

## Main Features of this Decoder

**Back EMF Load Compensation** for superior slow speed control even with heavy loads.

- **Quiet Drive** creates **SUPER QUIET** engine performance.
- **Autodetect** for realistic throttle response when using DC power.
- **Dimmed Brightness** of bulbs or LEDs is adjustable.
- **Variable Momentum** lets you make custom acceleration curves.
- **Mars, Gyra, and Rotary Beacon** are adjustable.
- **Decoder Lock** for programming same address decoders independently.
- **Function Remapping:** 13 buttons for most lights, 7 buttons for operations.

**Other Features of This Decoder:** This decoder has too many features that could be listed on this page. For the complete list of available features, print out the "Additional Programming Guide" that can be found in the literature section of our website ( [www.tcsdcc.com](http://www.tcsdcc.com)). Some of the features include: Function Remapping, 3 Point Acceleration/Deceleration Curves, Button Control of the Motor, Loadable Speed Tables, Various lighting effects, decoder lock and many more.

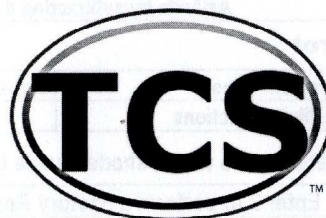
**WARRANTY PROCEDURE:** All decoders are covered by a one year goof proof, no questions asked warranty. **Please return in a padded envelope or small box.** NOTE: A4X, A6X, DP2X, and all drop in N-scale decoders must be returned in a small box.

1. Register the decoder(s) on our website at [www.tcsdcc.com](http://www.tcsdcc.com).
2. Print out a copy of the Warranty Registration and include in the padded envelope 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.

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)



Our Famous GOOF PROOF NO  
Questions Asked Warranty

1344 EU621

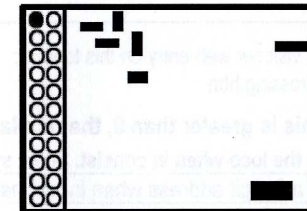
Scale	Functions	Function Rating	Continuous/Peak
HO	6	100 mA	1.0 /2.0 Amp

Dimensions: .78" x .59" x .13" or 20mm x 15mm x 3.5mm

This full featured BEMF decoder is designed specifically to meet the needs of European HO-Scale modelers who are converting their HO-Scale locomotives equipped with a 21-pin inline socket to DCC. We have included our next generation BEMF for outstanding slow speed performance, quiet drive for super quiet engine performance, and auto adjusting motor control for hassle free set-up.

## WIRING DIAGRAM

Pin #1 is marked in black.



This decoder is RAILCOM equipped !!!

## INSTALLATION

For detailed installation pictures visit our website where we maintain a constantly growing database of a wide range of locomotives and decoders.

