# MOSFETs Page 20

**Metal–oxide–semiconductor field-effect transistor**

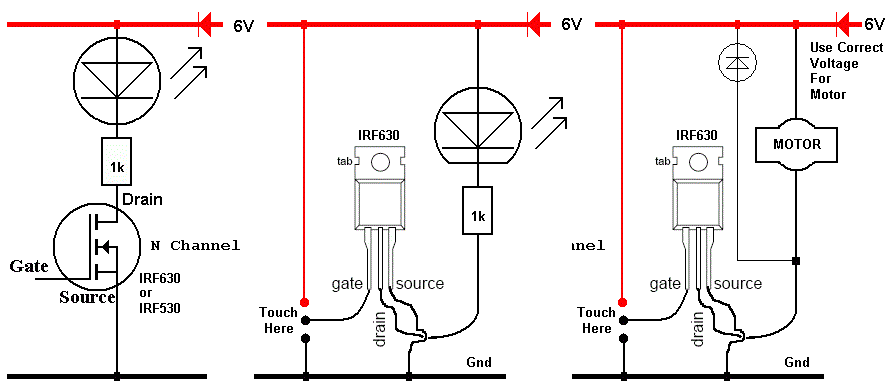
**A small voltage and an extremely small current control a much larger current up to several amps for a power MOSFET.**

## Properties

* Very high (near infinite) input resistance.
* Very fast switching.
* Low output resistance.
* Able to switch large currents (up to nine amps with a power MOSFET and a heat sink).
* Zero volts on the gate will turn the switch off.
* Two to five Volts on the gate (depending on the MOSFET) are needed to saturate the MOSFET (turn it on fully).
* Low drain voltage when saturated (0.1 Volts).

## Switch Circuits

This is another touch switch circuit. As the input current is so tiny, it works with one MOSFET.



## Possible Layouts

