## AUTOMATIC SOLDERING IRON SWITCH

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uite often, we forget to turn off the soldering iron. This results in not only a smoking oxidised iron but also waste of electricity. To solve this problem, no power when it is inactive. The circuit can also be used for controlling the electric iron, kitchen timer or other appliances.

At the heart of the circuit is a monostable multivibrator built around timer IC 555. When the circuit is in triggered and its output pin 3 goes high for around 18 minutes to keep relay RL1 energised via transistor T1. At the same time, capacitor C3 charges and AC supply is provided to switch on the soldering iron via normally opened (N/O) contacts of relay RL1.



The soldering iron remains 'on' for the time period predetermined by resistor R1 and capacitor C2. Here, this time is set for 18 minutes. Flashing of LED1 indicates the heating progress of the soldering iron. When the predetermined time is over, relay RL1 de-energises to turn off the soldering iron and the buzzer sounds until capacitor C3 gets discharged.

here's a circuit that automatically switches off the soldering iron after a predetermined time. The circuit draws sleep mode, to switch on the soldering iron, you should push switch S1 momentarily. The multivibrator gets For switching on the circuit, use either a bell push switch or a similar switch with appropriate current carrying capacity.