

Electricity is the movement of [charged particles](#) . In our everyday life the most used kinds of electricity are **direct current (DC)** and **alternating current (AC)** .

Before we are going to explain the differences between DC and AC, we have to stick to the first statement about electricity: "Electricity is the movement of [charged particles](#) ."

In almost every case of electricity the moving particles are [electrons](#) . On the one hand they need something that triggers them to move, that makes them move and on the other if they can be moved, they can also move something. The reason why electrons are moving is quite different, when we are talking about AC and DC.

What is direct current (DC)?

Talking about direct current the particles are moving in one direction and they move as a stream. In case of having a battery the source of electricity, the electrons are streaming from one pole to the other pole.

Therefore the one pole of battery contains a lot of electrons and the other one almost none. The differences will be equalized by the moving of the [electrons](#) .

What is alternating current (AC)?

Alternating current means that the different poles and therefore the direction of the electron stream is not static. It changes all the time in a wanted frequency. Sockets for example are providing AC. When you now imagine that DC is caused by different amounts of electrons in different poles AC works differently and is not comparable. The [electrons](#) moving is triggered by electromagnetic fields, which are changing all the time.

An [electron](#) is a charged particle and therefore [electrons](#) influence each other and can be influenced by electromagnetic fields. (Compare to the wiki-article: Electric Charge and to the experiment: Straws in love.) The AC generations devices change their electromagnetic fields all the time and therefore the field pushes and pulls the

[electrons](#)

in the frequency of the changing field. That's why alternating current is more comparable to vibrating

[electrons](#)

instead of streaming electrons. They stay almost in the same place and vibrate because they are pushed and pulled by the electromagnetic fields.

It does not matter which kind of current you are dealing with in both cases the movement of the electrons is used to run electrical devices and other electrical consumers.

Read also the articles:

[Electrons](#)

[Electric charge](#)

[Electrical Potential](#)

Electrical Network