

# The Beginners Guide To: Electric Vehicle Charging



## CABLES



Most new electric vehicles (EVs) come with some type of cable to enable you to plug-in and charge your car:

**3 Pin Plug Cable** - Just like a standard cable you would see on any electrical appliance, these come with the majority of new EVs. Whilst they do allow you to charge your car, the rate of charging will be very slow and is therefore not recommended.

**Type 1 & 2 Cable** - These allow you to charge your car in a much shorter time. They are used by the majority of Homecharge units available on the market as well as most public charging posts.

In short, you will definitely need a Type 1 or 2 cable. If your car doesn't come with one, speak to your car dealer or search online for EV cables.

We recommend getting a long version just in case.



## A CHANGE OF MINDSET

Driving an EV requires a significant change in mindset around the way you refuel your car.

Unlike a traditional combustion engine vehicle that is often driven until the tank is empty, EV charging works on a **'top-up basis'** meaning drivers need to top-up their battery at various points throughout the day or week (depending on how far you drive and your driving style).

Electric vehicle owners utilise the time they are parked for charging. There are therefore 3 main options for topping-up - **at home, at work and on the road or public charging.**

## CHARGING AT HOME



The vast majority of EV charging will happen at home overnight when your car is not being used. New EV customers currently receive **£500 grant funding from OLEV** (The Office for Low Emission Vehicles) towards the cost of a Homecharge unit. A grant funded Homecharge unit can cost from as little as **£279** and can be installed within 2 weeks.

Homecharge units will significantly speed up the rate of your charge, for example a Chargemaster 7kW Homecharge unit can charge 3x faster than a standard 13A plug.

Some car manufacturers give EV owners additional subsidies meaning Homecharge units can be completely free to buy and install.

To qualify for a grant funded Homecharge unit you will need off-street parking and modern household electrics.

For information on the grant scheme and eligibility criteria go to [www.gov.uk/government/publications/electric-vehicle-homecharge-scheme](http://www.gov.uk/government/publications/electric-vehicle-homecharge-scheme)

## CHARGING AT WORK



Workplace charge points allow staff and visitors to carry out additional 'top-ups' as required. Many forward-thinking employers are beginning to install charge points in workplace car parks and grant funding is also available for businesses wishing to support staff and visitors in this way.

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The government is currently offering businesses a grant of £600 per dual outlet charger (£300 for single units) to support the transition to electric motoring. Chargemaster also offers further incentive by topping up these grants to £700. Any money a business spends on installing electric vehicle charge points is also claimable as a deduction of their taxable benefits – so all good news for employers!

If you are an employer and would like to know more, or you would like to direct your employer to some useful information on workplace charging go to [www.chargemasterplc.com/workplace](http://www.chargemasterplc.com/workplace)



## CHARGING ON THE ROAD (PUBLIC CHARGING)

Public charging networks provide additional EV charging opportunities, especially useful for times when you are driving long distances.

Public charge points are generally classified as either Fast or Rapid.



There are a variety of different public charging networks that vary in coverage, services offered, support, costs and membership options. Charge points can also vary in terms of how they are operated.

It's useful to get to know where charge points are located before you set out on a long journey, so you can plan ahead. It may also be easier to sign up with a network before you set off if you think you might want to use their charge points.

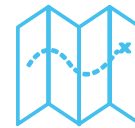


## POLAR

POLAR is the UK's largest public charging network and contains thousands of charge points across the UK, ranging from 3-pin and Type 2 sockets, to the new rapid charger, the Ultracharge. Customers can gain access to the charge points through a subscription based RFID card or key fob, or with a Pay As You Go app, POLAR instant. POLAR Plus customers can also access the CYC network of charge points. For more information on POLAR and to see a map of all POLAR charge points visit [www.polar-network.com](http://www.polar-network.com)



The key to successful public charging is to plan before you go.



Zapmap is a resource for planning travel routes around the availability of a wide range of public charge points. [www.zap-map.com/charge-points/public-charging-point-networks](http://www.zap-map.com/charge-points/public-charging-point-networks)

## EV CHARGING ETIQUETTE

**EVs Only** - It's never acceptable for an internal combustion car to park in a spot designated for a plug-in car, regardless of how crowded a car park is and no matter how infrequently the charging location is used.

**Only Charge When Necessary** - Don't charge if you don't need to, leave the spot free for another EV driver that might need it more than you.

**Charge and Move On** - Only occupy a charging spot while your car is being charged. As soon as the charging session is completed—either when your battery is full or when you have adequate range to comfortably reach your destination—be prepared to unplug and move your car as soon as possible, making way for a fellow plug-in driver. Many charging networks and car apps can be set to notify you by email or text when your charging session is completed.