



MICROMOTOR CONTROLLER

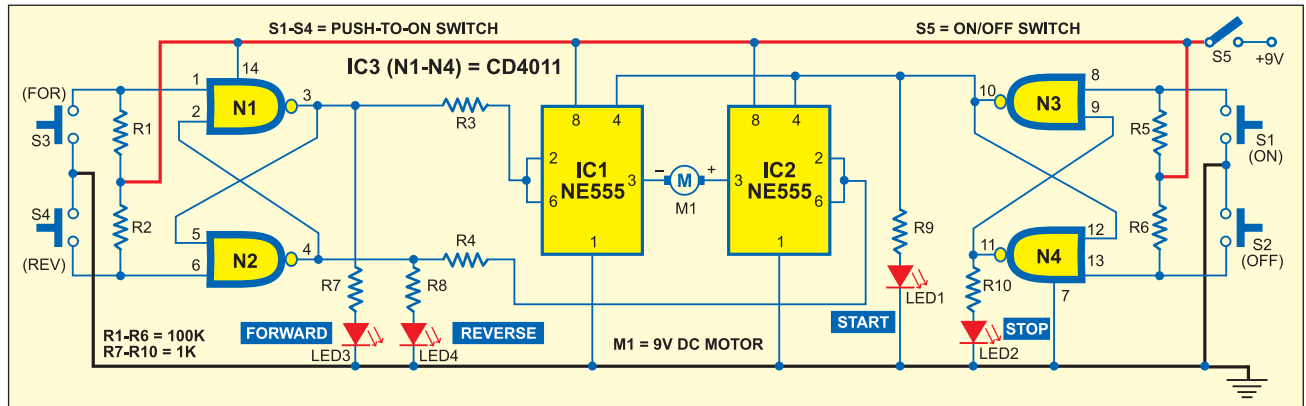
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Using this circuit, you can control the rotation of a DC micromotor simply by press-

connected between the outputs (pin 3) of IC1 and IC2.

Closing switch S5 provides power to the circuit. Now, when you press switch S1 momentarily, pin 10 of IC3

tor in conjunction with switch S1. If you press switch S3 after pressing switch S1, pin 3 of IC3 goes high, while its pin 4 goes low. The motor now starts rotating in the forward direction.



ing two push-to-on switches momentarily.

The circuit is built around two NE555 ICs (IC1 and IC2) and a quad-NAND IC CD4011 (comprising NAND gates N1 through N4). The NE555 ICs (IC1 and IC2) are configured as inverting buffers. IC CD4011 (IC3) NAND gates are configured as bistable flip-flop. The DC motor to be controlled is

going high, while its pin 11 goes low. Since pin 10 of IC3 is connected to reset pin 4 of IC1 and IC2, the high output at pin 10 of IC3 will enable IC1 and IC2 simultaneously. When switch S2 is pressed, pin 10 of IC3 goes low, while its pin 11 goes high. The low logic at pin 10 disables both IC1 and IC2.

Switches S3 and S4 are used for forward and reverse motion of the mo-

tor. However, if you press switch S4 after pressing switch S1, the motor will rotate in reverse direction.

Note. The complete kit of this circuit can be obtained from Kits'n'Spares, 303, Dohil Chambers, 46, Nehru Place, New Delhi 110019; Phone: 011-26430523, 26449577; Website: www.kitsnspares.com; E-mail: kits@efyindia.com. ●