

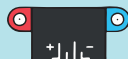
L360 CARBON POTENTIOMETER



1x LED



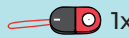
1x transistor NPN



1x battery



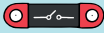
1x



1x



2x resistor 1kΩ



1x switch



2x



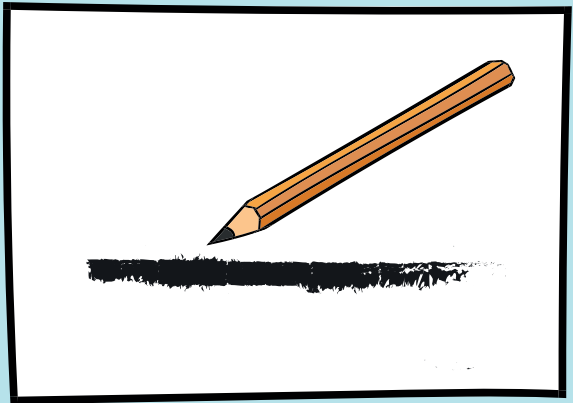
1x



paper and pencil

The material from which the resistance layer of the potentiometer is made is graphite. It is the same material that forms the ordinary pencil lead. If you draw a thick line on paper with a pencil, a resistance path is created that you can then connect to the conductors in the circuit. The longer the line, the higher the resistance at its ends. The thicker the line, the less resistance there is. Since the resistance value may be too high to turn on the LED directly, we will use a transistor in connection with a common emitter, where we will use the voltage gain to light up the LED. If you fasten one conductive component firmly to one edge of the line and move the other, you will get a variable resistance, i.e. a potentiometer.

1.



2.

