# Level 2 Electric Vehicle Charging Station

# Cat. No. EVB32

**User Guide** 

#### WARNINGS AND CAUTIONS:

- Carefully read these instructions and the charging instructions in your vehicle owner's manual before charging your electric vehicle. FAILURE TO DO SO CAN RESULT IN PROPERTY DAMAGE, INJURY OR DEATH.
- The Charging Station should be installed by an electrician and used in accordance with electrical codes and regulations.
- **DO NOT** use an extension cord to provide power to the Charging Station.
- DO NOT operate the Charging Station with a visibly damaged AC Receptacle, AC Supply Cord/Plug or Charge Cord/Connector. Inspect equipment before each use. If any damage is detected, replace the equipment or contact a Customer Service Representative.

### NOTE FROM THE MANUFACTURER

This user guide includes the latest information at the time of printing. Leviton reserves the right to make changes to this product without further notice. Changes or modifications to this product by other than an authorized service provider could void the product warranty. If you have questions about the use of this product, contact your Customer Service Representative (refer to the Customer Support section located in this user guide) or visit www.leviton.com/evrgreen.

# ELECTRIC VEHICLE COMPATIBILITY

The Level 2 Electric Vehicle Charging Station is listed by Underwriters Laboratories (UL) under Electric Vehicle Supply Equipment (EVSE). The compact physical design of your Charging Station takes up a minimum amount of wall space, providing the greatest flexibility for mounting locations. This device incorporates multiple levels of safety for the user, the vehicle and the charging equipment. It conforms to all industry standards and recommended practices.

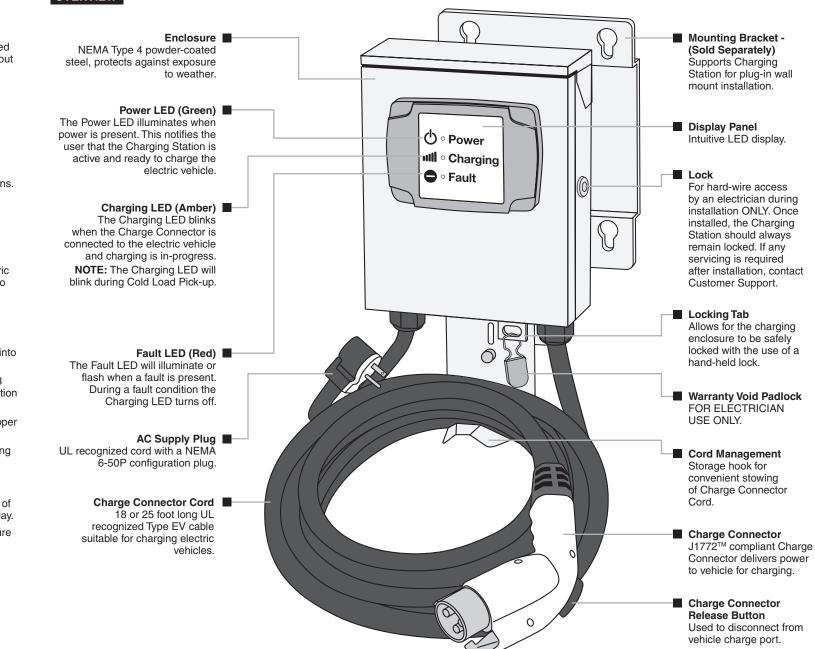
### FEATURES

- SAE J1772<sup>™</sup> Compliant Ensures compatibility with all battery electric vehicles (BEV) or plug-in hybrid electric vehicles (PHEV) conforming to this standard.
- Easy to read user interface.
- Self-Testing Sequence Upon energizing the Charging Station, a self-test will occur to ensure that the unit is working properly. This sequence will also occur each time the Charge Connector is plugged into the vehicle to ensure a proper connection, prior to initiating charging.
- Auto-Restart Allows charging to resume after fault condition, up to 3 times at 15 minutes intervals. If fault condition clears, no user intervention is required.
- Ground Monitoring Circuit Constantly checking for presence of proper safety ground.
- Contactor Monitoring Circuit Checks the integrity of the AC charging path before and after charging.
- Cold Load Pickup Time delayed and randomized (2-15 minutes) re-energizing of Charging Station following power outage. This feature protects electrical arid from overload from simultaneous re-energizing of chargers. Charging will automatically resume after the randomized delay.
- Excessive Cord Strain Detection On detection of excessive pressure on Charge Connector Cord, the EVSE de-energizes the cord.
- NEMA Type 4 Enclosure Water-tight, dust-tight and sleet resistant enclosure protects against exposure to weather
- cULus listed.

# OVERVIEW

#### WARNINGS AND CAUTIONS:

- DO NOT attempt to repair or service the Charging Station yourself. Opening the enclosure and removing the warranty void padlock will void the warranty. Refer to the Customer Support section for service information.
- The Charging Station is used to charge electric vehicles equipped with an SAE J1772™ compliant charge port.
- Cord Management hook below the Charging Station to properly stow the Charge Connector Cord and Charge Connector when not in use.
- Retain this guide for future reference.





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Ensure that the Charge Connector Cord is positioned so it will not be stepped on, tripped over, or otherwise subjected to damage or stress. Always use the

# CHARGING YOUR VEHICLE

Using the Level 2 Electric Vehicle Charging Station to charge your vehicle is as simple as plugging in any appliance.

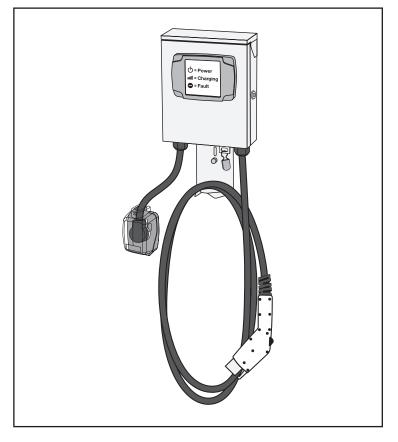
Reference Installation Instructions to ensure the Charging Station has been properly installed and powered up. NOTE: If the Charging Station Power LED is not illuminated, ensure the AC Supply Cord is plugged into the receptacle or reset circuit breaker to start power up sequence.

#### Power Up Sequence

• The Power, Charging and Fault LEDs will illuminate momentarily followed by just the Power LED. The Charging Station will then initiate a self-test sequence

**NOTE:** DO NOT plug the Charge Connector into the vehicle prior to the self-test; this may cause the Charging Station to go into Cold Load Pick-up, and delay charging.

 The Power LED will flash for approximately 3 seconds indicating the self-test, and then the Power LED will remain lit, indicating that the Charging Station is ready for use.



### **CHARGING YOUR VEHICLE**

#### 1. Connect the Charging Station to the Vehicle:

NOTE: The vehicle must be parked close enough to the Charging Station to allow the Charge Connector to connect to the vehicle charge port without putting any stress on the Charge Connector Cord. Position the Charge Connector Cord so that it will not be stepped on, tripped over or otherwise subjected to damage or stress.

Plug the Charge Connector of the Charging Station into the charge port on the vehicle (see vehicle owner's manual for location of charge port). Ensure that the Charge Connector is fully engaged, and cannot be removed from the vehicle without depressing the release button. Once the Charge Connector is engaged, a self-test will initiate, where the Power LED will flash for approximately 3 seconds. If no fault is detected and a proper connection is made between the vehicle and the Charging Station, the Power LED will illuminate solid and the Charging LED will start flashing, indicating charging has begun.

NOTE: The Charge Connector Release Button has to be fully released in order for the charging to start. The Charge Connector cannot be disengaged from the vehicle charge port without depressing the Charge Connector Release Button. Pressing the Charge Connector Release Button stops the charge to the vehicle.

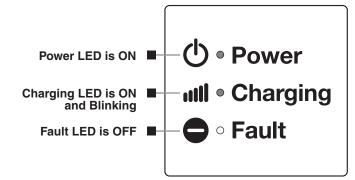


#### 2. Charge Vehicle:

At this point, charging will begin automatically (assuming the battery is not fully charged). Verify that the Power LED is illuminated and Charging LED is blinking, and the Fault LED is off

NOTE: Disengaging the Charge Connector from the vehicle charge port while charging will automatically stop the charging process. Reinserting the Charge Connector into the vehicle charge port will automatically restart charging after a self-test.

In the event of a power outage, all LEDs will turn off. When power resumes, the Charging Station will enter a Cold Load Pickup mode. This is a random (2-15 min) delay for the self-test start and is indicated by a blinking Charging LED. The Power LED will blink for approximately 3 seconds while performing a self-test. Charging will resume when the self-test is complete.



#### 3. End Charge:

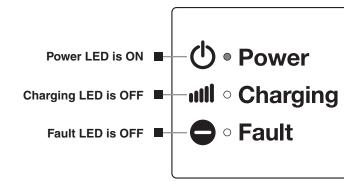
4. Disconnect Charge Connector:

Station

CLEANING

Once the vehicle has been fully charged, the charging process will automatically stop. Verify that the Power LED is illuminated, and that the Charging and Fault LEDs are off. The total charge time will vary based on vehicle, initial charge state of battery, and other variables. Consult your vehicle owner's manual for specific charge rates. If the vehicle is charging longer than the amount of time specified in the vehicle owner's manual, disconnect the Charging Station from the vehicle and contact the vehicle manufacturer.

While in the charging state it may be necessary to stop the charging process. To stop the charging process disconnect the Charge Connector from the vehicle charge port. The Charging LED will turn off to alert the user that the charging process has ceased.



CAUTION: Once the vehicle is fully charged, the Charge Connector must be disconnected from the vehicle charge port before the vehicle can be moved. Simply depress the Charge Connector Release

Carefully loop the Charge Connector Cord around the storage hook on the bottom of the Charging

Button on the Charge Connector and unplug it from the vehicle charge port.

PROBLEM	
No power; no LED indicators lit	
Charging LED not flashing	
Fault LED flashing	
Fault LED illuminated solid Red	

### TECHNICAL SPECIFICATIONS

Electrical Input		Standards & Certifications	
Amperage	32A	UL 62	Standard for Flexible Cords and Cables
Voltage	208/240VAC	UL 991	Standard for Tests for Safety-Related
Configuration	NEMA 6-50P Plug		Controls Employing Solid-State Devices
Electrical Output	-	UL 1998	Standard for Software in Progammable Components
Power	7.7kW (32A@240V)	UL 2231	Standard for Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits
Charging Connector	SAE J1772 <sup>™</sup> 18' cable (EVB32-8ML) SAE J1772 <sup>™</sup> 25' cable (EVB32-5ML)		
		UL 2251	Standard for Plugs, Receptacles and
Charge Cord	UL Type EV (Charge Connector)		Couplers for Electric Vehicles
Environmental Speci		UL 2594	Outline of Investigation for Electric Vehicle Supply Equipment
Operating Temperature	-35°C to 50°C	SAE J1772™	Electric Vehicle Conductive Charge Coupler Standard
Storage Temperature	-50°C to 80°C		
Enclosure	NEMA Type 4 Powder Coated Steel	NEC Article 625	Electric Vehicle Charging System Equipment

#### FCC INFORMATION

to operate this equipment.

#### CUSTOMER SUPPORT

Call our Customer Support Hotline at 1-877-338-7473. PLEASE HAVE THE MODEL NUMBER AND SERIAL NUMBER AVAILABLE WHEN YOU CALL. These can be found on the label on the left side of the Charging Station enclosure.

If your call is made after business hours or on weekends, please leave your name, telephone number, the Charging Station's serial number, and a brief description of the problem. A Customer Service Representative will call back at the earliest opportunity.

For additional products and information, and for complete step by step guidelines on how to install our Electric Vehicle Chargers and Pre-Wire Kits, please visit our website for our "How To Install" videos leviton.com/evrgreen.

NOTE: For Plug-In Unit - Unplug Charging Station before cleaning.

The Charging Station does not require any maintenance other than occasional cleaning.

Use a soft, lightly moistened cloth with a mild detergent solution. DO NOT use any type of abrasive pad, scouring powder, or flammable solvents such as alcohol. DO NOT power up charging station until completely dry.

#### LIMITED THREE (3) YEAR WARRANTY AND EXCLUSIONS

Leviton warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Leviton is free of defects in materials and workmanship under normal and proper use for three years from the purchase date. Leviton's only obligation is to correct such defects by repair or replacement, at its option, if within such three year period the product is returned prepaid, with proof of purchase date, and a description of the problem to Leviton Mfg. Co., Inc. 201 North Service Road, Melville, N.Y. 11747. This warranty excludes and there is disclaimed liability for labor for removal of this product or reinstallation. This warranty is void if this product is installed improperly or in an improper environment, overloaded, misused or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. There are no other or implied warranties of any kind, including merchantability and fitness for a particular purpose, but if any implied warranty, including merchantability and fitness for a particular purpose, is limited to three years. Leviton is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, lost sales or profits or delay or failure to perform this warranty obligation. The remedies provided herein are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.

## TROUBLESHOOTING

### ACTION

Check that Charging Station is plugged into receptacle.

Check that circuit breaker(s) is turned on. If LEDs still not lit, Call Customer Support Hotline.

Check that Charge Connector is fully engaged. The Release Button should be fully released. Check that vehicle is not fully charged.

Self diagnostic test failed. Unplug Charge Connector and reconnect.

If LED still not lit. Call Customer Support Hotline

Wait to ensure self-test is complete. If a fault is detected, the Fault LED will continue to flash, and the vehicle will not charge. The Charging Station will go into an Auto-Restart every 15 minutes. If no fault is detected after the Auto-Restart, the Fault LED will turn off, the Charging LED will illuminate, and charging will commence. If the fault is still detected after 3 attempts, the Fault LED will illuminate solid Red. Call Customer Support Hotline.

The Charging Station has been unable to detect a safety ground, or has failed 3 consecutive self-tests. Disconnect the Portable Charger from the power source, and begin again from step 1 If the fault continues, call Customer Support Hotline.

J1772 is a trademark of SAE International

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.

CAUTION: Any changes or modifications not expressly approved by Leviton will void the user's authority

Many questions and answers can be found in our knowledge base community.

Just go to leviton.com and click on the Knowledgebase link, or go directly to leviton.com/evrgreen.