Homann Designs http://www.homanndesigns.com

User Manual

GC-02 Rev: 1.0

GC-02 DB-9 Breakout Board

The GC-02TM DB-09 Breakout board provides an easy way to connect stepper motor cables to your Geckodrive G540TM 4-Axis Drive

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



Illustration 1: GC-02 DB-9 Breakout Board

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

The DB-9 connections are detailed inTable 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.
- 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.

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

© 2010 Homann Designs

Homann Designs

User Manual

http://www.homanndesigns.com

Copyright 2003-2010 © Homann Designs. All rights reserved.

No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior written permission of Homann Designs.

Disclaimer

Homann Designs makes no representation or warranties with respect to the contents hereof and specifically disclaim any implied warranties or merchantability or fitness for any particular purpose. Information in this publication is subject to change without notice and does not represent a commitment on the part of Homann Designs.

Feedback

We appreciate any feedback you may have for improvements on this document. Please send your comments to info@homanndesigns.com

Trademarks

GC-02TM is a trademark of Homann Designs. All other brand and product names mentioned herein are trademarks, services marks, registered trademarks, or registered service marks of their respective owners and should be treated as such.