Controller Test Board

At 4QD we spend quite a bit of time helping customers get to grips with wiring up all sorts of models and equipment.

One question that keeps recurring when things don’t work as expected is, is it the controller or the wiring?

This test board will help to answer that question. It works by temporarily taking the place of the normal control wiring. If the controller operates correctly with the test board, then the problem is in the external wiring. There is also a troubleshooting section on our website at [www.4qd.co.uk/support/troubleshooting/](http://www.4qd.co.uk/support/troubleshooting/).

We’re happy to provide technical support either by email or phone [but please do run through the troubleshooting steps and voltage checklists first].
Controller Test Board
Instructions

1. Check that the speed control is set to zero [anti-clockwise].

2. Connect the test board to the controller using the supplied lead[s] and socket[s] for your model.

3. If power is present, the B+ light should come on [not Porter].

4. Hold the Forward button down* and rotate the speed control clockwise.

5. The PSU** light should come on and the motor should rotate.

6. Repeat for reverse.

Notes:
*Porters do not need to have a button pressed, they only need the speed control rotated.
**PSU – the controller’s internal power supply unit.
Layout

Speed control

Forward button

Use this socket for the DNO, Pro, and VTX series

Reverse button

Use this socket for the Porter series

PSU light

Use these two sockets for the 4QD-200 & 300 series

B+ light
Interpreting the Results

- No B+ light.
  - Fault in the battery wiring
  - Blown fuse
  - Blown controller fuse track
- No PSU light
  - Internal controller fault
- PSU light but no motor rotation
  - Fault in the motor wiring [use voltmeter or light bulb across M+ / M- to check]
  - Faulty motor
  - Internal controller fault
- Forward but no reverse [or vice versa]
  - Is joystick mode set? [Pro-150 & 4QD series only]
  - Stuck relay
  - Internal controller fault