This motherboard is designed to replace the DCC decoder found in DCC equipped Intermountain and Bowser diesel locomotives. Created to fit the Intermountain ES44 as well as the Bowser S12, the IB-MB1 will fit a wide array of other locomotives. However, it will require comparing the original decoder as there are a few styles of Intermountain/Bowser frames which look very similar. Included on this motherboard is a KA3 Keep-Alive™ for smooth operation over troublesome tracks. Pair with a WOW121 for unparalleled sound and interruption free performance.

NOTE: This product does not function without a 21-pin decoder.

For full installation instruction visit the [http://www.tcsdcc.com/HO_Installs](http://www.tcsdcc.com/HO_Installs)

This board is a replacement for the earlier decoder equipped Intermountain and Bowser locomotives where connectors were not used. Simply remove the existing decoder and factory light board, mount this board in its place, solder in the wires from your locomotive, and plug in your 21-pin decoder.

For full installation instruction visit the [http://www.tcsdcc.com/HO_Installs](http://www.tcsdcc.com/HO_Installs)
WARRANTY PROCEDURE: All decoders are covered by a one year, goof proof, warranty. Please return in a small box.
1. You MUST register the failed decoder on our website at www.tcsdcc.com. If you do not have access to a computer you MUST call to register your warranty at: (267) 733-3408
2. Print out a copy of the Warranty Registration and include it in the box with the decoder(s).
3. Return decoder(s) directly to us using the address below.

Compatible with NMRA DCC standards. Made by TCS in the USA.

© Copyright Train Control Systems 2004-2008