HOME CHARGING FAQ

Why do I need a charging dock for my electric car?

EVs feature rechargeable batteries that supply energy to propel the vehicle. When you drive, the car consumes the battery's stored electricity. The charging dock helps to refill your battery with electricity, just like filling your current car with gas.

Isn't there already a charger on board most electric cars?

Yes, most electric cars have an "on-board charger." The charging dock helps to get AC power safely from the utility to your on-board charger. The electric car's on-board charger then converts the AC power to DC energy and charges up your battery, with help from the charging dock. All battery electric vehicles (EVs) and plug-in hybrid electric vehicles (PHEVs) that meet national automotive engineering standards can use a home charging dock in order to replenish the vehicle's energy.

How will my home charging dock work?

Your home charging dock is typically mounted on your garage wall and connected to your home's electrical system. You connect the dock to your EV when you park it, and disconnect it when you're ready to drive.

How do I know if it's charging?

An LED light will let you know when it's charging.

How will I know if my electric car is charged up?

The charging status is indicated by several lights on the charging dock.

Can I stop the charging dock before it's at 100%?

Just as you can stop refueling a gas car before the tank's filled, you can also stop charging your EV before the battery is fully recharged by pressing the "stop" button, then disconnecting the home charging dock.

Does the charging dock stop automatically?

The home charging dock knows when it's done charging, and will stop charging automatically. You will still need to disconnect the dock's connector from your car before you drive away.

Where will I put the charging dock?

The charging dock is typically mounted on your garage wall near where you park your car.

Who will install it?

Only a professional, licensed electrician certified by AeroVironment (AV) is authorized to install your charging dock to ensure that it works properly and meets all applicable code requirements.

Will the charging dock work with any electric vehicle?

Because the home charging dock's connector (the plug) is standardized, it's compatible with most EVs from large automakers that adhere to this widely accepted national standard from the Society of Automotive Engineers.

AeroVironment™ EV Solutions™ 181 W. Huntington Dr., Suite 202, Monrovia, CA 91016
P. 888. 833.2148 F. 626.359.9628 www.avinc.com/evsolutions ev@avinc.com

Will it work with Plug-in Hybrid Vehicles (PHEVs)?

The home charging dock is compatible with most PHEVs and can reduce PHEV charge times considerably. The home charging dock can also make PHEVs more environmentally friendly by making charging easier and faster.

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How far will a full charge get me?

Driving distance depends on the vehicle's range. If a vehicle's battery has a stated 100 mile range, a full charge is expected to deliver 100 miles, depending on conditions. Battery capacity decreases with time and use. Actual range will vary depending upon driving/charging habits, speed, conditions, weather, temperature, and battery age.

How much will my home charging dock cost?

The actual cost will vary according to the site conditions for installation and local requirements. After completing a site assessment at your home, the AV certified site assessor will provide a firm quote based on what is required for your installation.

How fast does it charge?

The home charging dock is designed to fully recharge your electric car within a maximum of eight hours. The charge time can be much less, depending on the amount of charge remaining in the battery when you begin the charging process, the size and chemistry of the battery, and other conditions..

When will the charging dock be available?

Home assessments are slated to begin in some states in the summer of 2010, with installation of home charging docks in those states beginning in Fall 2010.

Is the home charging dock safe?

AV's home charging dock is designed with safety and reliability in mind, and will be listed by the Underwriter's Laboratory, the same people who certify other electric appliances in your home.

What if rain gets in the garage?

The home charging dock will be rated for outdoor use.

What is the voltage requirement to run the home charging dock?

The charging dock is hardwired into a 240V dedicated circuit.

When the home charging dock stops charging, does it stop drawing power?

The home charging dock is energy-conscious and stops drawing all but minimal power to provide energy to the LED lights.

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What's different about AV's home charging dock?

AV is a technology company that has been on the leading edge of electric vehicle charging technology since the 1980s. AV played a key role in developing the prototype of the first mass market EV, has a line of testing equipment used widely by EV manufacturers to test their technologies, and has been supporting industrial electric vehicles with charging systems for ten years. AV's home charging system is based on years of experience and proven technical expertise, making it an ideal solution for your home and your electric car.

What if I live in an apartment?

Various charging configurations for apartment garages and other multi-family housing situations are being developed for your electric car.

What if I rent my house/don't own my house?

If your landlord agrees, the dock can be installed in your garage and uninstalled when you are ready to move.

Who will service my home charging dock?

Only professional, licensed electricians certified by AV are authorized to service your home charging dock.

Will the charging dock communicate with the smart grid?

Some versions of the charging dock will communicate with the smart grid, optimizing your energy usage and further reducing your carbon footprint. Check with your local utility for availability.

What if my electric car runs out of charge while I'm on the road?

Your electric car will be equipped with a charge gauge similar to your gas vehicle designed to avoid any surprises. There are plans for public charging docks located across the United States, in cities and major travel corridors. Many cities already have committed to electrification to make EVs more practical for drivers.

Do I have to install a charging dock to charge my car at home?

There are two options for home charging:

"Opportunity Charging" is accomplished with the home charging dock, which requires a 240V dedicated circuit and is designed for a full charge within eight hours under normal circumstances. We call this "opportunity" charging because you will probably use the home charging dock while engaged in other at-home activities such as sleeping, enjoying dinner, or watching TV. Remember, you won't need a full charge from 0 to 100% every time. You may get into the habit of charging opportunistically whenever your EV is at a half "tank," low, or nearly full, just because it's easy.

"Trickle Charging" describes the process of plugging your EV into a regular 120V wall socket and "trickle" charging your car in emergency situations, when a more practical charging regimen isn't available. Some electric cars may come equipped with trickle charging equipment, but a full charge may take up to twenty hours and may require a dedicated "plug" to be installed in your garage.

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What other kinds of charging options are there, besides home charging?

"Public Opportunity Charging." Versions of the 240V home charging docks are planned for public and semi-public installation at certain workplaces, as well as shopping malls, retail stores, and other places where drivers have planned stops for a few hours and can charge while taking care of other business.

"Fast Charging." Additional charging infrastructure is planned for installation at public charging locations similar to gas docks for situations when you need to "fill up" in the middle of a long trip, or find your electric car is low on charge. These chargers, also from AeroVironment, are designed to deliver a full charge to your EV's battery in minutes instead of hours.

How will I be able to find public charging stations?

We anticipate both opportunity and fast charging stations for public use will be mapped on standard Global Positioning Systems (GPS). Smart vehicles currently in development may also proactively suggest when you might want to stop for a fast charge, if you are running low and/or are near a public charging station.

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