



# Electrify America Level 2 Charger

**OPERATING INSTRUCTIONS**





# Contents

04	Important safety instructions	13	Troubleshooting
09	Product overview	15	Moving and storage instructions
10	Clicking the Charger into the Dock	16	Specifications
12	Charging	18	Notes
		19	Legal notice

In case of questions or problems with this product please call Electrify America Customer Assistance: 1-833-532-2778

Product subject to modification without prior notice. This document might not contain the latest changes to the product's specifications or processes described herein.

Visit [www.electrifyamerica.com/charging-at-home](http://www.electrifyamerica.com/charging-at-home) for the most up to date information.

# IMPORTANT SAFETY INSTRUCTIONS

## DANGER

### Risk of fatal injury



Warning of electrical voltage! This symbol in conjunction with the key word DANGER indicates an imminent danger. It will cause death or severe injuries if not avoided.

## WARNING

### Personal injury



This symbol in conjunction with the key word WARNING indicates a possibly hazardous situation. It might cause death or severe injuries if not avoided.

## CAUTION

### Slight injury and / or material damage



This symbol in conjunction with the key word CAUTION indicates a possibly hazardous situation. It might cause slight or minor injuries or damage to the product or objects in its vicinity if not avoided.

## NOTE

### Improvement of the application



This symbol in conjunction with the key word NOTE indicates hints for the user or very useful information. This information helps with installation, set-up and operation of the product to promote normal operation.

# IMPORTANT SAFETY INSTRUCTIONS

READ ALL THE INSTRUCTIONS BEFORE INSTALLING, OPERATING, MAINTAINING, OR USING THIS PRODUCT. SAVE THESE INSTRUCTIONS. THEY MUST BE PROVIDED TO EACH NEW OWNER.

## About this document

These operating instructions describe how to operate the charger properly. For your personal safety, follow these Operating Instructions exactly.

The Dock serves as a docking station that must be installed before the charger can be mounted. Dock may be plugged into a NEMA 14-50 outlet or hardwired to the main power supply. **Hardwiring must be performed by a qualified electrician. See the Dock Installation Instructions provided with the Dock for complete installation details.**

Do not carry out any work that is not described here. When in doubt, consult a qualified electrician.

## Intended purpose

These operating instructions apply to the charger and its use in USA and Canada. Follow all federal, provincial and local laws, regulations, ordinances, codes and safety standards.

## Charger – intended use

This device is intended for indoor and outdoor use. The charging instructions are listed on an adhesive label provided with the charger and may be affixed to the side of the charger.

Do not obscure any information on the charger. All persons using the charger must first have read and understood these instructions.



## WARNING

When using electric products, always follow basic precautions, including the following:

This device is intended exclusively for the charging of electric vehicles fitted with a Type-1 plug (SAE J1772-2009), and charging current control via the pilot signal (IEC 61851-1). Do not use the charger to charge or supply other devices.

## Please bear in mind:

- Do not use any adapters, converters, or charging cable extensions.
- The circuit breaker is installed outside of the charger and Dock and must be easily accessible.

- Read all the instructions before installing, operating, maintaining, or using this product.
- Supervise children when device is in use. Children under 16 should not operate this device.
- Do not put fingers into the electric vehicle connector.
- Do not use this product if the power cord or the electric vehicle cable is frayed, has broken insulation, or any other signs of damage.
- Do not use this product if the enclosure or the electric vehicle connector is broken, cracked, open, or shows any other indication of damage.
- The maximum ambient temperature rating for this device is + 50 °C (122 °F).
- Follow all federal, provincial and local laws, regulations, ordinances and safety standards regarding use of this device.
- Electrify America is not responsible for physical injury, damage to property or equipment caused by the installation, usage, repair or maintenance of this product.
- These Operating Instructions describe the usage of the charger in most commonly-used installation and mounting scenarios. If situations arise in which it is not possible to perform an operation following the procedures provided in this document, contact Electrify America. Electrify America is not responsible for any damages that may occur resulting from custom installations or operations that are not described in this document.
- Personal protection equipment: Use of proper personal protection equipment, including, but not limited to eye protection, shock protection, gloves, and other appropriate protection, is recommended when installing or servicing any electrical equipment.
- Arcing component in contactor: The charger includes contactors that, when opened or closed, will cause a short duration arc. The contactor is enclosed in an appropriate electrical enclosure, but caution is required if this arc occurs in the presence of flammable vapors, the vapors could ignite, creating an explosion. **Store hazardous and flammable vapors and materials away from all electrical equipment. If hazardous or flammable sources are present, allow sufficient time for ventilation before operating the charger.**
- Do not use extension cord to increase the length of the charging cable.

**Do not open the charger at any time during installation or operation! Only trained personnel should open the Dock.**

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**Visit [www.electrifyamerica.com/](http://www.electrifyamerica.com/) charging-at-home for the most up to date information**



**DANGER**

Handling live components incorrectly may cause grievous injuries or death.



**WARNING**

This equipment is intended only for charging vehicles that do not require ventilation during charging. The user should refer to the vehicle's owner's manual to determine its ventilation requirements.



**WARNING**

If the electricity service to the charger is damaged, immediately shut down the power to the charger by switching off the circuit breaker and contact a licensed electrician.



**CAUTION**

To reduce the risk of fire, connect only to a circuit provided with 1 x 40 A maximum branch circuit overcurrent protection in accordance with the National Electrical Code and local laws, regulations, codes and standards.



**DANGER**

Small parts are dangerous for children. Do not install in the presence of children.



**WARNING**

Do not use this equipment in an area with hazardous or flammable or materials or vapors



**WARNING**

Turn off circuit before remounting or replacing the charger.



**CAUTION**

Ensure that all components are dry throughout the installation.



**WARNING**

The feet of the charger are sharp-edged. Do not grip the charger by its feet.



**NOTE**

The charger is a maintenance-free product. It does not contain any repairable parts or components. Do not attempt any repairs. If a malfunction persists, replace the charger.



### DANGER

Radiofrequency radiation exposure Information:

This equipment complies with FCC and IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 7 3/4" (20 cm) between the radiator and your body.

## EMC compliance statement: FCC Part 15

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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.

Charger with Wi-Fi, SIM and RFID  
BTCPower, Inc.  
Model: charger  
Contains FCC ID:  
UXS-SMR-3X4 and QIPELS61-US  
FCC ID: 2ASKACCU205

### Certification UL listed



# Product overview

## Included in delivery

- 1 charger
- 1 operation instructions

## Charger – product details

- 1 Shutter
- 2 Socket / connector compartment
- 3 Face plate
- 4 Information on use
- 5 LED ring
- 6 Bluetooth® pairing button (disabled)
- 7 Vehicle connection indicator
- 8 Authentication indicator (disabled)
- 9 Dock (delivered separately)
- 10 Vehicle Connector



### CAUTION

The contents of the delivery must be checked for completeness and intactness.



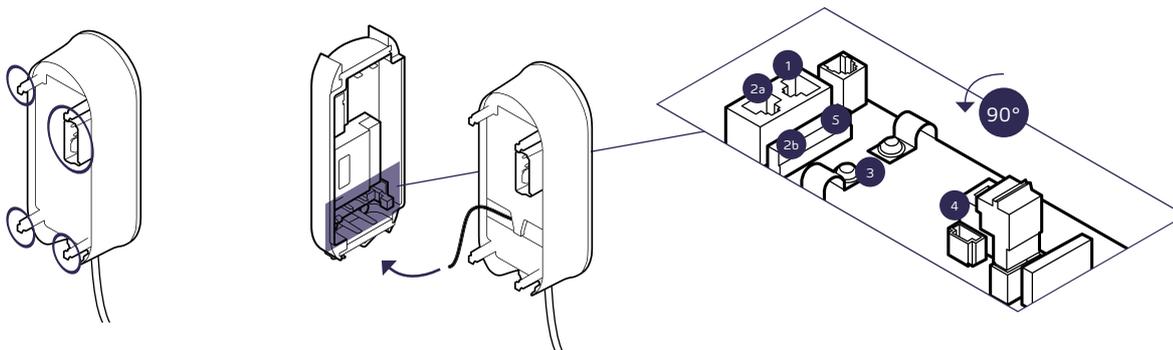
### CAUTION

Check that the warranty seal on the back of the charger is intact. Do not operate the product unless the warranty seal is undamaged. Damaged warranty seals void the warranty. If warranty seal is broken contact Electrify America at 1-833-532-2778 (24 hours / 7 days)



## Clicking the charger into the Dock

Before mounting the charger, make sure the power supply to the Dock is off. See the Installation Instructions provided with the Dock for complete installation details.



### 01

Take the charger and identify the connecting points (Shown here circled in blue) on its rear side.

### 02

Connect the black ribbon data cable of the charger to port 4 (Expansion terminal) at the bottom right of the Dock.

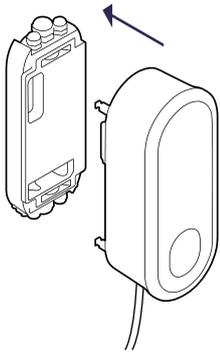
### 03

Place the white ribbon data cable of the charger on port 1 on the left of the Dock.

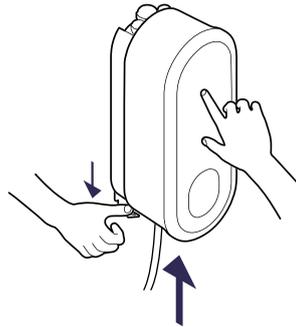
- 1** LAN 1 RJ45 (charger communication)
- 2a** LAN 2 RJ45 (deactivated)
- 2b** LAN 2 LSA plus (deactivated)
- 3** Cable clips for S/FTP cable
- 4** Expansion terminal (charger communication)
- 5** LAN 1 LSA plus to internet router

**CAUTION**

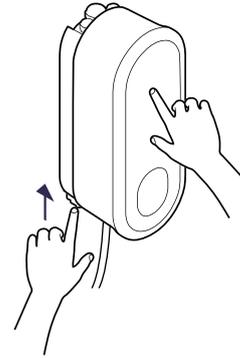
Ensure that the flat ribbon data cables are not trapped between the Dock and charger when mounting the charger.

**04**

Place the charger carefully on the Dock, and push in the charger until it is fully inserted.

**05**

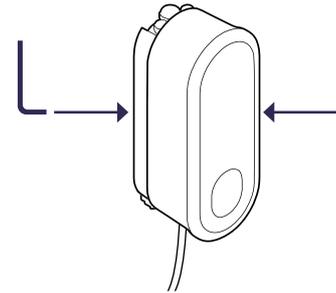
Keep a firm hold on the charger while pulling down the spring-loaded locking clip on the Dock. Now release the locking clip. As soon as the locking clip is in place and properly aligned, strongly press the charger onto the Dock.

**06**

If necessary, readjust the locking bracket until it is properly aligned. Alignment marks (triangular recesses) are visible on the locking clip of the Dock. Check that the locking bracket is fully inserted. The triangular alignment marks to the left and right of the locking bracket must be flush with the Dock-housing.

**CAUTION**

The set screws should only be fully inserted when the locking clip is fully inserted.

**07**

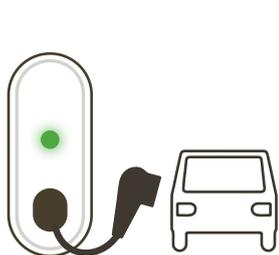
Tighten the two set screws using the allen wrench at the rear left and rear right of the Dock to secure the locking mechanism in place and the charger on the Dock.

**08**

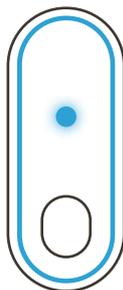
Power on the Dock circuit.

# Charging

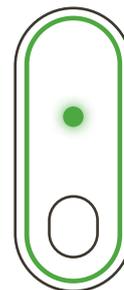
Charging involves connecting your vehicle to the charger, authenticating the charging process, charging your vehicle, and finally disconnecting your vehicle from the charger. Please make sure that the connected cable is hung carefully back up.

**01**

Connect your electric vehicle to the charger. When your vehicle is detected, the vehicle link indicator and the ring light up green.

**02**

Plug into the vehicle, the LED ring and vehicle link indicator start pulsing blue, and your vehicle starts to charge. The blue ring goes out after a few minutes when you move away from the charger.

**03**

Charging is complete when both the vehicle link indicator and the LED ring light up green. You can then disconnect your vehicle from the charger.

## Using charging cables properly

Do not use charging cables with adapters of any kind on the charger. Do not use extension cords.

# Troubleshooting

## Troubleshooting

Most charger malfunctions are caused by incorrect use. These errors cannot be detected by the charger and therefore can not be displayed by the device. This for example applies to the following situations:

- No power source connected
- Charging connector not plugged in correctly

If a malfunction persists, restart the charger by disconnecting it from the main power supply. To do so, unplug the Dock from the wall outlet, and then plug it back in. If your Dock is hardwired to the main power supply, switch off the circuit breaker and then switch it back on. If necessary, also check the connection on the vehicle side.

## Charging malfunction

Sometimes external causes can impact charging. This can occur when:

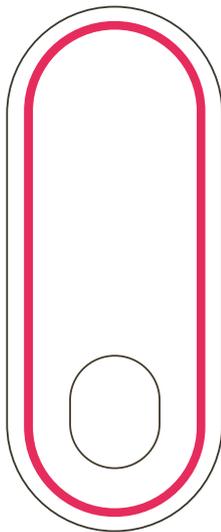
- the charger overheats:  
When a temperature limit is exceeded, the charger down-regulates the charging power automatically and temporarily reduces charging. Shield the Charger from direct sunlight to reduce the risk of overheating.
- There is a charging problem at the vehicle:  
Check the fault display in your vehicle.

## Authentication faults

- Vehicle link indicator does not light up green:  
Communication fault between the vehicle and charger. Check the connection between the vehicle and the charger, and if necessary connect again.
- Issues linking to home charger to the app:  
Follow instructions in the app or contact Electrify America Customer Assistance at 1-833-532-2778 (24 hours / 7 days).

**DANGER**

Device error.  
Warning of  
electrical voltage.

**Critical fault**

If the LED ring turns red, a serious device fault has rendered the charger inoperable, and it must be disconnected immediately from the main power supply. To do so, unplug the Dock from the wall outlet. If your Dock is hardwired to the main power supply, switch off the circuit breaker. If the fault persists after the charger has cooled down and been restarted, then contact Electrify America Customer Assistance at 1-833-532-2778 (24 hours / 7 days).

# MOVING AND STORAGE INSTRUCTIONS

Do not lift or carry the charger by the flexible cord. Do not allow the connector cable to drag or touch the ground when moving the charger.

When stored, make sure that the connector cable does not cause any obstruction and be careful not to break the cable.

**Specifications**

With cable

**Dimensions**

Measurements H x W x D (without Dock)	17 3/4" x 7" x 5" (450 mm x 180 mm x 126 mm)
Cable length	24'-7" (7.5 m)
Installation type	Wall, pole
Weight (without Dock)	14.1 lbs (6.4 kg)

**Environment**

Enclosure rating	Type 3S
Ambient temperature	-22 °F to +122 °F (-30 °C to +50 °C) full load Thermal overload protection: output power reduced at higher temperatures
Storage temperature	-22 °F to +176 °F (-30 °C to +80 °C)

**Mains connection**

Voltage supply	240 V AC split phase
Connected load	up to 7.6 kW

**Charging ports**

Number of charging ports	1
Output power	up to 7.6 kW
Cable	Type 1 SAE J1772

**User interface**

Display	LED ring for charging level; 2 status LEDs: vehicle link; 1 status LED as touch button: Bluetooth® (disabled)
Backend link (disabled)	WLAN with 2.4 GHz b/g/n with WPA2 (disabled)
Backend protocol (disabled)	OCPP v1.6 via WLAN (disabled)
App linking (disabled)	Via Bluetooth interface; Bluetooth Class 1 and 2 (power level) (disabled)

**Protective equipment**

AC fault monitor	GFCI Integrated (20 mA rms for AC)
Short circuit / overload protection	Needs to be installed as described in the installation instructions of the Dock

**Specifications**

With cable

**Authentication / activation**

Authentication-free charging	Pilot signal (IEC 61851-1:2017)
Plug&Charge	ISO 15118 ready
Card activation	N/A
Remote activation	N/A

**Vehicle communication**

Pilot signal (IEC 61851-1:2017)

**Certifications**

UL / FCC certificate (tested and confirmed by a certified body)

## Notes

### The charger must always be used in conjunction with the Dock.

Electric vehicle charger characteristics (IEC 61851-1 Ed 3):

1. The product must be connected to an AC supply power.
2. The product is Dock-compatible. It is available with a Type-1 plug with connected cable.
3. This product is designed for use with Level 2-compatible electric vehicles.
4. The product can be installed and used in indoor and outdoor areas. For best performance, shield product from direct sunlight. To ensure adequate heat dissipation and proper functioning of the device, place the dock at a generous distance from surrounding objects. We recommend 20", depending on ambient temperature.

5. The Dock and charger together are rated electrical protection class IP I. The open dock (i.e., without the charger) is rated electrical protection class IP I.

### Disposal

The Dock and the charger are electrical devices. Follow all federal, provincial and local laws, regulations, ordinances and safety standards regarding disposal of this device.

### Cleaning

The charger may only be cleaned with water; the use of lukewarm water is recommended. Do not use cleaning agents containing solvents.

### Dismounting

You must disconnect the main power supply before dismantling the charger. **Only a qualified electrician should dismantle the Dock if it is hardwired to the main power supply.** After power has been disconnected, loosen the two set screws on the side. Take the charger out of the Dock by pulling down the locking bracket, taking out the charging unit, and, if fitted, detaching the Ethernet cable connecting the charger and the Dock.



#### DANGER

The Dock must be disconnected from the power supply before dismantling. Make sure that all components are dry during dismantling.



#### CAUTION

When dismantling the charger, make sure that the charger is carefully removed from the Dock so that the flat ribbon data cables, the Dock and the charger are not damaged during dismantling.

# Legal notice

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## **Electrify America, LLC**

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