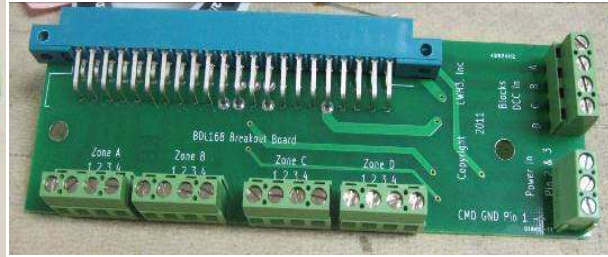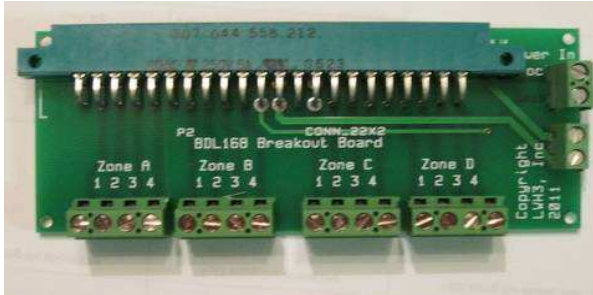# Breakout Board for BDL168 Instructions

The breakout boards eliminate soldering connections to the card edge or card edge adapter of a BDL168 block detection board. The breakout board is made in two different styles. The first style (above left) has a single input that connects to all 4 detection zones on the BDL168. The second style (above right) has 4 inputs, each tied to a specific detection zone.

Making Connections:

Strip approximately .125" (1/8 inch) off your wire. Either solid or stranded wire can be used, from 12 AWG to 26 AWG. Insert the bare portion of the wire into the terminal block and tighten the screw to make a solid connection.

Do not over-tighten, as the terminal blocks can be stripped or broken with too much force.

The instructions following describe the board and connections if the large connector for the BDL is at the top; matching the orientation of the pictures above.

Inputs:

The inputs from your circuit breaker, command station or booster connect at upper right, facing outboard from this position. The top most connection on the single input board is your sole input. On the multi input board, the top 4 connections are the inputs. Each has a label on the board that reflects which zone it serves. The top connection goes to zone D; which is sections 13 to 16 on the Digitrax documentation.

Power:

12V to 18V AC or DC is connected to the board via the bottom right block.

On the single board, the power can connect to either pin, as the board will rectify the supplied power as appropriate.

On the multiple board, use location 2 & 3. Note, that this is marked on the board with printed notes.

Outputs:

At the bottom edge of the board facing you are the 16 section outputs. The outputs start with Zone A (sections 1 to 4) from the left and count up to Zone D (sections 13 to 16).

Command Station/Booster Ground:

This common ground connection is used so that the Digitrax system has a common reference point to be shared among the network.

On the single board, this connection is next to the input from your booster; on the top right hand block.

On the multi board, this connection is the extreme right hand bottom corner connection on the 3 position block. The board has a note marked "CMD GND"