



Our Famous GOOF PROOF NO  
Questions Asked Warranty

1619 IB-MB1-NC

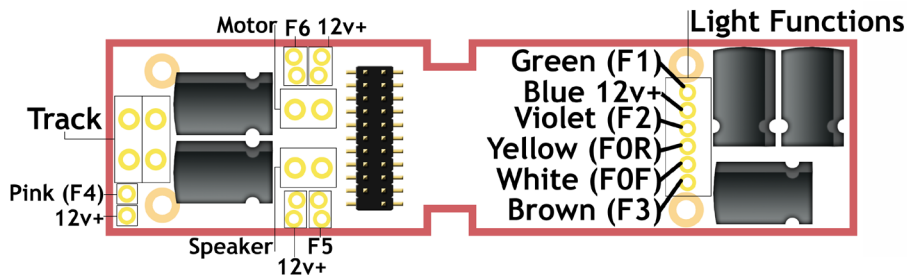
Scale	Pairs well with
HO	WOW121-Diesel and EU621

Dimensions 2.82" x 0.69" x 0.33" or 72mm x 18mm x 8mm

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 KA2 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.

### WIRING DIAGRAM



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)



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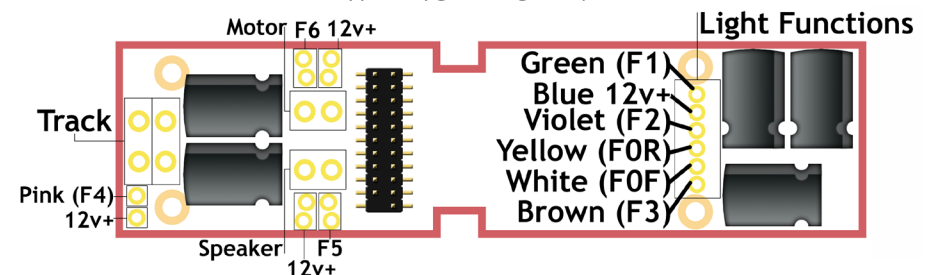
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**WARRANTY PROCEDURE:** All decoders are covered by a one year goof proof, no questions asked warranty. **Please return in a small box.**

1. You must Register the failed decoder on our website at [www.tcsdcc.com](http://www.tcsdcc.com).
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 TCS. Train Control Systems  
PO Box 341  
Blooming Glen, PA 18911

Compatible with NMRA DCC standards.

Made by **TCS** in the USA.

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**Train Control Systems**  
P.O. Box 341  
845 Blooming Glen Rd.  
Blooming Glen, PA 18911



Phone **215-453-9145**  
Fax **215-257-0735**  
Email [tcs@tcsdcc.com](mailto:tcs@tcsdcc.com)  
Web [www.tcsdcc.com](http://www.tcsdcc.com)

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