

## NE555 BASED DC MOTOR SPEED CONTROLLER

555 DC Motor Speed Controller project will control the speed of a DC motor connected to it. This project is built using the popular 555 timer IC.

- Power supply input 5-12V DC
- Motor Load Up to 1 to 2Amps
- Onboard preset to vary Duty Cycle from 10% to 95% @ 120 Hz
- Ideal for mini drill and robotics application
- Transistor based output drive with heatsink
- Diode protection for motor surge
- Power-On LED indicator
- Screw terminal connector for easy power supply input and output-Motor connection
- Four mounting holes of 3.2 mm each
- PCB dimensions 47 mm x 56 mm

Cn1 Connector : Supply Input 5V-12V DC  
For Supply Input 12 VDC, R1 - 1K

CN2 Connector : DC Motor Max Load 1A-2Amps

D1 : Power Indication LED

PR1 : Speed Adjust



SR.	QTY.	REF.	DESCRIPTION
1	1	CN1	2 PIN SCREW TERMINAL CONNECTOR
2	1	CN2	2 PIN SCREW TERMINAL CONNECTOR
3	1	C1	100uF/25V
4	3	C2,C3,C4	0.1uF
5	1	D1	RED LED
6	2	D2,D3	1N4148
7	1	D4	1N5822
8	1	PR1	100K PRESET
9	1	Q1	TIP122
10	1	R1	1K
11	1	R2	1K
12	1	R3	47E
13	1	U1	NE555
14	1	SOCKET	8 PIN DIP IC SOCKET
15	1	HEATSINK	HS05025
16	3	SCREW	SC02905
17	1	NUT	NT02900

