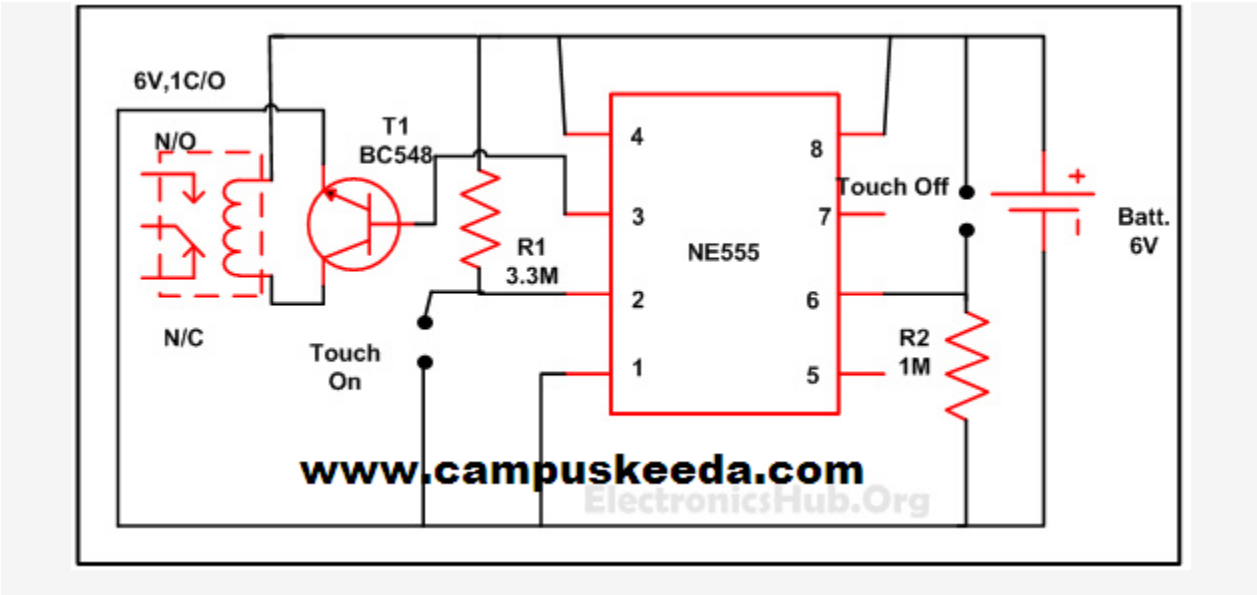
Touch ON and OFF Switch Circuit

This circuit is build around a **555 timer** configured in monostable mode means it will be stable in one state and action will require to change that state. That's why we have utilized this property to make touch on and off switch. With the help of this circuit you do not require to move from your place to on and off the device just touch with the help of finger device will become on and off automatically. And important feature of this circuit is you will not get mechanical shock which we sometimes get while using the normal switched.

Circuit Diagram of Touch ON and OFF Switch:



How Touch ON or OFF Switch Circuit Works?

Assemble the circuit properly and apply power supply. To "ON" the connected device, put your finger between touch to "ON" point and to off the device put your finger between touch to OFF point.

When power supply is provided to circuit device connected through relay remain ideal because voltage at pin2 (trigger pin) of IC is low but as soon as you touch the "ON" switch pin 2 of IC1gets the trigger signals and out pin3 receives high input and output pin 3 goes high which will make the transistor T1 into conduction and the relay connected through it energize and device connected across relay becomes "ON".

At this point voltage at pin 6 is zero. Similar action takes place when you touch the "OFF" switch. This circuit works by latching a relay to "ON" state with push of a button and with another push latch is released and device become "OFF". It is working similar to a flip-flop states.

If you are getting problem in getting touch pad then in place of touch pad you can also switch. In that case use push to on switch so that when you press the switch it will make the connection and “ON” and “OFF” the device according to the requirement.

You can also use the touch plate from the old toys and door bell . Touch pads consist of a small carbon block mounted in silicon rubber and when the button is pushed, the carbon block make contact with the pad and reduces the resistance between the two interleaved tracks. The pads which are available in market are already protected from corrosion and have very good sensitivity to detect your finger response. When a finger is put between points, the resistance between the lines drops between 150k and 850k, depending on the pressure and presence of moisture in the finger and it will vary from person to person.

Components Used in this Circuit:

- IC1-NE555
- R1-3.3M
- R2-1M
- On/Off Switch-Push to on switch
- Relay-6V,1C/0