

Breakout Boards for the Digitrax Plug In Units

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For those of you similarly challenged with less than perfect soldering skills, I thought you should know about a couple of aids that I have found and am using on my layout.

Digitrax PM42 Power Manager Breakout Board



The breakout board eliminates soldering connections to the card edge or card edge adapter of a PM42 circuit breaker/reverser board. The breakout board replaces the 44 pin connector that is provided in the PM42 packaging from Digitrax. Instead of having to solder the input and output wires to the many pins of the 44 pin connector as instructed by Digitrax, the breakout board provides screw down terminal connectors to more securely terminate your wires. There are also jumpers included on the board to allow you to convert any of the four sections on the board to auto-reversing.

With the edge connector facing away from you there is a three point terminal on the left. This block covers the aux power source and the ground connection to the command station. Please note that the three point terminal block that is used for aux power and ground is not clearly marked which terminals are for aux power and which terminal is for the ground. It just so happens the end terminal point that is closest to the center of the left edge of the circuit board is the ground.

With the edge connector facing away from you there are two point terminal blocks on the right with the jumpers installed. These two blocks cover the rail power inputs. One terminal block is for sections 1 & 2 while the other terminal block is for sections 3 & 4. The board came with jumpers installed bridging the respective pins. When the jumpers are installed all four sections are powered by either of the two point terminal blocks. When the jumpers are removed the first terminal block feeds two sections and the second terminal feeds the other two sections.

With the edge connector facing away from you there still exists four two point terminal strips facing me on the front of the board. . Each terminal block is a unique section of the PM42. Just above each terminal block are two jumpers. If both jumpers, of a section are installed – joining adjacent pins, then that section is configured as a reverse loop section. If both jumpers, of a section are not installed – connected to only one pin, then that section is configured as a circuit breaker. My breakout boards came with each section configured for circuit breaker operation.

When you wire the board, you must be careful when tightening the screws of each terminal as it is not that difficult to strip the threads where by one cannot make a tight connection.

Mounting the Boards

The BDL168 version had only two mounting holes, about 1/8 in diameter, and are so placed so that the board can flex. I used nylon washers and nylon spacers in order to be able to mount the PM42 board with #8 screws.

The PM42 version has three large holes about 3/16 in diameter. I had to use nylon washers and nylon spacers in order to be able to mount the PM42 board with #8 screws.

I would recommend the use of these boards to anyone that can afford them. They make installation and trouble shooting very easy.

There are similar boards for the Digitrax BDL168 Occupancy Detector and the SE8C Signal Decoder.

The boards are made by Acculites (acculites.com) and are available from John Gorman at Bluegrass Model Railway Supply in Lexington.

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