

# Siren Using IC 555

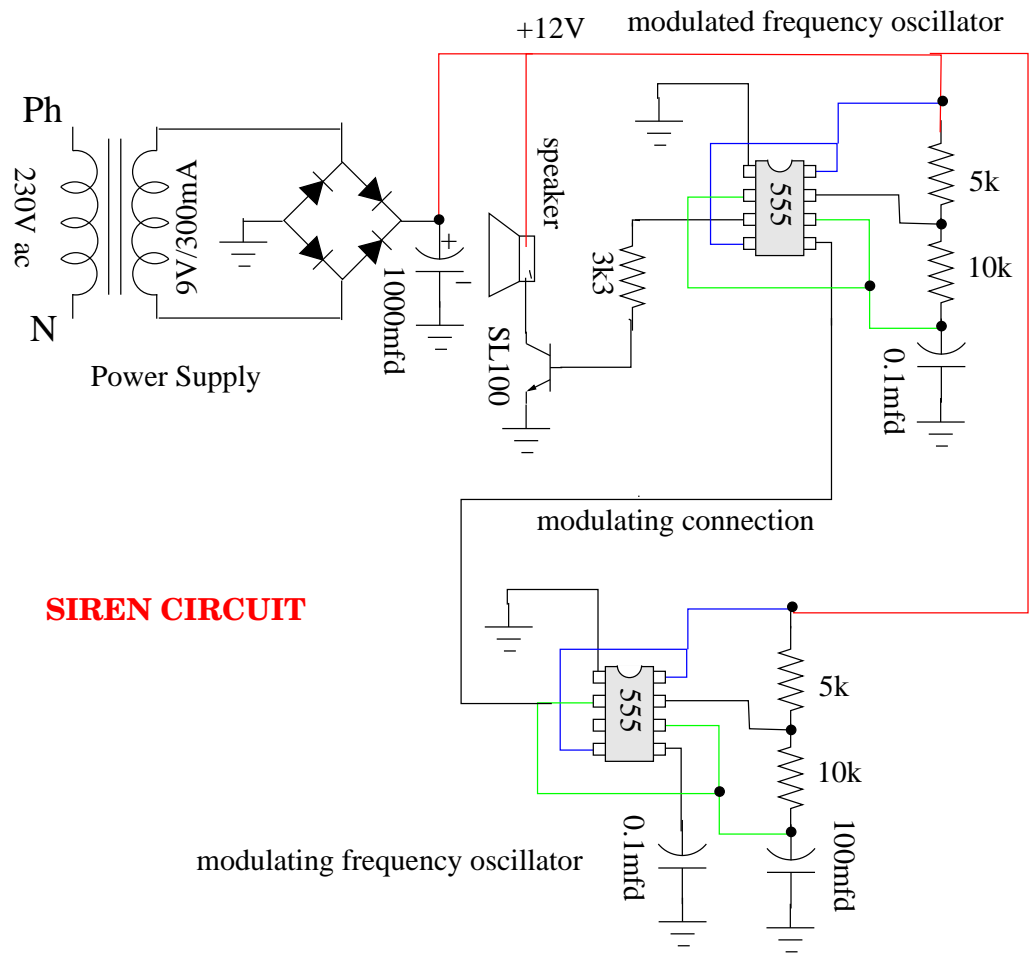
PRASAD MEHENDALE

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## **Abstract**

This is a simple siren. Two 555 ICs are used to implement it. One IC is used as modulating frequency oscillator and the other as the modulated frequency oscillator. Note the connection between the two ICs. Instead of the rectified and filtered power supply, you may use a battery as the power source.

## Circuit Diagram



### SIREN CIRCUIT

## Specifications

Two ICs are used. One is for modulating frequency generation and the other for the modulated frequency generation. Power supply uses 9V/300mA transformer that finally gives dc voltage of 12V dc output across the 1000µF capacitor. This is used as the supply voltage for both ICs.

### Modulating frequency oscillator

With the values shown above, the oscillator oscillates with

- Frequency 0.577 Hz
- Duty cycle 0.6
- Period 1.732 sec

### Modulated frequency oscillator

With the values shown above, the oscillator oscillates with

- Frequency 577 Hz
- Duty cycle 0.6
- Period 0.00173 sec

### Speaker

Paper cone speaker of 8 ohm and paper cone diameter of 4 to 5 cm is used.

### Material list

Sr No	Part name	specifications	Qty
1	diode	1N4007	4
2	transformer	230V/9V,300mA	1
3	capacitor	1000mfd/electrolytic	1
4	IC 555	8 pin DIL package	2
5	capacitors	0.1mfd/disc	2
6	capacitor	100mfd/electrolytic	1
7	resistors	5k,10k /0.25W	2 each
8	resistors	3k3/0.25W	1
9	transistor	SL100	1
10	speake	8 ohm/5cm dia	1
11	pcb	general purpose 5cm x 8cm	1
12	misc	solder metal, wires etc	

### References

1. Data sheet of IC 555
2. osc555.xls file on [www.babavakyam.com](http://www.babavakyam.com)