



R1 Winter Driving Tips



RIVIAN

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Symbols Used in This Guide

The following are the meanings of symbols used in this guide.



CAUTION

Risk of

- damage to vehicle or property
- data disruption
- voiding warranty

IMPORTANT

Instructions to successfully complete a task

NOTE

Useful information

Overview

To get the most out of your Rivian vehicle during wintertime, it may be helpful to understand how the vehicle's key systems—Drive, Thermal, and Energy—work together to perform vital functions in cold weather conditions.

How Your Rivian Vehicle Operates

Your vehicle relies on three interdependent systems to optimize performance year-round.





- **Drive System:** Essential for movement. It includes the motors (to generate and regenerate mechanical power), inverters (to regulate electrical power flow), and braking system (to manage deceleration). Beyond movement, the drive system closely monitors traction and vehicle stability to maximize driving control on slippery roads.
- **Thermal Management System:** Responsible for cabin climate comfort, as well as battery and drive system temperature regulation. It heats and cools the cabin air and surfaces (seats, steering wheel) while maintaining the battery and drive system at optimal operating temperatures. It efficiently transfers heat throughout the vehicle to minimize energy consumption.
- **Energy Management System:** Vital for the flow of energy. It manages the battery, charging system, and various electrical components that consume energy within the vehicle. Major energy consumers include the drive system, thermal management system, and features such as the power outlets and the Gear Guard security system. Look at the Energy app on the center display to see where energy is being consumed while the vehicle is parked, moving, or charging.

IMPORTANT

Rivian software optimizes these systems automatically, but following the best practices in this guide will help you enhance comfort, efficiency, and range in challenging conditions.

Before You Drive

Preparation is key to safety and comfort.

- **Precondition Manually:** If you don't have a Climate Schedule set up, then use the Rivian mobile app to remotely turn on the cabin climate system, including defrost, the heated steering wheel, and heated seats before you drive the vehicle.
- **Clear Snow and Ice:** Remove snow from the windshield, windows, roof, hood, and lights.
- **Turn on Defrost:** Choose **Front Defrost**  on the center display or the Climate section of the Rivian mobile app to melt ice or snow buildup from the windshield and front wipers. Choose **Rear Defrost**  to heat the back window and side mirrors.
- **Access Door Handles:** For instructions on how to remove ice from the door handles, go to the **Owner's Guide**  on the center display or on the [website](#). Search for **unfreeze**.
- **Check Tires:** Ensure tires are inflated to the recommended pressures, as cold weather conditions typically lower tire pressure. Verify you have adequate tread depth or consider dedicated winter tires for improved traction. For more information about snow traction devices, go to the **Owner's Guide**  on the center display or on the [website](#). Search for **traction**.
- **Maintain an Emergency Kit:** Keep winter essentials, such as a blanket, flashlight, first-aid supplies, and a shovel, in the vehicle.

Maximizing Vehicle Energy and Range

The battery in your vehicle may temporarily lose energy and available range during the winter due to cold temperatures.

NOTE

Effects caused by cold temperatures are temporary, and energy is restored as the battery warms up.

When the range decreases due to the battery becoming cold:

- The vehicle and the Rivian mobile app notify you ahead of time when your vehicle is most susceptible to range loss.
- The battery or energy bar graphic uses blue shading to represent the range decrease due to cold temperatures. You can view this on the driver display and in the Energy app on the center display.

NOTE

The battery state of charge isn't actually decreased; instead, some of the energy—or range—isn't available.

When you prepare your vehicle for DC fast charging, the battery warms up and regains the available range. Sometimes range is also restored when you drive your vehicle.

Best Practices to Maintain Range in Cold Weather

We recommend the following:

- **Plug In:** When possible, keep your vehicle plugged in. This replenishes energy and allows the battery to condition itself, reducing range loss.

While charging at home, you may notice that the thermal system uses some of the energy to warm the battery and regain range. If you plan to leave your vehicle for an extended period of time, we recommend that you keep it plugged into a charger and set the slider to the [recommended limit for your battery type](#).

- **Use a Climate Schedule:** If you set a departure time in the Rivian mobile app or on the center display, and you have your vehicle plugged in, you ensure the cabin climate is comfortable and the battery is prepared before you drive. When you set up the Climate Schedule, turn on **Energy Usage** to draw power from a charger to preserve its driving range.

IMPORTANT

If you cannot plug in your vehicle and you expect cold weather conditions while you are away, we recommend that you leave your vehicle with a minimum battery charge level between 50% and 70% and plan for some range to be unavailable when you return.

Driving in Winter Conditions

Winter driving has its own set of challenges. When you drive in cold weather conditions, consider the following:







Range and Energy Management

- **Monitor Energy Usage:** Use the Energy app to monitor energy flow while the vehicle is parked, moving, or charging. In a cold environment, your vehicle works harder to keep you and the vehicle systems at the optimal temperatures, so you may see higher than typical energy consumption.
- **Use Navigation:** Always enter your destination into the Navigation app, even for familiar routes. The trip planning feature estimates range based on the weather and elevation. It allows you to set a desired arrival range, and it provides an accurate prediction of your battery status upon arrival after factoring in the driving conditions.


NOTE

Your vehicle automatically manages the heat within it. It intelligently regulates and circulates heat generated by the drive system to help warm up its battery and cabin efficiently while you drive your vehicle.

Cabin Comfort and Visibility

- **Use Auto Mode for Climate:** This maintains a comfortable cabin as outside conditions change. Auto mode also detects interior fogging and automatically defogs the windshield and windows.
- **Turn on Defrost:** Choose **Front Defrost**  on the center display or the Climate section of the Rivian mobile app to melt ice or snow buildup on the windshield and front wipers. Choose **Rear Defrost**  to heat the back window and side mirrors.
- **Heat Vehicle Surfaces:** Keep your vehicle seats and steering wheel warm.
 - Choose **Seat Climate**  and then **Heat**  on the center display or the Climate section in the Rivian mobile app.
 - Choose **Seat Climate**  and then **Heat Steering Wheel**  on the center display or the Climate section in the Rivian mobile app.

Drivability and Safety

- **Use Snow Mode:** When you drive on snowy or icy surfaces, go to **Drive Modes**  on the center display, and choose **Snow** mode. Snow mode helps to maximize confidence and control on roads with snow, slush, or ice. A relaxed pedal response and reduced regenerative braking allow for more precise control on low-grip surfaces.
- **Pay Attention to Road Conditions:** Road surfaces and traction can change quickly. Reduced traction affects acceleration and deceleration. Drive cautiously and avoid sudden changes in steering or speed.
- **Increase Following Distance:** Increase your following distance to account for longer stopping times on slippery roads.

Charging Guidelines for Your Battery

Different Rivian vehicles use different battery chemistries that require specific maintenance habits for longevity and performance.

Large and Max Batteries

Any R1S or R1T, Gen 1 or Gen 2 vehicle with a Large or Max battery uses an NCA (Nickel Cobalt Aluminum) battery.

Recommendation: Maintain a daily state of charge between 50% and 70%.

IMPORTANT

Only charge to higher levels, up to 100%, for long-distance travel.

Standard Batteries


Any R1S or R1T, Gen 2 vehicle with a Standard battery uses an LFP (Lithium Iron Phosphate) battery.

Recommendation: Periodically charge to 100%. This ensures accurate range estimation, optimal charging speed, and calibrated regenerative braking performance.

IMPORTANT

Your vehicle automatically sets the charge limit to 100% and lets you know if you should charge to 100% to calibrate your battery and improve its performance.

Resources

For more information about operating your vehicle, go to the **Owner's Guide**  on the center display or on the website:

- [R1S Owner's Guide](#)
- [R1T Owner's Guide](#)

Customer Service

Still need help? Connect with us.

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Customer Engagement Center

(888) RIVIAN1 / (888) 748-4261
rivian.com/support/contact

Insurance

(888) RIVIAN8 / (888) 748-4268

Roadside Assistance 24/7

(844) RIVIAN4 / (844) 748-4264

Service 24/7

(855) RIVIAN5 / (855) 748-4265
rivian.com/support/service