



**RDL**<sup>®</sup>  
Radio Design Labs

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

## STICK-ON<sup>®</sup> SERIES Model ST-LMX3 Mic and Line to Line Mixer

### ANYWHERE YOU NEED...

- Mic and Line Audio Mixing
- Balanced or Unbalanced Inputs and Output
- To Add Additional Inputs to Existing Mixer
- To Combine Signals of Different Level, Impedance, or Bal. /Unbal. Configuration
- Expandable Add-On Mixing System



### *You Need The ST-LMX3!*

The ST-LMX3 is part of a group of products in the Stick-On series from Radio Design Labs. The durable bottom adhesive permits quick, permanent mounting nearly anywhere or it may be used with RDL's racking accessories. The ST-LMX3 gives you the advantages of a combination line/mic audio mixer with the added convenience of Stick-Ons!

The ST-LMX3 is a 3-channel utility audio mixer for combining one or two mic-level signals with a line-level signal, all to a single line-level output.

**APPLICATION:** Individual level control is provided for each input. Each input features a separate preamplifier circuit, which isolates it from the other inputs. Signals from the three preamps are actively summed and fed to the output line-level driver amplifier. The line-input circuit allows the input to accept either a balanced or unbalanced signal, of either high or low impedance. The mic-input circuit design allows the inputs to accept either balanced low-impedance mics or high-impedance unbalanced mics. The output is capable of driving into either high or low impedance, balanced or unbalanced loads. Each output may be connected in parallel with ST-MX3s or ST-MMX3s to form a multi-channel mixer to fit nearly any installation! The ST-LMX3 features direct coupled amplifier circuitry, which produces the unsurpassed pure clarity for which Radio Design Labs products are known! Some features are:

- Ultra-low distortion
- Ultra-low noise
- Input levels individually adjustable
- Ample headroom at operating level
- Full operation in either high or low impedance circuits
- Outputs short-circuit protected
- Positive connections via barrier block - no audio connectors to wire

Anywhere you need a small, simple, quality mic and line input utility mixer, the ST-LMX3 is the cost-effective solution!

# STICK-ON<sup>®</sup> SERIES

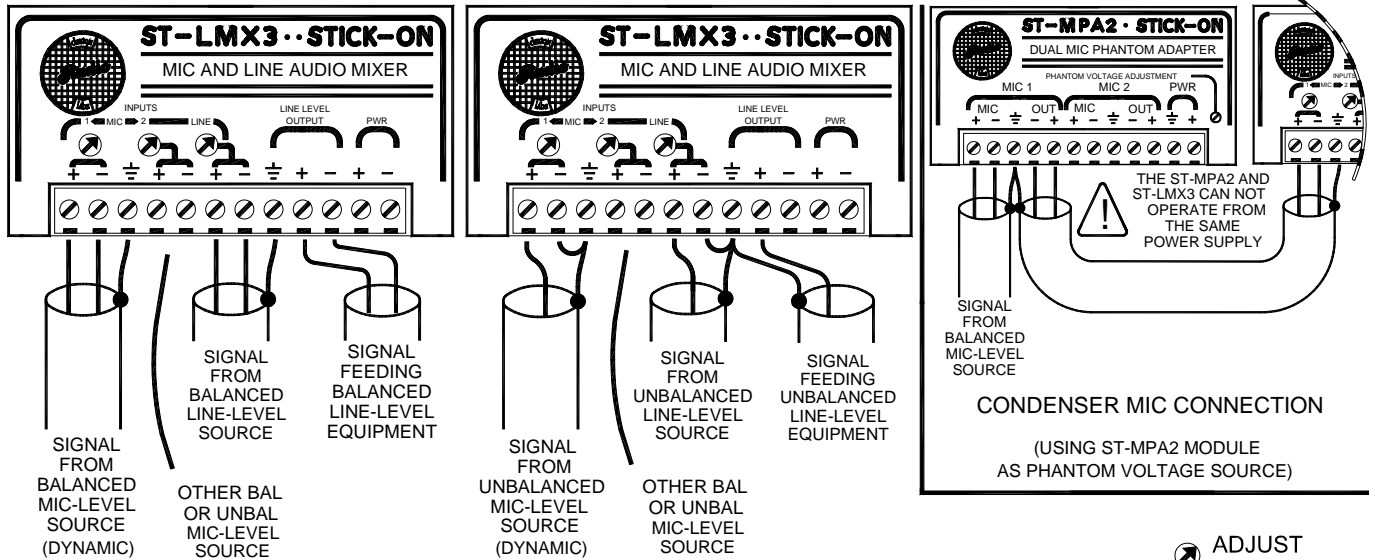
## Model ST-LMX3

### Mic and Line to Line Mixer

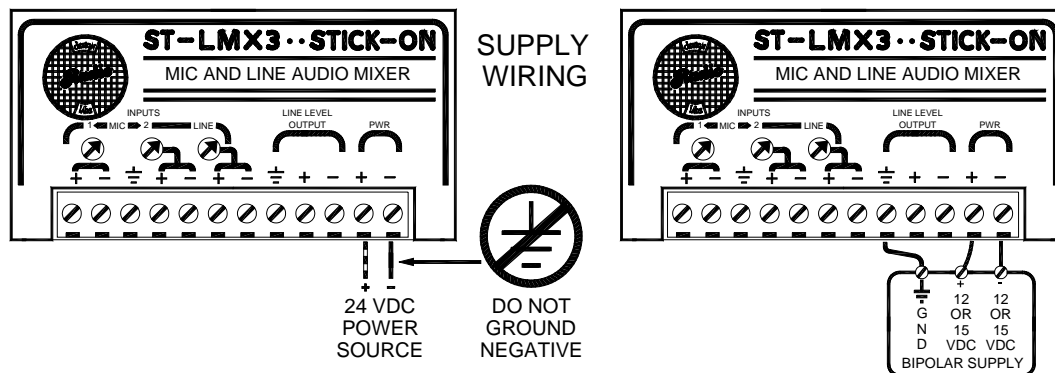
## Installation/Operation



EN55103-1 E1-E5; EN55103-2 E1-E4  
Typical Performance reflects product at publication time exclusive of EMC data, if any, supplied with product. Specifications are subject to change without notice.



EACH INPUT OR OUTPUT MAY BE BALANCED OR UNBALANCED



### TYPICAL PERFORMANCE

#### Inputs (3):

Line Level (1): > 30 k $\Omega$  balanced or unbalanced bridge  
Mic Level (2): 200  $\Omega$  balanced; 5 k $\Omega$  unbalanced  
NOTE: MIC INPUT ON ST-LMX3 IS NOT PROTECTED AGAINST PHANTOM VOLTAGE. IF CONDENSER MICS ARE TO BE USED, USE RDL's ST-MPA2 PHANTOM ADAPTER

#### Input Signal:

Line: -20 dBu to +18 dBu (for +4 dBu output)  
-24 dBu to +14 dBu (for 0 dBu output)  
Mic: -66 dBu to -26 dBu (for +4 dBu output)  
-70 dBu to -30 dBu (for 0 dBu output)

#### Output:

400  $\Omega$  to drive low or high impedance balanced or unbalanced lines

#### THD+N:

Line: < 0.030% (+4 dBu 10 Hz to 20 kHz)  
Mic: < 0.200% (typical 0.1% 10 Hz to 10 kHz)

#### Freq. Response:

Line: 10 Hz to 20 kHz (+/- 0.50 dB)  
Mic: 10 Hz to 18 kHz (+/- 1 dB)

#### Headroom:

18 dB (above +4 dBu)

#### Gain:

Line: -14 dB to +24 dB (adjustable)  
Mic: 30 dB to 70 dB (adjustable)

#### CMRR:

Line: > 50 dB (60 or 120 Hz)  
Mic: > 55 dB (60 or 120 Hz)

#### Noise Below +4dBu:

< 70 dB (line inputs @ unity gain; mic input 50 dB gain; inputs unterminated)  
< 60 dB (line inputs @ unity gain; mic input 50 dB gain; inputs 500  $\Omega$  terminated)

#### Multiple Module System Loss:

6 dB with two module outputs paralleled  
10 dB with three module outputs paralleled  
12 dB with four module outputs paralleled

#### Power:

24 to 33 Vdc @ 55 mA, Floating

Radio Design Labs Technical Support Centers

U.S.A. (800) 933-1780, (928) 778-3554; Fax: (928) 778-3506

Europe [NH Amsterdam] (+31) 20-6238 983; Fax: (+31) 20-6225-287