

Re: controlling dc motor direction (help a newbie, please)

Source: <http://sci.tech-archive.net/Archive/sci.electronics.basics/2006-10/msg01477.html>

- *From:* ehsjr <ehsjr@xxxxxxxxxxxxxxxxxxxx>
- *Date:* Sun, 29 Oct 2006 05:31:27 GMT

theneonlobster@xxxxxxxx wrote:

i have a 1.5-3vdc motor that i would like to turn on and off in opposite directions using two microswitches. i'm new to electronics, but from what i've learned so far, i think i want to use a 556 timer and dpdt relay. striking a switch would turn on the 556 timer for x seconds (5, i'm thinking), then the dpdt relay, then the motor. am i right taking this direction?

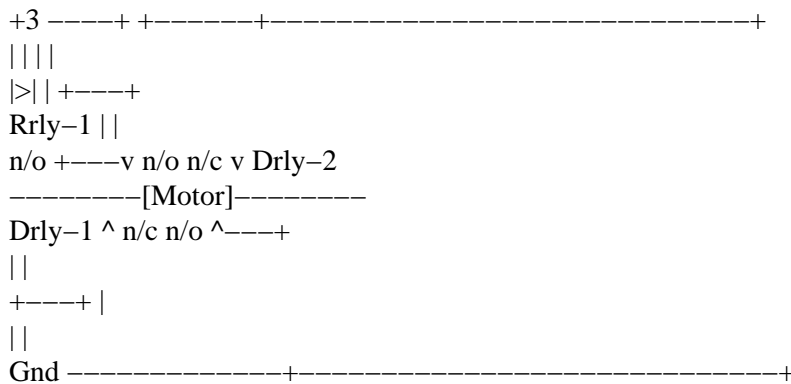
also, would striking the other switch before the end of the process cause a problem? i'm hoping that it wouldn't interrupt the motion, and would like to know if i could have it be ignored by the circuit.

and, testing the motor speed, i've been using resistors to get my 9v supply down to 1.5 and 3vdc. would i still go that route to control motor speed, or is there another option?

and help would be appreciated. thanks

david

View in courier font:



Re: controlling dc motor direction (help a newbie, please)

Rrly = Run relay – energize it when you want the motor to run. It is a single pole relay

Drly = direction relay. Energize or de-energize to change direction. It is a double pole, double throw relay and contains 2 sets of contacts, labeled Drly-1 and Drly-2.

Both relays are shown in the energized position. +3 gets to the top of the motor through the energized Rrly-1 and Drly-1 n/o and common points. Gnd gets to the bottom of the motor through the Drly-2 n/o and common point. When you de-energize Drly, Gnd gets to the top of the motor through the Drly-1 n/c and common point. + 3 gets to the bottom of the motor through the Drly-2 n/c and common point, and the Rrly-1 n/o and common point.

That is a basic circuit to give you independent control of direction and whether the motor runs or not. It was not clear what you have in mind as to timing and changing direction. However, whatever you want to do is achievable by controlling how/when/how long you energize the relays.

Ed

.