

# INSTALLING RESIDENTIAL EV CHARGERS

Want To Install An Electric  
Vehicle Charger At Home?

Here's How:



Visit [driveelectriccolorado.org](https://driveelectriccolorado.org)

## ABOUT US

Drive Electric Colorado is a public resource for consumers to learn all about electric vehicles. Our Drive Electric Coaches can help you navigate everything EV including how to choose an EV model that fits your lifestyle, how to charge, busting common EV myths, and connecting you to local EV dealerships in Colorado.

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# THE LINGO

EV - Electric Vehicle

ZEV - Zero-Emission Vehicle

PHEV - Plug-In Hybrid Vehicle

PEV - Plug-In Electric Vehicle




BEV - Battery Electric Vehicle

EVSE - Electric Vehicle Service Equipment (i.e. charging stations)

DCFC - Direct Current Fast Charger

# HOW DOES EV CHARGING

## WORK?

	LEVEL 1	LEVEL 2	DC FAST CHARGING
<b>RANGE ADDED</b>	4-6 MILES PER HOUR	20-40 MILES PER HOUR	150-500+ MILES PER HOUR
<b>POWER</b>	120 VOLTS	240 VOLTS	480 VOLTS
<b>COST*</b>	\$0.23 PER HOUR	\$1.37 PER HOUR	\$16-23 PER HOUR
<b>LOCATION</b>			

\*Approximate cost assuming an EV gets 3-4 miles per kWh and using the U.S. household average of 16 cents per kWh (check with your local utility provider)



# STEP 1: IDENTIFY YOUR NEED

## Level 1 Charging

Ideal for EV drivers who drive less than 50 miles a day and primarily use their car for errands and local commuting around town. This type of charger uses a regular 120V outlet and does not require any additional infrastructure or added cost. Simply plug into your garage or car-port outlet and charge away!

## Level 2 Charging

Ideal for EV drivers who drive more than 50 miles a day and need a full charge more quickly. You may need electrical work done to upgrade your wiring. This type of charger uses a 240V outlet - the same outlet used by a washing machine or dryer. A certified electrician should be able to install this type of charger. Any costs can be offset by tax credits and incentives being offered by utilities or the federal government.



## STEP 2: CHOOSE A SITE

The best placement for an EV charging station in your home would be in your garage or driveway, most accessible to your car's charging port. Sites are best placed near your breaker box and existing outlets so as to minimize electrical retrofits when putting in infrastructure. Placing it close to the electrical supply is the best way to reduce installation costs. This may differ from the “prime” location.

## STEP 3: SURVEY THE SITE

**Location** – Check where your electric power is located and if it is easily accessible for your needs.

Identify if you need work done to increase the capacity of your electric availability.

Identify cost estimates to complete a preliminary budget.



## STEP 4: TALK TO YOUR LOCAL UTILITY

**Rebates** - Many electric utilities offer rebates for residential Level 2 chargers - be sure to check on your utilities' website to learn more and see if you qualify.

**Rates** - Discuss how to maximize savings on charging your EV during off-peak hours. Learn more about potential consumer EV rate programs and find the most cost-effective rate to use for your chargers by speaking with your local utility.

[Click here to learn more about Utility EV programs, rebates, and incentives](#)



## STEP 5: CHOOSE A CHARGER

Speak with charger manufacturers to find the best fit for your needs.

You can purchase Level 2 chargers at your local hardware store or order online directly from the manufacturer or other online sources.

The price for a charging unit and the installation can range from \$500-\$2,000, depending on the electrician.

[Click here for a list of Level 2 chargers available at retail stores and online.](#)

## STEP 6: APPLY FOR FUNDING

### RESOURCES

Utility rebate programs: Check your local utility to determine rebate offers for residential Level 2 EV chargers.

Federal tax incentives: Covers 30% (up to \$1,000 per unit) of the cost of the EV charging equipment. Please consult with your tax advisor for more information.



## STEP 7: INSTALL THE DEVICE

Work with your chosen manufacturer and electrician to install the device at your home.



## STEP 8: REGISTER YOUR CHARGER & CELEBRATE

You can register your residential charger on the Airbnb of EV Charging - this an opportunity to provide a public service and make a buck!

Find out more at [EVmatch.com](https://www.evmatch.com)





# HAVING PROBLEMS WITH YOUR HOA?

In Colorado, we have a Right to Charge Law, which states that HOAs do not have the legal right to restrict homeowners from installing private residential EV charging stations, as long as the resident is willing to take on the financial costs and liabilities for installing & maintaining the charger.

[Learn more about this law here.](#)



# NEED MORE INFORMATION?

Contact a [Drive Electric Colorado Coach](#) today!

Installing an electric vehicle charging station does not need to be overly complicated. Electric vehicles are some of the best vehicles on the road in Colorado today. We want to help you support our statewide goal of reaching 940,000 EVs on Colorado's roads by 2030. If you have a question about this guide or you just want to talk about EVs, please contact us at [driveelectriccolorado.org/contact](https://driveelectriccolorado.org/contact).



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