

LEFANEV PCD041-32A-NEMA14-50

LEFANEV 32 Amp EV Charger Level 2 Instruction Manual

Model: PCD041-32A-NEMA14-50 | Brand: LEFANEV

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation of your LEFANEV 32 Amp EV Charger Level 2. This portable electric vehicle charging station is designed for use with electric and hybrid vehicles that comply with the SAE J1772 standard, utilizing a NEMA 14-50 outlet for power supply. Please read this manual thoroughly before initial use and retain it for future reference.

2. SAFETY INFORMATION

To ensure safe operation and prevent damage, observe the following precautions:

- **Electrical Safety:** Always connect the charger to a NEMA 14-50 outlet that is properly installed and grounded by a qualified electrician. Ensure the outlet can safely support continuous 32 Amp draw and temperatures within 65 degrees Celsius.
- **Protection Features:** The charger incorporates multiple safety measures including overvoltage, overcurrent, battery leakage, and over-temperature protection, along with IP66 waterproof rating.
- **Physical Protection:** The charging station is constructed with high-strength ABS material to resist physical impact.
- **Environmental Conditions:** Avoid exposing the charger to extreme temperatures, direct sunlight for prolonged periods, or heavy rain/snow when not in use.
- **Maintenance:** Do not attempt to open, disassemble, repair, or modify the charger. Contact customer support for assistance.

3. PRODUCT OVERVIEW

The LEFANEV 32 Amp EV Charger is a portable Level 2 charging solution. It features a control box with an LCD screen, a NEMA 14-50 plug for the power source, and an SAE J1772 connector for your electric vehicle.



Figure 3.1: Overview of the LEFANEV 32 Amp EV Charger components.

3.1 Control Box and LCD Screen

The control box houses the intelligent charging circuitry and features a large LCD screen to display real-time charging data, including actual charging voltage and current, kWh used, charging time, and charging device temperature.



Figure 3.2: Detailed view of the LCD screen on the control box.

3.2 NEMA 14-50 Plug

The charger is equipped with a NEMA 14-50 plug, designed to connect to a standard 240V NEMA 14-50 receptacle, commonly found in homes for appliances like electric ranges or RV hookups.

NEMA 14-50

Also known as “T-Slot”
Mates with a 14-50R Receptacle



You need a Nema 14-50 Outlet



Figure 3.3: NEMA 14-50 plug and compatible outlet.

3.3 SAE J1772 Connector

The vehicle connector adheres to the SAE J1772 standard, ensuring compatibility with most electric and hybrid vehicles (excluding electric motorcycles). It features silver plating for better conductivity and to prevent overheating.

SAE J1772



Figure 3.4: SAE J1772 vehicle connector.

4. SETUP

The LEFANEV 32 Amp EV Charger is designed for portable use. For optimal performance and safety, ensure your NEMA 14-50 outlet is installed by a certified electrician and meets all local electrical codes.

4.1 Installation

1. **Outlet Verification:** Confirm that you have a dedicated NEMA 14-50 outlet (240V, 50A circuit breaker recommended) in a suitable location, preferably indoors or in a sheltered outdoor area.
2. **Placement:** Position the control box in a location where the cable can comfortably reach your vehicle's charging port without tension or obstruction. Ensure adequate ventilation around the control box to prevent overheating.
3. **Mounting (Optional):** While portable, the control box can be mounted for convenience. Use appropriate hardware for your wall type.
4. **Power Connection:** Plug the NEMA 14-50 plug firmly into the dedicated NEMA 14-50 outlet.

APPLY TO E-VEHICLE



CHEVROLET VOLT,CITROEN C-ZERO,FISKER KARMA,FORD FOCUS ELECTRIC,FORD C-MAX ENERGI, MIA, MIA ELECTRIC VAN,MITSUBISHI-1 MIEV,MITSUBISHI OUTLANDER PHEV, NISSAN NV200 SE VAN,NISSAN LEAF, PEUGEOT ION, RENAULT FLUENCE,RENAULT KANGOO, SMITHS EDISON VAN,SMITHS NEWTON, TATA LNDICA VISTA EV, TOYOTA PRIUS, VAUXHALL AMPERA...

Figure 4.1: Charger connected to power and ready for use.

5. OPERATING INSTRUCTIONS

Follow these steps to charge your electric vehicle:

1. **Connect to Power:** Ensure the NEMA 14-50 plug is securely connected to the wall outlet. The charger's LCD screen should illuminate, indicating it is powered on.
2. **Connect to Vehicle:** Open your vehicle's charging port and firmly insert the SAE J1772 connector. Ensure a secure connection.
3. **Start Charging:** The charger will automatically initiate the charging process. The LCD screen will display real-time charging parameters.
4. **Monitor Charging:** Observe the LCD screen for charging status. The charger intelligently adjusts the current (typically 25-32A) based on the vehicle's acceptance.
5. **End Charging:** Once your vehicle is fully charged or you wish to stop, disconnect the SAE J1772 connector from your vehicle. The charger will cease operation.

Video 5.1: Demonstration of connecting and using the 32 Amp Level 2 Portable EV Charger with Nema 14-50 Plug.

6. MAINTENANCE

Proper maintenance ensures the longevity and safe operation of your EV charger:

- **Cleaning:** Regularly wipe the control box and cables with a dry, clean cloth. Avoid using harsh chemicals or abrasive materials.
- **Cable Inspection:** Periodically inspect the charging cable and connectors for any signs of wear, damage, or fraying. Do not use if damaged.
- **Storage:** When not in use, store the charger in a dry, clean, and secure location. Avoid coiling the cable too tightly.

7. TROUBLESHOOTING

If you encounter issues with your charger, refer to the following common problems and solutions:

- **Charger Not Powering On:** Ensure the NEMA 14-50 plug is fully inserted into the outlet and the circuit breaker is not tripped.
- **Charging Not Initiating:** Verify that the SAE J1772 connector is securely plugged into the vehicle's charging port. Check for any error messages on the LCD screen.
- **Overheating:** If the charger or outlet feels excessively hot, disconnect immediately. Ensure the outlet is rated for the charger's power draw and has adequate ventilation. The product notes that it is a high-power electrical appliance and will generate heat; use a qualified socket that supports temperatures within 65 degrees Celsius.
- **Error Codes:** Refer to the LCD screen for specific error codes. If an error persists, disconnect the charger and contact customer support.

8. SPECIFICATIONS

Feature	Specification
Brand	LEFANEV
Model	PCD041-32A-NEMA14-50
Amperage	32 Amps
Voltage	240 Volts (AC)
Wattage	7.68 KW
Plug Type	NEMA 14-50
Connector Type	SAE J1772
Cable Length	20 ft
Waterproof Rating	IP66
Item Weight	8.78 pounds
Product Dimensions	20.87 x 16.93 x 3.15 inches

9. COMPATIBILITY

The LEFANEV 32 Amp EV Charger is compatible with most electric and hybrid vehicles that adhere to the SAE J1772 charging standard. This includes a wide range of popular EV models.



Figure 9.1: Examples of compatible electric vehicle brands.

10. WARRANTY AND SUPPORT

For any product-related inquiries, technical support, or warranty claims, please contact LEFANEV customer service. Refer to your purchase documentation for specific warranty terms and contact information.

LEFANEV is committed to providing reliable and efficient charging solutions. All chargers undergo strict quality testing and certification to ensure safety and reliability.