.

P1	KM/Miles setting; default is miles
P2*	Voltage level setting (36V, 48V, 52V, 60V, 72V); default 52V. DO NOT CHANGE
P3*	Wheel diameter, in inches; default 10. DO NOT CHANGE
P4*	# of magnetic poles for speed measurement, 1-100 default 30. DO NOT CHANGE
P5	Cruise selection (0 means no cruise, 1 means cruising). default 0
P6	Zero startup (0) vs. non-zero startup (1) settings. When powering on, no icon will be displayed if zero startup; the display will show "NON" if zero startup. In non-zero startup mode, you will need to manually bring the scooter to 3 MPH and press the accelerator to start. default 0
P7	Speed limit setting, 1-100% default 100
P8	Sleep time setting, 1-60 minutes default 5
PA	Start strength setting, 1-5 (1 least starting power, 5 strongest) default 1
PB	Brake strength setting 1-5 (1 least stopping power, 5 strongest) default 1

Note: * Do not change P-settings: P2, P3, P4. These are preset factory settings and will disrupt the performance of your scooter if changed.



Operating Instructions

Power ON/OFF:

A: Turn your key to the right to turn on, turn your key to the left to turn off.

B: Long press the power button (~ approximately 1-2 second) to turn the LCD display on/off.

C: Press once quickly to switch gears (default is gear 1).

Gear Setting:

Press the button located on the throttle to switch gears.

GEAR 1: Slowest Speed

GEAR 2: Medium Speed

GEAR 3: Fastest Speed
(up to 50 mph)

Kick Start Mode:

The throttle system will work once the scooter reaches 3 MPH. Press the throttle smoothly to accelerate. Refer to P-6 setting on how to engage.

Headlights:

When the scooter is powered on, push the headlight button to turn on headlights, taillights, and sidelights. Push the headlight button to turn off the lights.

Cruise control:

When cruise control is turned on, it will automatically be activated when you reach a consistent speed. Release the thumb accelerator and the scooter will automatically move at the set speed. To cancel the cruise control, pull either brake lever and cruise control will automatically turn off.



Error Codes

E-001	Rear motor haul error - swap front and rear motor heads. If code still appears, replace the controller. If it does not appear, replace the motor.
E-003	Controller error - change the controller and try again
E-005	Voltage error - battery is low; charge the battery and try again
E-006	Receiver error - replace instrument/controller and try again
E-007	Sending error - replace instrument/controller and try again
E-009	Controller temperature error - Controller's temperature is too high
E-011	Front motor haul error - swap front and rear motor heads. If code still appears, replace the controller. If it does not appear, replace the motor.
E-013	Secondary controller failure - Change the controller and try again
E-017	Sub-controller receiving failure - replace instrument/controller and try again



Performance Features + Care Instructions



Frame, Stem, and Locking Mechanism

01

With safety as the paramount design objective, the aerospace grade 6061 single cast aluminum frame to ensure structural integrity of the RS5.

02

The RS5 has an innovative stem with a dual locking mechanism. The stem is crafted to ensure stability even at high velocities, effectively eliminating wobble for a secure riding experience.



2-Piston NUTT Hydraulic Brakes

01

Proper care and maintenance of the NUTT hydraulic brakes on the RoadRunner RS5 MAX electric scooters are essential for ensuring optimal braking performance and safety. Here are some detailed care and maintenance tips



2-Piston NUTT Hydraulic Brakes

01

Regular Maintenance

1. Brake Fluid Check: Check the brake fluid level regularly, ideally once a month.

Use the recommended type of brake fluid specified by the manufacturer, typically DOT 4 or DOT 5.1.

2. Brake Pad Inspection: Inspect the brake pads regularly for wear. Replace them if the thickness is less than 1.5mm or if they are visibly worn down.

Check for any debris or dirt on the brake pads and clean them with a soft brush or cloth.

3. Rotor Inspection: Inspect the brake rotors for any signs of warping, cracks, or excessive wear.

Ensure the rotors are clean and free of oil or grease.

4. Brake Lever Check: Check the brake levers for smooth operation. They should not feel spongy or too hard to pull.

Adjust the lever reach if necessary to ensure comfortable and effective braking.



2-Piston NUTT Hydraulic Brakes

02

Cleaning

Brake Components: Clean the brake calipers, rotors, and pads regularly to remove dirt and grime.

Use a brake cleaner or isopropyl alcohol to clean the brake components. Avoid using water or soap, which can leave residues

Avoid Contaminants: Keep the brake components free from oil, grease, and other contaminants.

If any brake parts get contaminated, clean them immediately with brake cleaner.

03

Usage Tips

Brake Bedding: After installing new brake pads or rotors, perform a bedding-in process. This involves gradually increasing the braking force to create a smooth and even surface on the pads and rotors.

Perform several slow stops to medium stops to allow the brakes to adjust properly.

Brake Application: Apply the brakes smoothly and evenly to avoid sudden stops, which can cause excessive wear and heat buildup.

Use both front and rear brakes simultaneously for balanced stopping power.



Storage

1. Environment:

Store the scooter in a cool, dry place away from direct sunlight and extreme temperatures.

Avoid storing the scooter in places with high humidity or where it can come into contact with chemicals.

2. Position:

If storing for an extended period, elevate the scooter to take the weight off the brakes.

Ensure the brake levers are not engaged during storage to prevent pressure build-up in the hydraulic system.

Repair and Replacement

1. Bleeding the Brakes:

Bleed the brakes if you notice a loss of braking power or if the brake lever feels spongy. This involves removing air bubbles from the hydraulic system.

Follow the manufacturer's instructions or seek professional help for bleeding the brakes.

2. Professional Service: For significant brake issues or if you're unsure about performing maintenance, seek professional help.

3. Replacement: Replace brake pads and rotors as needed based on wear and tear.

Use original or compatible parts recommended by the scooter manufacturer to ensure safety and performance.

By following these care and maintenance tips, you can ensure that the NUTT hydraulic brakes on your RoadRunner RS5 MAX electric scooters remain in top condition, providing reliable and safe braking performance.



Tubeless Tires

01

Caring for the tubeless tires on the RoadRunner RS5 MAX electric scooters involves several key steps to ensure their longevity and optimal performance. Here are the detailed care instructions:



Tubeless Tires

01

Regular Maintenance

1. Tire Pressure:

Check the tire pressure regularly. If the scooter is ridden more, check more often.

Maintain the recommended tire pressure of 30 PSI (207 kPa), or the pressure listed on the tire sidewall.

Use a reliable pressure gauge to check and a suitable pump to inflate if needed.

2. Tire Inspection:

Inspect the tires for any signs of wear, damage, or punctures before and after each ride.

Look for cuts, embedded objects, or cracks on the tire surface and sidewalls.



Tubeless Tires

02

Cleaning

Keep the tires clean by washing them with water and mild soap.

Avoid using harsh chemicals or solvents that could damage the tire material.

03

Usage Tips

1. Riding Style:

Avoid aggressive riding, such as sudden stops, fast accelerations, and sharp turns, which can wear out the tires more quickly.

Ride on smooth surfaces whenever possible to minimize wear and tear.

2. Load Capacity:

Do not exceed the maximum load capacity of the scooter as it can put extra strain on the tires and lead to premature wear or damage.

3. Avoid Hazards:

Avoid riding over sharp objects, potholes, and rough terrain to prevent punctures and damage.

If you must ride over such obstacles, do so carefully and slowly.



Storage

1. Environment:

Store the scooter in a cool, dry place away from direct sunlight and extreme temperatures.

Avoid storing the scooter in places with high humidity or where it can come into contact with chemicals.

Repair and Replacement

1. Puncture Repair:

For minor punctures, use a tubeless tire repair kit to patch the hole.

Follow the repair kit instructions carefully to ensure a proper seal.

2. Professional Service:

For significant damage or if you're unsure about repairing a puncture, seek professional help.

Regularly have the tires checked by a professional to ensure they are in good condition.

3. Replacement:

Replace the tires when the tread depth is low, or if there are irreparable damages.

Use tires recommended by the scooter manufacturer to ensure compatibility and safety.

By following these care instructions, you can help extend the life of your tubeless tires and maintain the performance of your RoadRunner RS5 MAX electric scooters.

TECHNICAL SPECIFICATIONS



RS5 MAX

MOTOR

2800W (1400×2) Brushless Dual Drive

SPEED CONTROLLER

One Sine Wave controller per motor

TOP SPEED

Up to 50 mph (80 km/h)

MAX RANGE

Up to 60 miles (97 km)

BATTERY

52V nominal (58.8V full charge)

32Ah · 18650 LG · removable

CHARGING PORTS

2 ports (1× 2A charger included)

TIRES

10×3 Multi-Terrain Nylon

SUSPENSION

KKE Hydraulic Spring Shocks, front & rear

BRAKES

NUTT 2-Piston Hydraulic Disc

AMBIENT LIGHTING

Side lights, lower front deck light

FUNCTIONAL LIGHTING

LED headlights, brake light, turn signals

DISPLAY

TFT Digital LCD

SHIPPING WEIGHT

105 lb (48 kg)

SHIPPING DIMENSIONS

52" (L) × 12" (W) × 25" (H)

LOW-VOLTAGE PROTECTION

42V

WEIGHT

88 lb (40 kg)

RIDER CAPACITY

330 lb (150 kg)

FOLDED DIMENSIONS

50" (L) × 9" (W) × 24" (H)

UPRIGHT DIMENSIONS

50" (L) × 9" (W) × 49" (H)

CLIMBING ANGLE

32° incline

WATER RATING

IP67

COLORS

Sapphire Blue, Onyx Gray



! ABOUT VOLTAGE

Batteries are identified by their nominal voltage. A fully charged battery measures higher — this is normal. 52V=58.8V · 60V=67.2V · 72V=84.0V fully charged. The BMS prevents over-charge and over-discharge.

! DUAL MOTOR OPERATION

Engineered to run both motors in normal riding. Extended single-motor use loads one motor and controller unevenly (heat + accelerated wear). Use Dual Motor Mode whenever practical.

✓ BATTERY PROTECTION

The BMS protects against over-charge, over-discharge, over-current and short circuit. At minimum safe voltage, power is reduced or shut off. Always charge with the supplied charger, never modify or bypass the BMS.



Safety Instructions

- This scooter is for use by one adult rider at a time.
- The RS5 is designed for experienced riders only.
- When riding, wear safety gear including a helmet.
- Always keep both hands on the handlebar and both feet on your scooter while riding.
- Do not ride your scooter anywhere unsafe or illegal.
- Practice riding in an open space first, and only ride on the road once you're comfortable and competent.
- Always use lights when riding in dark conditions.
- Please ride slowly if you encounter an uneven surface or poor road conditions.
- Do not ride on a slippery surface (i.e. ice, excessive water, and oil)
- Do not exceed the weight limit of 330 lbs.
- Avoid storing your scooter in extremely high or low temperatures, and do not store it near flammable items.
- Do not immerse your scooter in water higher than 1/2".
- Avoid riding in extreme weather conditions such as heavy rain, snow, and high winds.
- Avoid potholes.
- Always ride in accordance with local traffic laws and regulations.



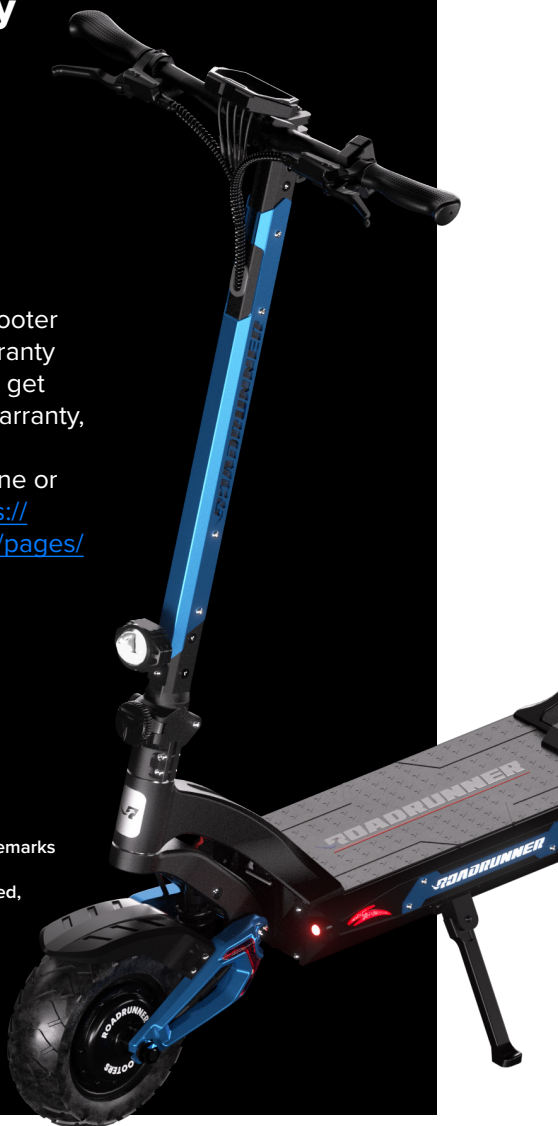
Warranty Policy



The RoadRunner RS5 Scooter comes with a limited warranty that lasts for one year. To get more details about the warranty, scan the QR Code below using a camera on a phone or visit our website at: <https://roadrunnerscooters.com/pages/warranty-policy>

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Contact Us

Product Support

Need technical or mechanical assistance
with your RoadRunner Scooter?

<https://roadrunnerscooters.com/pages/contact-us>

Phone:

720.664.4456

Address:

2337 Arapahoe St. Suite 105 Denver, CO 80205



RS5MAX

ROADRUNNER RS5 ELECTRIC SCOOTER

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