

# Smart Splitter User Manual





Welcome to NeoCharge! As EV drivers, we understand the headaches that come with home charging. Costly rewiring and limited options prompted us to find a better solution for charging at home - one that is easier, more cost-effective, and doesn't require expensive panel upgrades.

Our journey led us to collaborate with industry experts, engineers, utilities, and electricians, resulting in the birth of the Smart Splitter - the first product to enable safe, cost-effective, and effortless home EV charging access, without rewiring. It's a significant stride towards making the electrification of homes more affordable and contributing to our climate goals.

But we didn't stop there. We're now focused on optimizing your entire home's energy usage for increased savings, insights, and control starting with your EV charging. **Don't forget to scan the QR code on the large postcard for exclusive early access to the new NeoCharge Connect app.** 

We are truly thankful to have earned the trust of tens of thousands of EV drivers across North America, and we extend that gratitude to you for becoming part of our community as well.

Spencer Harrison
Co-Founder and CEO

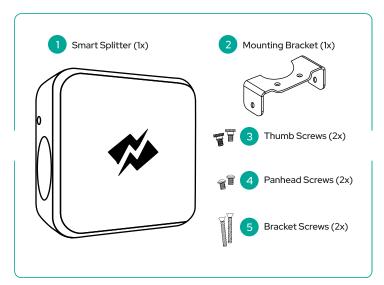
Akhil Veluru

Co-Founder and CTO

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## What's in the Box



#### NOTE:

The thumb and panhead screws are interchangeable when securing the bracket to the Smart Splitter.

- · Thumb Screws: For quick plug-and-play
- Panhead Screws: A low profile option to avoid interfering with the orientation of larger plugs and cords. Screw driver required.

#### **How it Works**

The Smart Splitter functions by monitoring the total power coming from both outlets and shutting off the Secondary side when the power draw exceeds the limit of your circuit. Once the Primary side finishes drawing power, the Splitter will automatically switch back to the Secondary side if it is still attempting to draw power.

The Primary outlet will always allow for a minimal amount of power that is necessary to power LED screens, even when the Secondary is active. This "idle mode" allows you to interact with and turn on the Primary device which will then completely shut off the Secondary.

#### APPLIANCE AUTO-SWITCHING









Ev is charging

Appliance starts, EV charging automatically pauses

When appliance finishes, EV charging resumes

#### DUAL EV AUTO-SWITCHING





Primary EV is charging, Secondary outlet is shut off

Primary EV completes charging session, power switches to Secondary

Due to the completely automated switching functionality, there is no remote for the Smart Splitter.

# **Cautionary Advice**



Do not set your EV charging amperage:

>40 Amps on a 50A breaker

>24 Amps on a 30A breaker



Only use your Smart Splitter within the specified operating parameters.



Do not use (or discontinue using) the NeoCharge if it is defective, appears cracked, frayed, broken or otherwise damaged, or fails to operate.



Do not use the NeoCharge in any outlet for which it is not designed.



Do not attempt to open, disassemble, repair, tamper with, or modify your Smart Splitter. Your device is not able to be serviced by the user. Please contact NeoCharge Support for any repairs.



Do not disconnect your Smart Splitter when it is supplying power to either output.



Do not plug the NeoCharge into a damaged, loose or worn power outlet. Ensure that the prongs on your device fit snuggly into your wall outlet.



Do not expose your unit to flammable or harsh chemicals or vapors. Do not use or store your device in a recessed area or below floor level. When using your Smart Splitter indoors, ensure that the device is positioned at least 18 inches (46 cm) above the floor.



Avoid and prevent your Smart Splitter from foreign objects as well as moisture and water at all times. If any sort of corrosion or damage is suspected discontinue use immediately. If rain falls during charging, do not allow rain water to run along the length of the charge cable plugged into your device.



Do not plug your Smart Splitter into an electrical outlet that is submerged in water or covered in snow. In the event of this situation, turn off your breaker and then unplug your device.



Do not touch the Smart Splitter's end terminals with sharp metallic objects such as wire, tools or needles. Do not insert any foreign objects into any part of your device. Avoid the use of cleaning solvents with your device.



Do not use private power generation as a source for charging.



Do not operate your Smart Splitter in temperatures outside of its operating range of -22° F to 122° F (-30° C to 50° C).



Store your device in a clean and dry place inside the temperatures of -40° F to 185° F (-40° C to 85° C).

# Configuration



#### **Ensuring Your Setup Meets Safety Guidelines**

The max charging amperage you can utilize as a continuous load is 80% of your breaker rating (US and Canada Electrical Codes).



Circuit Breaker
Amperage



Charge Amperage

50 Amp Breaker

40 Amp or less

30 Amp Breaker

24 Amp or less



**PRO TIP:** Your charging amperage can be adjusted in most newer EVs and EVSEs (Electric Vehicle Supply Equipment).

### Simultaneous EV Charging (50A Breaker Only)

If you have two EVs/EVSEs with adjustable amperage capabilities, you have the option to charge both EVs simultaneously at half power. As long as the total load from both sides does not exceed the Smart Splitter's switching limits, both cars will receive power.

To Enable Simultaneous Charging: Set both EVs to charge at 20A or less, so the total amperage does not exceed 40 Amps.

#### SIMULTANEOUS EV CHARGING



Charge two EVs simultaneously at half speed

## Installation Instructions

#### Step 1 - Turn Breaker Off

Turn off the breaker to your 240v outlet then unplug your appliance or EV charger that is currently occupying it.



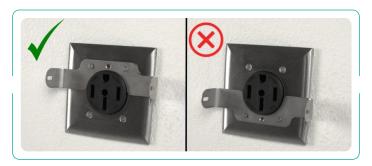
#### Step 2 - Install Mounting Bracket

Remove the existing screws from the outlet faceplate.

Screw in the mounting bracket using the bracket screws (2x) so the mounting bracket is flush with the faceplate.



Ensure that the mounting bracket is in alignment with the gold colored mounting points on your Smart Splitter. See pictures on page 9 for the correct bracket orientation for each outlet.















#### **WARNING!**

An improperly installed bracket will overlap with the Smart Splitter's side receptacles and can cause a short from metal-on-metal contact. Please doublecheck that your Smart Splitter's mounting bracket aligns properly before turning your breaker back on.

If the provided mounting bracket does not fit your outlet we offer a larger bracket that is compatible with 2.5" diameter commercial grade outlets



#### NOTES for NEMA 10-30 and 10-50:

- These outlet types don't have a standard orientation so it may be "upside-down" or "sideways". No need to worry, simply utilize the mounting bracket to secure the Smart Splitter to the wall.
- Some older faceplates only have two mounting points centered above and below the outlet. Use the center hole on the provided mounting bracket.

#### Step 3 - Plug in Smart Splitter

Plug in your Smart Splitter (it feels good, we know) and secure to the mounting bracket using the thumb screws (x2). Alternatively, you may also use the provided panhead screws (x2) if you would prefer a lower profile or the thumb screws interfere with any of your cables.





#### Step 4 - Plug in Your Primary Device

Plug your priority appliance or EV into the Primary Output (left side) of your Smart Splitter. Primary is indicated with PRI on the side of the Smart Splitter next to the LED indicator.



The device plugged in to the Primary side will always take priority over the device plugged into the Secondary side. This is typically your appliance, or if charging two EVs, the Primary should be the EV you want to charge first.

#### Step 5 - Plug in your Secondary Device

Plug your EVSE cord into the Secondary Output (right side) of your Smart Splitter. Secondary is indicated with SEC on the side of the Smart Splitter next to the LED indicator.



If you are using an extension cord with your Smart Splitter, please ensure the cord is UL certified and is the proper gauge wire.

#### Step 6 - Turn Breaker On

Turn on the circuit breaker to your outlet and verify that your Smart Splitter is receiving power by ensuring that the indicator lights are on.



The Smart Splitter lights will turn white once the device is powered.

## **LED Indicators**



White - Idle/On

Green - Receiving power

Yellow - Charging paused

Blue (flashing) – WiFi Pairing Mode
Pairing mode is active for the first 5 minutes after the device is power cycled

Red – Error; Charging stopped (lower the current limit)

## **Troubleshooting**

Here are the most common issues we see:

Question: What do I do if my auto-switching is not working?

**Answer:** Please perform a factory reset (page 13). If that still does not resolve the issue, connect to WiFi and contact Customer Support with your device's serial number for an over the air update.

**Question:** My EV is not charging, and the Smart Splitter is showing a red LED light. What do I do?

Answer: This is likely due to your EV charger being at a higher amperage than what your outlet can handle (LED is usually red). Please refer to the Configuration section (Page 4) to ensure your amperage is setup correctly. Please set your maximum charge current based upon your outlet/breaker:

Outlet Type	Breaker Current	Charge Current
NEMA 10-30	30 Amp	24 A
NEMA 14-30	30 Amp	24 A
NEMA 6-50	50 Amp	40 A
NEMA 10-50	50 Amp	40 A
NEMA 14-50	50 Amp	40 A

Question: My wall outlet doesn't have a way to attach the mounting bracket?

Answer: It is completely fine to use the Smart Splitter without the provided mounting bracket as most 240V wall receptacles have adequate clamping force. If you cannot use the mounting bracket to securely attach the Smart Splitter, it is recommended that you occasionally check the seating of the device to make sure it is not coming loose from the outlet.

# **How to Factory Reset Smart Splitter**

To perform a factory reset, you will need to power cycle your Smart Splitter 5 times - you can do this by unplugging your unit and plugging it back in (5 times) or by flipping the breaker on and off (5 times) if that's easier.

Once the reset is successfully performed, you will see both the indicator LEDs flash RED and then go back to WHITE. You should also hear the device click when the unit boots back up.

# Troubleshooting Continued: Connect to WiFi and Contact Support

If you still need help, please connect your device to WiFi to allow the NeoCharge Support team to further troubleshoot the issue. Connecting to wifi will allow the team to review charging logs and send an OTA firmware update to address any issues.

Step 1: Note serial number of your Smart Splitter found on the back of the device or on the original packaging.

Step 2: Scan the QR code and follow the WiFi setup instructions.



Step 3: Once connected, contact NeoCharge Support with your serial number to continue troubleshooting.

# Warranty

All Smart Splitters are covered with a 2 year limited warranty from the date of purchase.

NeoCharge warrants the Smart Splitter product against defects in materials and workmanship under normal use for two years from the date of purchase. If a Smart Splitter is deemed defective, NeoCharge will repair or replace, at no charge, the Smart Splitter or parts of the Smart Splitter that prove defective.

#### The warranty includes:

- · Defects in materials and workmanship
- · Shipping damage
- Any material, equipment, tools, and incidentals necessary to complete repairs including replacements
- Supplier or manufacturer upgrades

#### The warranty excludes:

 If the device has been opened, altered, abused, or misused by the owner

After receiving a customer notice, the NeoCharge Customer Support team will help troubleshoot and, if defective, issue a return/replacement.

<sup>\*</sup>NeoCharge shall make the final decision, with fairness to all parties, as to the legitimacy of the claim to this warranty.

# Support

We are always ready to help! If you have any questions, you can contact us via the contacts below:



805-622-2783 (Text Only)



support@getneocharge.com



www.getneocharge.com



# Your Feedback Matters!



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