Lectron LCHG-14-50-40A-BLK-US

Lectron Level 2 EV Charger User Manual

Model: LCHG-14-50-40A-BLK-US

1. Product Overview

The Lectron Level 2 EV Charger is designed for efficient and reliable charging of J1772 compatible electric vehicles. This portable charger delivers up to 240V and 40 Amps of input power, providing a 9.6 kW charging rate for fast charging at home or on the go. It features a NEMA 14-50 plug for direct connection to a 240V outlet and a 16-foot cable for flexible placement.

- **Fast Charging:** Up to 240V, 40 Amps, and 9.6 kW charging rate.
- **Safety Certified:** ETL, FCC, and Energy Star certified with overvoltage, overcurrent, and short circuit protection.
- **Durable Design:** IP65 rated for dust and water resistance.
- **Portable:** Long 16-foot cable for convenient use in various locations.
- **Universal Compatibility:** Compatible with all J1772 standard EVs.
- **LED Indicators:** For monitoring charging status and fault alerts.

Figure 1.1: The Lectron Level 2 EV Charger, showcasing its main components including the NEMA 14-50 plug, the control unit, and the J1772 charging connector.

2. Safety Information

Please read all safety instructions carefully before using the Lectron Level 2 EV Charger. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- Ensure the NEMA 14-50 outlet is properly installed and grounded by a qualified electrician.
- Do not use the charger if the cable or connector is damaged.
- Do not immerse the charger in water or other liquids.
- Keep children and pets away from the charging area.
- Avoid using extension cords with the charger.
- Operate the charger within its specified temperature range (-22°F to 122°F).

The Lectron Level 2 EV Charger is certified for safety and efficiency:

ETL Certified (UL2594 standard): Ensures compliance with North American safety standards.

FCC Certified: Confirms electromagnetic compatibility.

Energy Star Certified: Indicates energy efficiency.

IP65 Rated: Provides protection against dust ingress and low-pressure water jets.

Figure 2.1: The Lectron EV Charger highlighting its safety certifications, including ETL, FCC, and Energy Star, ensuring reliable and safe operation.

3. Setup Instructions

Setting up your Lectron Level 2 EV Charger is straightforward. Follow these steps for proper installation and initial use:

1. **Choose a Location:** Select a dry, well-ventilated area near a NEMA 14-50 outlet. Ensure the 16-foot cable can comfortably reach your vehicle's charging port without tension.
2. **Mounting (Optional):** The charger comes with a mounting bracket. Securely attach the bracket to a wall stud or suitable surface using appropriate hardware (not included). Hang the charger control unit on the mounted bracket.

3. **Connect to Power:** Insert the NEMA 14-50 plug firmly into a dedicated 240V NEMA 14-50 outlet. The charger's "Power" LED indicator should illuminate, typically red, indicating it is receiving power.
4. **Initial Check:** Observe the LED indicator lights on the control unit. Refer to the "Operating Instructions" section for the meaning of each light.

Figure 3.1: Detailed view of the NEMA 14-50 plug and J1772 connector, illustrating the charger's compatibility and power specifications.

4. Operating Instructions

Once the charger is set up and connected to power, follow these steps to charge your electric vehicle:

1. **Prepare Your Vehicle:** Ensure your vehicle is turned off and the charging port is accessible.
2. **Connect to Vehicle:** Grasp the J1772 connector firmly and insert it into your vehicle's charging port. You should hear a click, indicating a secure connection.
3. **Monitor Charging Status:** The LED indicator lights on the charger control unit will change to reflect the charging status.

- **Red (Power):** Indicates the charger is powered on.
- **Green (Connect):** Illuminates when the charger is successfully connected to the vehicle.
- **Blue (Charging):** Blinks or stays solid blue when active charging is in progress.
- **Yellow (Fault):** Indicates an error or fault condition. Refer to the Troubleshooting section.

4. **Charging Complete:** Once your vehicle's battery is fully charged, the charger will automatically stop charging. The "Charging" LED may turn off or change color depending on the vehicle's communication.
5. **Disconnect:** Press the release button on the J1772 connector and carefully pull it out from your vehicle's charging port. Disconnect the NEMA 14-50 plug from the wall outlet if you intend to store the charger.

Figure 4.1: Demonstrates the process of connecting the Lectron EV Charger to an electric vehicle, enabling fast charging up to 9.6 kW.

Figure 4.2: The Lectron EV Charger installed and actively charging an electric vehicle, illustrating its practical use in a home or garage setting.

5. Maintenance

Proper maintenance ensures the longevity and optimal performance of your Lectron Level 2 EV Charger.

Cleaning

- Always disconnect the charger from the power outlet before cleaning.
- Wipe the exterior of the charger and cables with a soft, damp cloth.
- Do not use abrasive cleaners, solvents, or harsh chemicals.
- Ensure all components are dry before reconnecting to power.

Storage

- When not in use, store the charger in a dry, clean, and cool place.

- Coil the cable neatly to prevent kinks or damage.
- Utilize the provided carrying case for protection during transport or storage.

Figure 5.1: The Lectron EV Charger neatly packed in its carrying case, demonstrating its portability and ease of storage in a vehicle's trunk.

Figure 5.2: A close-up of the Lectron EV Charger cable, illustrating its robust and high-grade material construction designed for durability.

6. Troubleshooting

If you encounter issues with your Lectron Level 2 EV Charger, refer to the table below for common problems and solutions.

Problem	Possible Cause	Solution
No Power (Red LED off)	Charger not plugged in, outlet issue, or power outage.	Ensure the NEMA 14-50 plug is fully inserted. Check the circuit breaker for the outlet. Verify power to the outlet with another device.
Charger connected but not charging (Blue LED off/not blinking)	Vehicle not ready to charge, J1772 connector not fully inserted, or vehicle communication error.	Ensure the vehicle is ready to accept charge. Re-insert the J1772 connector firmly. Check vehicle's dashboard for charging status or errors.

Problem	Possible Cause	Solution
Yellow Fault LED is on	Internal fault, overcurrent, overvoltage, or short circuit detected.	Disconnect the charger from both the vehicle and the power outlet. Wait 5 minutes, then reconnect. If the fault persists, contact customer support.
Slow Charging	Vehicle settings, or external factors affecting power delivery.	Check your vehicle's charging settings. Ensure no other high-power appliances are on the same circuit.

If the problem persists after attempting these solutions, please contact Lectron customer support for further assistance.

7. Specifications

Detailed technical specifications for the Lectron Level 2 EV Charger:

Specification	Value
Model Number	LCHG-14-50-40A-BLK-US
Rated Current	40 Amps
Rated Input/Output Voltage	240 Volts
Charging Rate	Up to 9.6 kW
Connector Type	J1772
Plug Type	NEMA 14-50
Cable Length	16 feet
Weatherproof Rating	IP65
Operating Temperature	-22°F to 122°F (-30°C to 50°C)
Item Weight	14.57 pounds
Certifications	ETL, FCC, Energy Star

8. Compatibility

The Lectron Level 2 EV Charger is designed to be universally compatible with all electric vehicles and plug-in hybrid vehicles that utilize the J1772 charging standard.

This includes, but is not limited to, vehicles from manufacturers such as:

- Mercedes
- BMW
- Ford
- Honda
- Hyundai
- Kia
- Porsche
- Nissan

- Chevy
- Rivian
- Volkswagen

Figure 8.1: Visual representation of various electric vehicle brands compatible with the J1772 standard, ensuring broad usability of the Lectron charger.

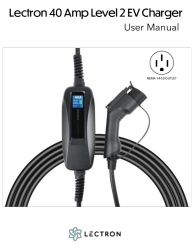
9. Warranty and Support

Lectron products are manufactured with high-quality materials and undergo rigorous testing. This product is covered by a manufacturer's warranty against defects in materials and workmanship.

For warranty claims, technical support, or any inquiries regarding your Lectron Level 2 EV Charger, please visit the official Lectron website or contact their customer service department. Keep your purchase receipt as proof of purchase for warranty purposes.

For more information, you may visit theLectron Store on Amazon.

Related Documents - LCHG-14-50-40A-BLK-US

	Lectron 32A Level 2 EV Charger User Manual User manual for the Lectron 32A Level 2 EV Charger. Provides essential safety information, step-by-step charging instructions, charging display overview, and technical specifications for electric vehicle charging.
	Lectron 40 Amp Level 2 EV Charger User Manual User manual for the Lectron 40 Amp Level 2 EV Charger, providing safety information, charging instructions, troubleshooting, and specifications.
	Lectron 40 Amp Portable EV Charger User Manual User manual for the Lectron 40 Amp Portable EV Charger, detailing safety precautions, installation steps, LED indicator meanings, charging procedures, troubleshooting tips, and technical specifications for electric vehicle charging.
	LECTRON Portable Level 2 EV Charger (32A) User Manual Comprehensive user manual for the LECTRON Portable Level 2 EV Charger (32A). Covers safety, setup, charging procedures, troubleshooting, and technical specifications for electric vehicle charging.
	Lectron 15A Level 1 Smart Portable EV Charger User Manual Comprehensive user manual for the Lectron 15A Level 1 Smart Portable EV Charger. Learn about setup, safety, app connectivity, charging, troubleshooting, and specifications for your electric vehicle.
	Lectron V-BOX 48A EV Charging Station User Manual User manual for the Lectron V-BOX 48A EV Charging Station, covering installation, operation, and safety information.