Voltage

Voltage, electric potential difference, electric pressure or electric tension is the difference in electric potential between two points. The difference in electric potential between two points (i.e., voltage) in a static electric field is defined as the work needed per unit of charge to move a test charge between the two points. In the International System of Units, the derived unit for voltage is named volt.

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Electric potential differences between points can be caused by electric charge, by electric current through a magnetic field, by time-varying magnetic fields, or some combination of these three. A voltmeter can be used to measure the voltage (or potential difference) between two points in a system; often a common reference potential such as the ground of the system is used as one of the points. A voltage may represent either a source of energy (electromotive force) or lost, used, or stored energy (potential drop).





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