

2009 Massoth eMOTION Decoder Summary

The eMOTION Decoders are unique and versatile new technology decoders for controlling motors, lights, sound and 8 other functions with analog, DCC (NMRA standards) or LGB MTS power. The 4 sizes have a common set of features designed specifically for G-Scale model-railroading and the LGB enthusiast using MTZ/MTS or analog legacy systems.

Visit the Shourt Line where every Massoth item is discounted everyday day. Call 310-622-4431 or email info@shourtline.com one the web at www.ShourtLine.com open 9 to 9 PST everyday



M decoder \$66.06, for small and very small locos, 1.8 Amps (30 mm x15 mm x 6 mm), 1.2 motor amps, 1.0 function amps, (2) front light hook-ups, (2) 600 mA function outputs, (3) 50 mA function outputs, (1) RC servo control channel - <u>Manual</u>



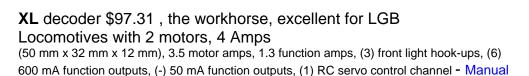
L decoder \$87.24, replacement for LGB 55021, with more power - 2.5 Amps

(55 mm x 25 mm x 14 mm), 1.8 motor amps, 1.0 function amps, (2) front light hook-ups, (2) 600 mA function outputs, (4) 50 mA function outputs, (1) RC servo control channel - <u>Manual</u>



LS- decoder \$ 211.79 **L** decoder **+ S**ound >12 original LGB digital sounds, free loco sound library >50 sounds AND includes wiring with mini-plugs - <u>Manual</u>







XLS decoder \$289.95 **XL** decoder **+ S**ound >12 original LGB digital sounds, free loco sound library >50 sounds AND includes a Massoth speaker for your type loco + wiring - <u>Manual</u>



XXL decoder \$144.80, the Big Boy with 6-10 Amps Designed to serve in third-brand locomotives like Aristocraft, Bachmann, USA-Trains and other amp eaters.

(55 mm x 32 mm x 20 mm), 6-10 motor amps, 1.3 function amps, (3) front light hook-ups, (6) 600 mA function outputs, (-) 50 mA function outputs, (1) RC servo control channel - <u>Manual</u>

When ordering a LS or XLS sound decoder be sure to choose the sound you want from the price list link shown below or <u>click here</u> to choose from over 50 free loco sounds; you can hear the sounds by clicking on the speaker icon or view a loco's photo by clicking its name.

Click here to view or download our complete Shourt Line & Massoth discount product price list

Shourt Line Model Railroad Products Phone: 310-622-4431 Fax: 310-622-4431 PO Box 490271, Los Angels California, 90049 web: <u>www.ShourtLine.com</u> email: <u>info@ShourtLine.com</u>

ALL eMOTION driving decoders have these common features:

- Fully compatible to NMRA-DCC & LGB MTS standards and requirements
- Work in analog mode, too
- Backward compatible with LGB MTS I , II , and III
- Decoders run with 14 or 28 or 128 speed steps. They automatically will recognize 128 speed steps when set to 28 speed steps.
- Can be programmed from 1 to 10239 loco addresses, addresses 128-10239 will require additional programming.
- Each loco can be programmed to an individual speed characteristic (programmable speed curve)
- Simplified individual speed characteristics including starting speed, mid speed, and max speed (speed characteristics defined in 3 points)
- Newest technology in Back EMF for precise slow speed operation
- Adjustable motor frequency ranging from 70 Hz to 16 kHz by programming VC value
- Automatic operation-mode detection allows for switching analog-mode-of operation on or off. When switched to "analog off" decoder will only run in digital mode – this allows station stops using signal switches while sound, smoke, and lights continue to operate – No central station commands required
- Can process either serial or parallel functions
- Decoders operate LGB sound modules # 650xx and up
- Light and function outputs dimmable in analog and in digital mode-of-operation
- Programmable flashing light / timer / pulse generator output-functions
- Switching speed available without programming
- Overload protection for motor output and function output
- Overheat protection for motor output and function output
- Built-in connection for power buffers
- Programming (CV-Read, CV-Write, CV- bitwise, CV-indirect, PoM)
- Reset function for all CV values
- Best warranty in the industry (according to our customers)

The M – decoder locos e.g.: Feldbahn, Dresine = hand car, motor cycle, Flyer, Industrial field loco, Porter, 0-Gauge Gauge 1 and H0

The L- decoder locos e.g.: LGB 2X600 , LGB 2X21, LGB 2X900 and all single motor locos with #55021 interface.

The XL decoder locos e.g.: LGB Mogul, Genesis, GG1, F7, Crocodile, Alco Diesel, Uintah, Mallet, and many more

The XXL decoder locos e.g.: Bachmann G-Scale locos, the Big Boy, USA Trains locos, Kiss locos, Aristocraft locos, Accucraft cast iron locos

All decoders are in stock and ship within 24 hours

Visit the Shourt Line where every item is discounted everyday day + worldwide shipping Call **310-622-4431** email <u>info@shourtline.com</u> web <u>www.ShourtLine.com</u> -

> Click here to view or download our complete Shourt Line & Massoth discount product price list

> > Copyright Shourt Line by Soft Works Ltd. 10/2009

Shourt Line Model Railroad Products Phone: 310-622-4431 Fax: 310-622-4431 PO Box 490271, Los Angels California, 90049 web: <u>www.ShourtLine.com</u> email: <u>info@ShourtLine.com</u>