

Barrel Jack Breakout

Assembly Instructions

5 March 2020 - Dale Wheat - <https://www.dalewheat.com>

Thank you!

Thank you for purchasing the Barrel Jack Breakout board. These instructions will guide you in the correct assembly of this useful gadget.



Figure 1. The Barrel Jack Breakout kit comes in two flavors: 2.1mm and 2.5mm center pin diameter. These instructions apply to both models.

Required Tools and Supplies

You will need a soldering iron and some solder to complete the assembly of the Barrel Jack Breakout board. Always use eye protection when soldering!

Check Your Components



Figure 2. The contents of the Barrel Jack Breakout kit (2.1mm version shown)

Make sure you received all the components needed to build the Barrel Jack Breakout board.

- Qty 1 Barrel Jack Breakout PCB
- Qty 1 Barrel jack connector (2.1mm or 2.5mm center pin)
- Qty 1 3 pin screw terminal block

Component Installation

- Install the 3 pin screw terminal block with the wire access ports facing outward.
- This is important!



Figure 3. Install the terminal block, then solder the three pins

- Install the barrel jack connector

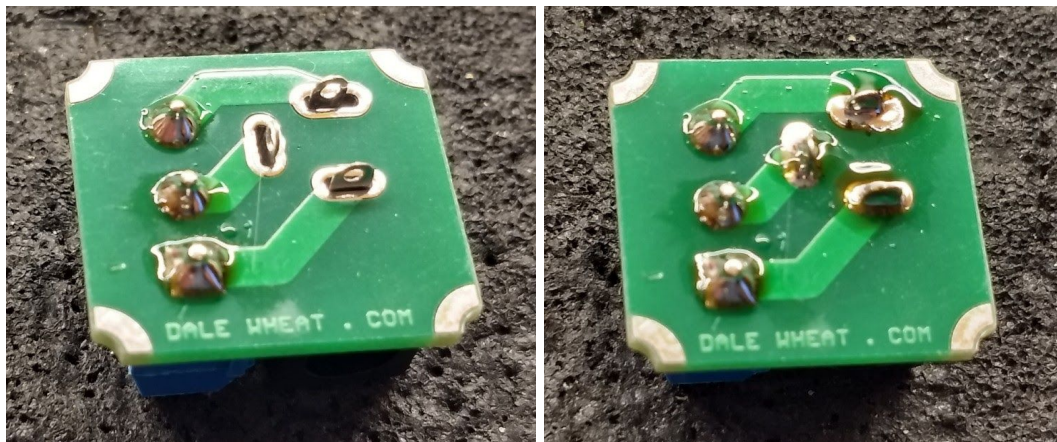


Figure 4. Install the barrel jack connector, then solder the three pins

You're Done!

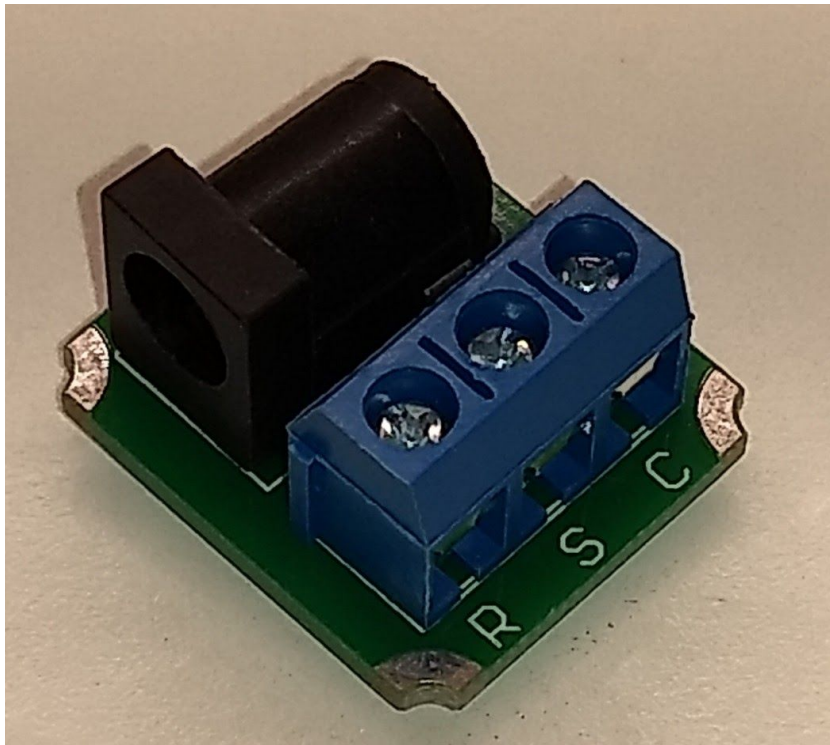


Figure 5. The completed Barrel Jack Breakout board

Terminal Wiring

The barrel jack connector terminals are brought out to the screw terminal block. The terminals are labeled R (ring), S (switch) and C (center pin).

R	Ring	Outside ring conductor
S	Switch	Connected to ring terminal when no plug is installed
C	Center pin	Center pin conductor

Table 1. The connections of the Barrel Jack Breakout board

Example Application

Here is an illustration of an example application. The Barrel Jack Breakout board is used to provide a modular power connection to a solderless breadboard. The “S” (switch) terminal is not being used. The power supply has a center-positive plus, so the “C” (center pin) terminal is connected to the “V1” terminal, which is then connected to the positive power distribution rails.

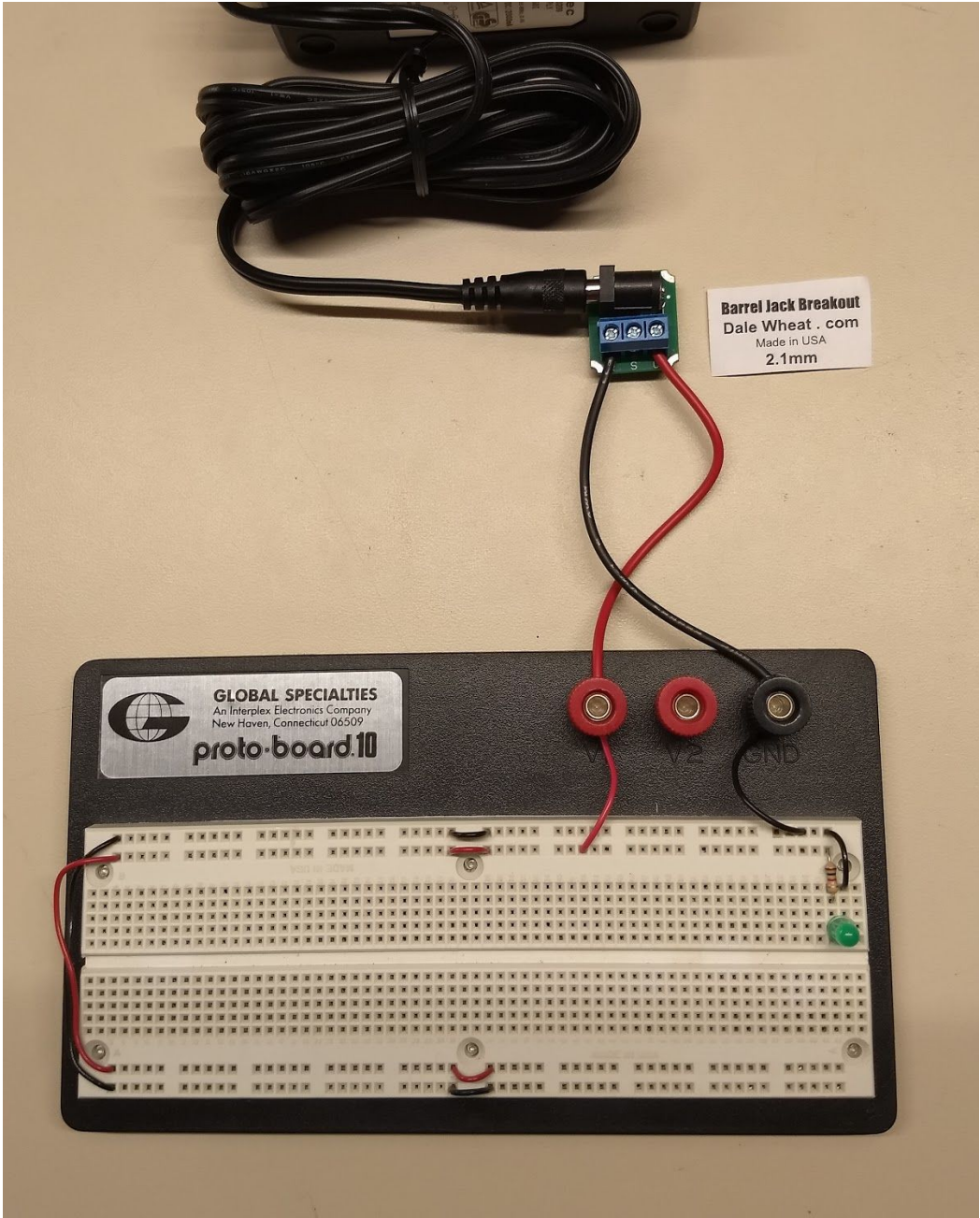


Figure 6. Example application: powering a solderless breadboard