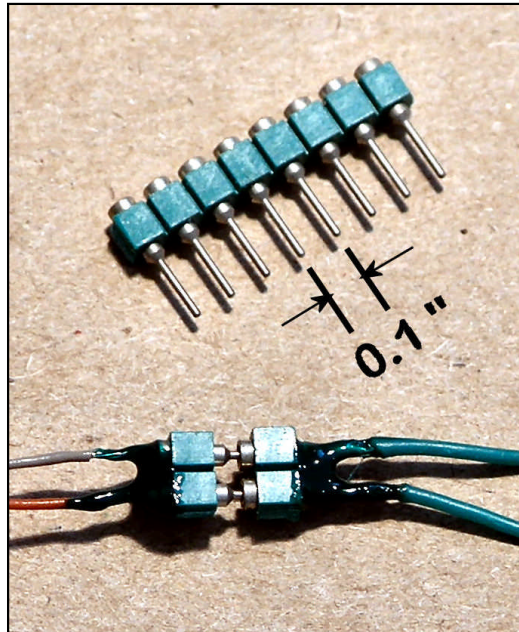


Make Your Own Miniature Plug Sets

By Fred Miller, MMR

Miniature plug sets are useful in several Model Railroading projects. Chief among those uses would be connections between an engine and tender on a steam locomotive, and in making various connections with DCC decoders within a locomotive.

Sources for miniature connectors include Micro-Mark (#83858 – set of 10 pairs) and Miniaturics (#50-001 series of 2, 3 or 4 contacts – sets of 2 pairs). Both of these products meet the needs. However, the Miniaturics line is a bit expensive and the Micro-Mark designs are a bit chunky because of their snap-lock feature.



For some time now I have been making my own plug sets at only pennies a piece. I use commercially available Machine Contact Single-in-line Female Sockets. These are intended for construction of sockets on electronic circuit boards. As can be seen in the photo, they can mate with themselves, i.e., the pin of one can be inserted into the socket end of an identical pin. The socket pins come in a strip, which enables easy “break-away” to the desired size. A strip of 10 pins is available from Jameco Electronics for 27 cents (Jameco #102201). Jameco also sells a strip of 30 for 99 cents (#78642). Digi-key offers a large variety. An example is a strip of 40 for \$2.75 (Digikey #A460-ND). It is important to obtain the Machine Contact variety for the best reliability.

As can be seen in the photo, it's just a simple matter of soldering your leads to either the pin side, or into the hole on the opposite side. A small soldering iron and a tiny spot of resin flux does the trick very easily. I like to coat the exposed wire with “Liquid Tape” to insulate the connections. I typically make either one conductor pin sets or two conductors, as shown in the photo. However, other configurations are just as easy.

The web sites for the companies referenced in the article are:

Micro-Mark - <http://www.micromark.com>

Miniaturics - <http://www.miniaturics.com>

Jameco Electronics - <http://www.jameco.com>

Digi-key - <http://www.digikey.com>