

Motorized Slide Potentiometer Driver

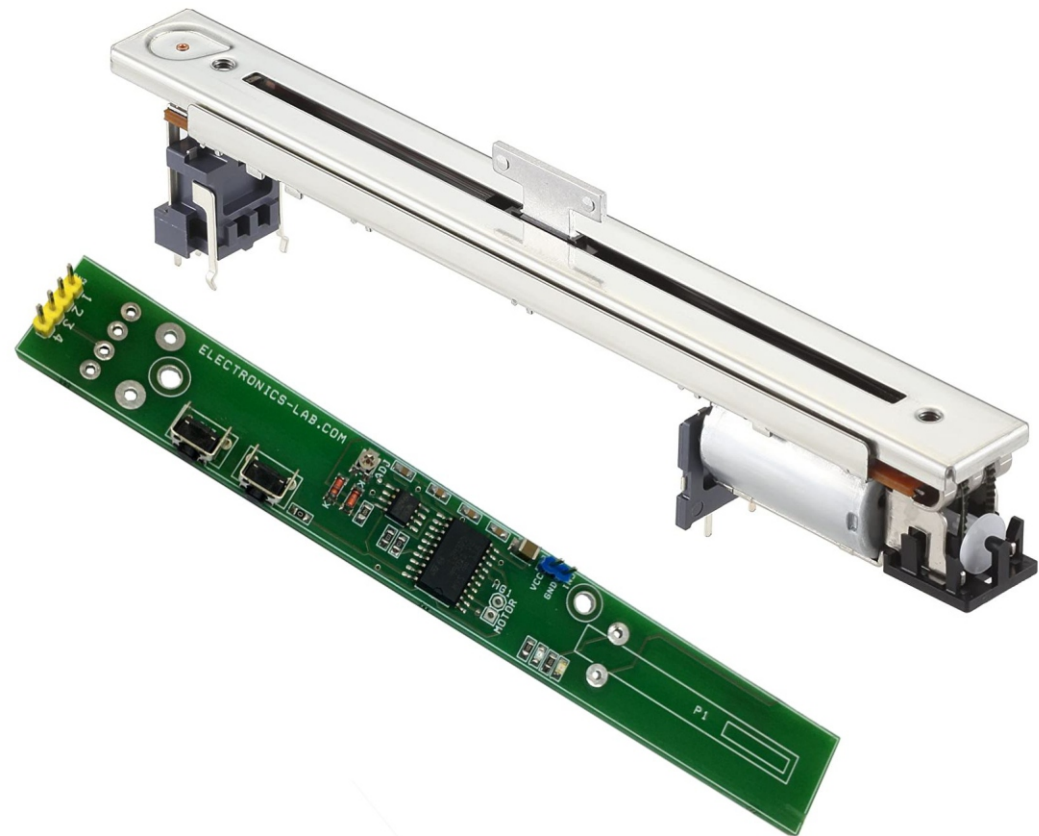
This motorized slide potentiometer is used in lighting and Audio/Video equipment or other similar application. It is a simple solution to control a motorized slide potentiometer using two tactile switches or a microcontroller interface. The project includes bidirectional motor driver L293DD H-Bridge chip, LM555 timer IC to generate the PWM pulse for speed control and two tactile switches to control the direction of the motor. Instead of two tactile switches, these pins can be interfaced with Arduino or microcontroller. SW2 and SW3 are used for CCW/CW motor control. PR1 trimmer potentiometer is provided to set the motor speed. Operating power supply of the project 6V to 9V DC. LED D3 and D4 Motor direction indicator. We have used a 10KB taper resistance potentiometer with a 100mm travel distance.

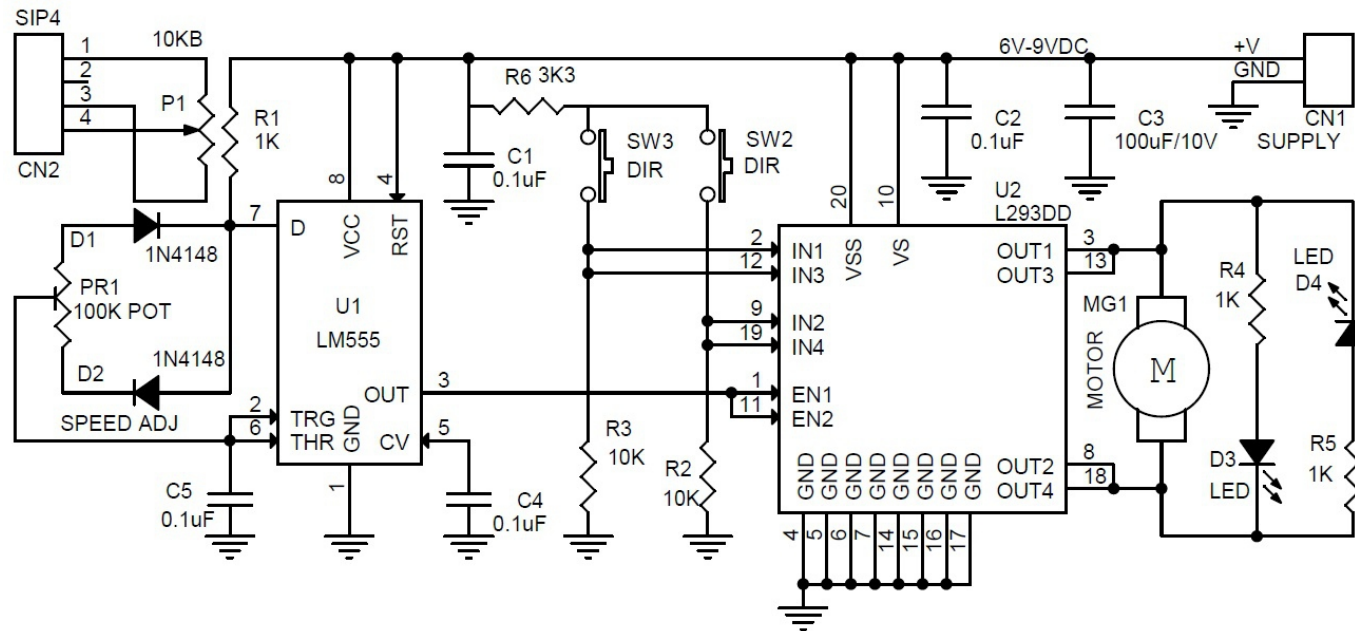
A **motorized potentiometer** is a slide pot which has a timing belt driven by a small DC brushed motor and two-timing pulley. It is a single channel 10K Ohms B type resistance taper Pot.

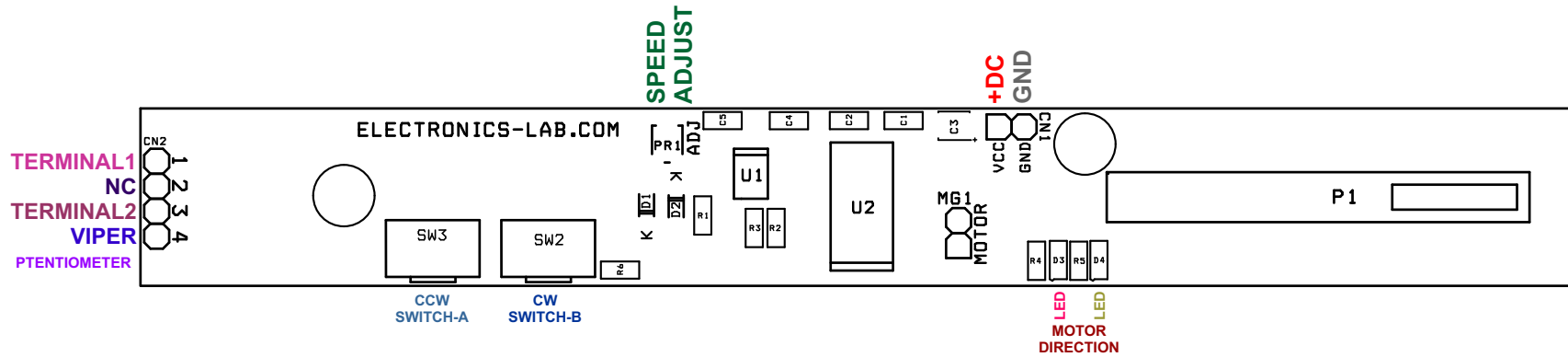
Motor Slide Potentiometer (ALPS ALPLINE) - Part number: RSA0N11M9A0J

Features

- Operating Supply 9V DC (6V to 9V)
- Current consumption 400mA Peak
- PWM Frequency Approx. 5Khz
- Duty Cycle 10 to 90%
- Motor Potentiometer Travel 100MM
- Potentiometer 10K Resistance B Type Taper (RSA0N11M9A0J)
- 2 X Motor Direction LED
- Trimmer Potentiometer for Motor speed adjust







BOM				
SR.	QNTY.	REF.	DESC.	VENDOR/DIGIKEY/MOUSER
1	1	CN1	2 PIN MALE HEADER 2.54MM PITCH	DIGIKEY S1011EC-40-ND
2	1	CN2	4 PIN MALE HEADER 2.54MM PITCH	DIGIKEY S1011EC-40-ND
3	4	C1,C2,C4,C5	0.1uF/50V SMD SIZE 0805	YAGEO
4	1	C3	100uF/10V OR 16V SMD SIZE 1210	YAGEO
5	2	D1,D2	1N4148	DIGIKEY 1N4148UR-1-ND
6	2	D3,D4	LED RED. GREEN SMD SIZE 0805	DIGIKEY475-1410-2-ND
7	1	MG1	OMIT	OMIT
8	1	PR1	100K TRIMMER POT	DIGIKEY TC33X-104ECT-ND
9	1	P1	ALPS POT 10KB (RSA0N11M9A0J)	CHIP1STOP RSA0N11M9A0J
10	3	R1,R4,R5	1K 5% SMD SIZE 0805	YAGEO
11	2	R2,R3	10K 5% SMD SIZE 0805	YAGEO
12	1	R6	3K3 5% SMD SIZE 0805	YAGEO
13	1	SW2	TACTILE SWITCH	DIGIKEY 450-1662-ND
14	1	SW3	TACTILE SWITCH	DIGIKEY 450-1662-ND
15	1	U1	LM555 SO8	DIGIKEY LM555CMM/NOPBCT-ND
16	1	U2	L293DD SO20	DIGIKEY 497-1390-5-ND

