

## Tutorials:

**Tutorial links are given on the product page and on [www.buildcircuit.com](http://www.buildcircuit.com).**

**There are enough images to explain the soldering process.**

**Description:** This do-it-yourself (DIY) sound/clap operated switch can be used for switching your 100-240V AC electrical appliances. The kit responds to clap up to distance of 10 meters, but, the further you go, the louder the clap should be.

### Features:

- Operates a 100-220V AC lamp with clap/loud sound.
- Supply voltage: 6V-9V.
- There are two supply input points: a DC barrel and a 2 pin screw terminal. You can use one of the points to power up the kit.
- Consists a PTC resettable fuse. Switches the circuit off if there is unexpected flow of current over 500mA.
- Dimension: 83.82mm x 49.53mm
- Relay specification: Activation voltage: 5V DC. Controls appliances operating at 10A 250VAC, 10A 125VAC, 10A 30VDC, 10A 28VDC. Suitable for Europe, North America, Australia and New Zealand.

**It's a do-it-yourself (DIY) kit:** It comes as a pack of parts kit and is easily assembled if you can follow the silkscreen indicators (labels) and have beginning experience with a soldering iron. You will need to read the resistor bands or use a multimeter to determine the resistor values.

### Package contains the following components:

Clicking on the component links will also show you the steps for assembling the kit.

- 1 x PCB

Altogether 18pcs of resistors:

- 4 x 1K resistor
- 5 x 10K resistor
- 3 x 2.2K resistor
- 3 x 4.7K resistor
- 1 x 470 Ohm, 1 x 47K and 1 x 470K

Other components: 30pcs.

- 2 x 1N4148 diode
- 2 x 1N4001 diode or 1N4004 or 1N4007- All are same.
- 1 x PC817 optocoupler
- 1 x LM7805 voltage regulator
- 1 x BD139 NPN transistor
- 1 x SPDT switch
- 1 x 3mm LED
- 4 x 0.1uF capacitor (code- 104)
- 1 x 0.01uF capacitor (code- 103)

- 4 x S9013 NPN transistor
- 1 x 5mm LED
- 1 x Electret microphone
- 1 x 2 pin screw terminal
- 1 x DC barrel
- 1 x 500mA PTC resettable fuse
- 1 x 3 pin screw terminal
- 2 x 10uF electrolytic capacitor
- 1 x 47uF electrolytic capacitor
- 1 x 1uF electrolytic capacitor
- 1 x 5V relay
- 1 x 9V battery connector

### **SHOULD USE WITH CAUTION:**

This product is not for kids or anyone who does not know about relays.

This product is not recommended for users who have not soldered electronic kits before or who have not worked with AC240V.

Make sure that the device works with DC first. Test the relay for 5V-9V DC circuit and then only connect any AC240 lamp.