

## GC-02 DB-9 Breakout Board

The GC-02™ DB-09 Breakout board provides an easy way to connect stepper motor cables to your Gecko Drive G540™ 4-Axis Drive

The GC-02™ breakout board routes the 4 pins of the DB-9 male connector used for driving the stepper motor coils to easy to solder terminal pads.

Additionally, the GC-02™ breakout board contains a trimpot for setting the drive current to the stepper motor. The trimpot sets the resistance from 0 ohms (fully clockwise) to 3.5Kohm (fully counter clockwise).

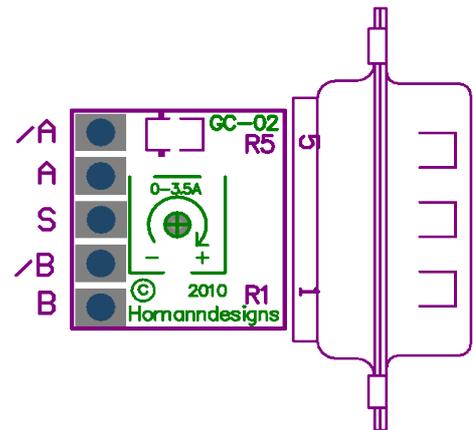


Illustration 1: GC-02 DB-9 Breakout Board

The DB-9 connections are detailed in Table 1 below.

### Installation

1. Solder the two stepper coil wire pairs to the BOB pads labeled A, A- and B, B-. **Note 1**
2. If you are using a cable with a shield wire, solder that to the pad labeled S.
3. Using a multimeter to measure the resistance across the DB9 pins labeled R1 and R5, adjust the trimpot to match your motor current specification.

**Note 2**

4. Assemble the GC-02 BOB into the connector housing, ensuring that the wires are not pinched by the housing.

Signal	BOB Pin	DB9 Pin
Trimpot	R1	1
Shield	S	2
Shield	S	3
Shield	S	4
Trimpot	R5	5
Stepper Coil B	B	6
Stepper Coil /B	/B	7
Stepper Coil A	A	8
Stepper Coil /A	/A	9

Table 1: BOB to DB-9 Connector Pin outs

**Notes:**

1. **If you are not sure which 2 wire belong to a coil pair, twist any 2 of the 4 wires together, then try and turn the stepper shaft. If you can feel a strong resistance, then the 2 twisted wires belong to the same coil. If not then try twisting a different pair combination.**
2. **For a motor current of 2.8Amps, adjust the trimpot to 2.8Kohms. Keep in mind that fully CW sets the current to 3.5Amps**

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