GSK-805
DC Motor Control Kit

INTRODUCTION

This DC motor control kit comes pre-assembled and utilizes pulse width modulation (PWM) to vary the speed of a DC motor from stop to maximum revolutions per motor specifications. PWM eliminates the need for gear boxes and can drive motors at low speeds with minimal torque loss. The kit outputs at 12 V or 24 V with 30 A max load and runs at a fixed 100 Hz. The output voltage will always match the input voltage. Applications include DC motor speed control, LED and incandescent lamp dimming, and current control in hydroxyl or HHO generators.

CIRCUIT DESCRIPTION

PWM controls the current output by regulating the duty cycle between 0 and 100%. As the variable resistor is adjusted and the positive portion of the duty is greater the motor will slow down. Placing or removing the jumper at Point J (see Figure 1) will select the input operating voltage at 12 V or 24 V.

SPECIFICATIONS

- Input Voltage ..... 12 V / 24 Vdc
- Output ..... 12 V / 24 Vdc, 30 A Max
- Output frequency ..... 100 Hz
- Duty cycle..... 0 to 100%
- PCB dimensions ..... 3.85 in x 1.59 in

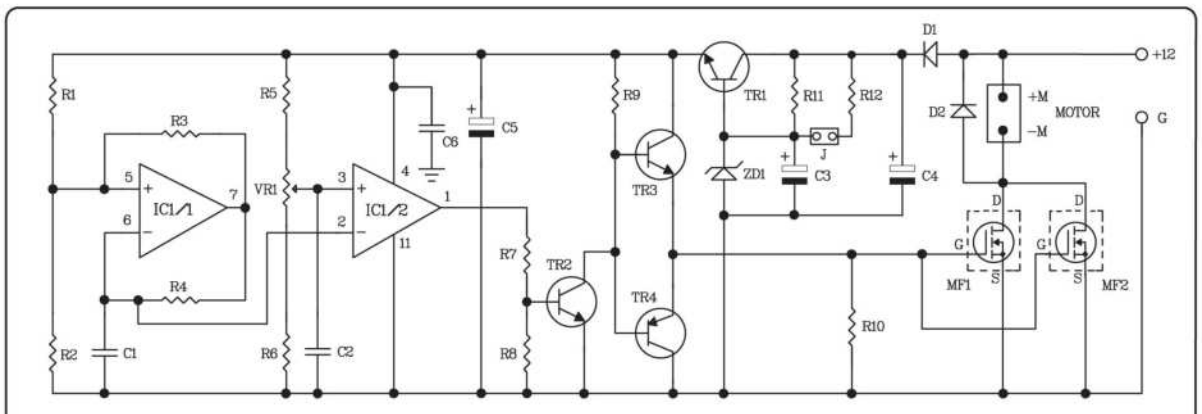


Figure 1. GSK-805 DC Motor Speed Control Circuit Diagram

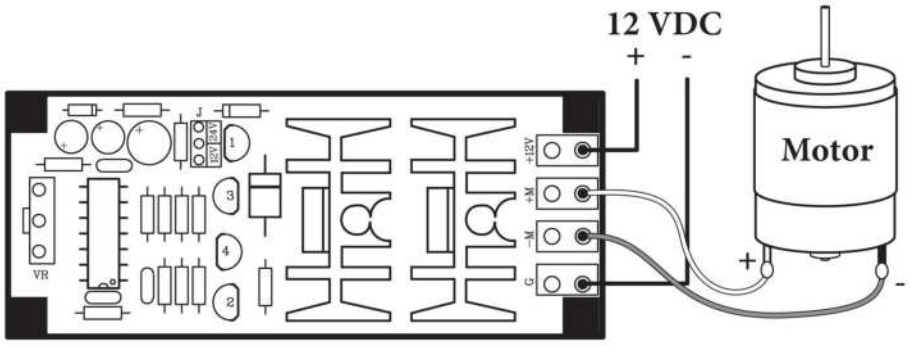


Figure 2. GSK-805 DC Motor Speed Control Circuit Layout