

Leviton 1450R

Leviton 50 Amp EV Charging Receptacle 1450R Instruction Manual

Model: 1450R

1. INTRODUCTION

This manual provides essential instructions for the safe installation, operation, and maintenance of your Leviton 50 Amp, 125/250 Volt, NEMA 14-50R Heavy Duty Flush Mount EV Charging Receptacle. This receptacle is designed for electric vehicle (EV) charging applications, offering durability and reliable performance.



Image: Angled front view of the Leviton 1450R receptacle, showing its robust construction and NEMA 14-50R configuration.

Important Safety Information:

- Installation must be performed by a qualified electrician in accordance with all national and local electrical codes.
- Always disconnect power at the circuit breaker before installing or servicing the receptacle.
- This device is intended for use with copper conductors only. Do not use with aluminum or copper-clad wiring.
- Ensure all terminal connections are tightened to the specified torque to prevent overheating.

2. PRODUCT FEATURES

- Designed specifically for plug-in EV charging applications.
- Constructed to withstand extended charge times and frequent insertions required by EV chargers.

- Ideal for homeowners preferring a plug-in EV charging unit over a hardwired application.
- Manufactured from durable, high-impact nylon for longevity.
- Features pressure-wire terminal connections to ensure full contact with conductors.

3. PACKAGE CONTENTS

- 1 x Leviton 50 Amp NEMA 14-50R Receptacle
- Mounting Screws
- Instruction Sheet (this manual)

4. TECHNICAL SPECIFICATIONS

Specification	Detail
Model Number	1450R
Amperage	50 Amp
Voltage	125/250 Volts
NEMA Configuration	14-50R
Poles/Wires	3-Pole, 4-Wire
Mounting Type	Flush Mount
Material	High-Impact Nylon, Steel
Color	Black
Dimensions	5 x 7.5 x 2.5 inches (approximate)
Item Weight	7.4 ounces (approximate)
Certification	NEMA, UL Listed (implied by product description and image)

5. INSTALLATION INSTRUCTIONS

5.1 Safety Precautions

- Turn OFF power at the main circuit breaker before beginning any electrical work. Verify power is off using a voltage tester.
- Wear appropriate personal protective equipment (PPE), including safety glasses and insulated gloves.
- Ensure the electrical box is properly grounded.
- Consult a qualified electrician if you are unsure about any part of the installation process.

5.2 Tools Required

- Screwdrivers (Phillips and flat-head)
- Wire strippers
- Torque screwdriver or wrench (recommended for terminal connections)
- Voltage tester

- Electrical tape

5.3 Wiring and Mounting Steps

1. **Prepare the Electrical Box:** Ensure you have a suitable electrical box (e.g., a 2-gang box) that can accommodate the receptacle's dimensions. The receptacle is designed for flush mounting.
2. **Strip Wires:** Carefully strip approximately 3/4 inch (19mm) of insulation from the ends of the copper conductors (two hot, one neutral, one ground).
3. **Connect Wires:** Refer to the wiring diagram below. Connect the wires to the corresponding terminals on the back of the receptacle.
 - **Green or Bare Copper Wire:** Connect to the Ground (G) terminal.
 - **White Wire:** Connect to the Neutral (W) terminal.
 - **Black Wires (Hot):** Connect to the two Hot (X and Y) terminals.



Image: Rear view of the Leviton 1450R receptacle, highlighting the G (Ground), W (Neutral), X (Hot), and Y (Hot)

terminals for wiring connections.

4. **Tighten Terminals:** Use a torque screwdriver or wrench to tighten the terminal screws to 75 in-lbs (8.5 Nm). Proper torque is crucial for preventing loose connections and potential overheating.
5. **Mount the Receptacle:** Carefully push the wired receptacle into the electrical box. Secure it to the box using the provided mounting screws.



Image: Front view of the Leviton 1450R receptacle, showing the NEMA 14-50R configuration and the EV symbol.

6. **Install Wall Plate (Not Included):** Attach a compatible wall plate (sold separately) over the receptacle.
7. **Restore Power:** Once installation is complete and verified, restore power at the circuit breaker.

6. OPERATION

The Leviton 1450R receptacle is designed for straightforward use with NEMA 14-50 compatible EV charging cables. Once installed and powered, it functions as a standard electrical outlet for high-power applications.

- **Connecting your EV Charger:** Insert the NEMA 14-50 plug of your EV charging cable firmly into the receptacle. Ensure a secure connection.
- **Charging:** Follow the instructions provided with your EV charging unit to initiate and monitor the charging process.
- **Disconnecting:** When charging is complete, or if you need to disconnect, firmly grasp the plug and pull it straight out from the receptacle. Avoid pulling by the cable.

***Note:** While designed for frequent use, it is recommended to avoid unnecessary plugging and unplugging to maintain optimal terminal contact over time.*

7. MAINTENANCE

Regular inspection and minimal maintenance will ensure the longevity and safe operation of your Leviton 1450R receptacle.

- **Periodic Inspection:** Periodically inspect the receptacle for any signs of damage, discoloration, or loose connections. If any issues are observed, disconnect power and consult a qualified electrician.
- **Cleaning:** Ensure power is OFF before cleaning. Wipe the surface of the receptacle with a dry, soft cloth. Do not use abrasive cleaners or solvents.
- **Temperature Monitoring:** During extended charging sessions, occasionally check the receptacle and plug for excessive heat. While some warmth is normal, excessive heat may indicate a problem. If you detect excessive heat, discontinue use and consult an electrician.

8. TROUBLESHOOTING

This section addresses common issues you might encounter. For problems not listed here, contact Leviton customer support or a qualified electrician.

Problem	Possible Cause	Solution
No power to the receptacle.	Circuit breaker tripped; loose wiring connection.	Check and reset the circuit breaker. If issue persists, disconnect power and inspect wiring connections (consult electrician).
Receptacle or plug feels excessively hot during charging.	Loose terminal connections; undersized wiring; faulty EV charger plug.	Immediately discontinue use. Disconnect power and have a qualified electrician inspect all connections and wiring. Ensure the EV charger plug is in good condition.
EV charger does not recognize the connection.	Plug not fully inserted; issue with EV charger.	Ensure the EV charger plug is fully and securely inserted. Test the EV charger with another compatible outlet if possible, or consult the EV charger's manual.

9. WARRANTY AND SUPPORT

Leviton products are manufactured to high-quality standards and are backed by a limited warranty. For specific warranty details, product support, or technical assistance, please visit the official Leviton website or contact their customer service department.

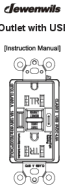

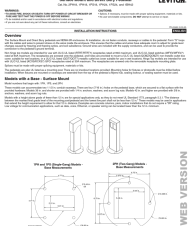
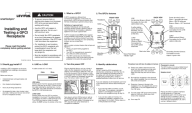


Leviton Customer Support:

- Website: www.leviton.com
- Phone: Refer to the website for regional contact numbers.

Please have your product model number (1450R) and date of purchase available when contacting support.

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Related Documents - 1450R

 <p>Leviton GFCI Outlet with USB Ports (Instruction Manual)</p> <p>Please pay attention to the warning signs. Read the instructions with caution before operating and use it properly.</p> <p>1450R</p>	<p>Leviton GFCI Outlet with USB Ports Installation and Operation Manual</p> <p>Comprehensive guide for installing and operating Leviton GFCI Outlets with USB Ports, including wiring instructions, safety warnings, testing procedures, and warranty information.</p>
	<p>Installing and Testing Leviton Smart GFCI Outlet: A Comprehensive Guide</p> <p>Step-by-step instructions for installing and testing Leviton Smart GFCI outlets (models D2GF1, D2GF2). Learn about GFCI functionality, wiring, troubleshooting, and safety precautions.</p>
 <p>Leviton Surface Mount and Direct Bury Pedestal Installation Instructions</p> <p>WEB VERSION</p>	<p>Leviton Surface Mount and Direct Bury Pedestal Installation Instructions</p> <p>Installation guide for Leviton Surface Mount and Direct Bury Pedestals, including model numbers 2PH18, 1PH18, 1PS18, 1PH24, 1PS24, and 1BH42. Covers warnings, cautions, overview, surface mount, and direct bury installation.</p>
	<p>Leviton SmartlockPro GFCI Receptacle Installation and Testing Guide</p> <p>Comprehensive guide to installing and testing Leviton SmartlockPro Ground Fault Circuit Interrupter (GFCI) receptacles. Covers safety precautions, wiring, troubleshooting, and product features.</p>
	<p>Leviton GFCI Receptacle Installation and Testing Guide</p> <p>A comprehensive guide on how to install and test a Leviton SmartLock Pro GFCI Receptacle, including wiring instructions, safety precautions, and troubleshooting tips.</p>
	<p>My Leviton App Guide: Control Your Smart Home Devices</p> <p>Explore the My Leviton App Guide to easily enroll, integrate, and customize your Decora Smart Wi-Fi devices and Leviton Load Center with Smart Breakers for seamless smart home control.</p>