

SOUND SWITCH documentation

The soundswitch is a 50 x 50 mm PCB with a few components. It contains a crystal microphone, one transistor used as a crude amplifier, and an SCR (thyristor) as output stage. From the documentation of the thyristor (MCR101, see <http://www.unisonic.com.tw/product/db/scr.php>) it should be able to switch a current of a few 100's of mA.

The soundswitch is a latching type: after it has triggered on a sound it will remain triggered, until the power is removed. The current required to latch can be found in the SCR datasheet, worst case (highest value) is given as 15 mA.

I have not been able to deduce the exact voltage for which the circuit was designed, but I have tested it successfully at 3.0 and 5.0 Volt. It contains an elco rated for 10 Volt, so I would not use it with more than 5 Volt.

The potmeter at the left of the circuit controls the sensitivity: turn it clockwise for higher sensitivity.

