

A4988 stepper motor drive control board



Product Description:

The A4988 stepper motor driver carrier is a breakout board for A4988 micro-stepping bipolar stepper motor driver. The driver features adjustable current limiting, overcurrent and overtemperature protection, and five different micro-step resolutions (down to 1/16-step). It operates from 8 – 35 V and can deliver up to approximately 1 A per phase without a heat sink or forced air flow (it is rated for 2 A per coil with sufficient additional cooling). As well as the A4988, this listing also includes a very handy shield for the stepper driver. The shield includes female headers for power, male headers for stepper motor control, a DIP switch for step resolution, 4 pin housing for connection to the stepper motor, and an on-board capacitor. Please see below for a description of the breakout board.

Features:

Simple step and direction control interface.

Five different step resolutions: full-step, half-step, quarter-step, eighth-step, and sixteenth-step.

Adjustable current control lets you set the maximum current output with a potentiometer, which lets you use voltages above your stepper motor's rated voltage to achieve higher step rates.

Intelligent chopping control that automatically selects the correct current decay mode (fast decay or slow decay).

Over-temperature thermal shutdown, under-voltage lockout, and crossover-current protection.

Short-to-ground and shorted-load protection.