

# Power Managment 2024-25 Documentation

Jacob Wilde

Last Modified: April 3, 2025

# Contents

<b>1</b>	<b>User Manual</b>	<b>3</b>
1.1	Turning Vehicle ON . . . . .	3
1.2	Turning Vehicle OFF . . . . .	3
1.3	Charging the Vehicle . . . . .	3
<b>2</b>	<b>Implementation Details</b>	<b>5</b>
2.1	Charging System . . . . .	5

# 1 User Manual

## 1.1 Turning Vehicle ON

Turning the vehicle on can be done with the following steps:

1. Make sure the charger is unplugged
2. Make sure the charging breaker is in the "OFF" position
3. Switch the battery pack breaker from "OFF" to "ON"

### Extra Info

- If the charging breaker is left on and the charger is connected to the car can attempt to draw a higher current than the charger is rated for. **This should trip the charging breaker.**
- If the charging breaker is left on and the charger unplugged the exposed terminals on the charging port will be energized by the battery pack.

## 1.2 Turning Vehicle OFF

Turning the vehicle off can be done with the following steps:

1. Switch the battery pack breaker from "ON" to "OFF"

## 1.3 Charging the Vehicle

Charging the vehicle can be done with the following steps:

1. Make sure the battery pack breaker is in the "OFF" position
2. Connect the charger to the charging port
3. Switch the charging breaker from "OFF" to "ON"

### **Extra Info**

- The charger used is 60V 3A SLA Charger from Emmo
- The charging breaker used is 80V DC 5A Breaker
- Any charger designed to charge a 60V (5 cell) SLA Battery pack can be used but the charging breaker might have to be replaced if the new charger is a higher amperage

## **2 Implementation Details**

### **2.1 Charging System**

The charging system consists of the following partsq