



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

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

## STICK-ON<sup>®</sup> SERIES

### Model ST-MPA24

#### Dual Microphone Phantom Adapter

- Add Phantom Powered Mics to Standard Inputs
- Two Phantom Adapters in One Module
- 24 Vdc Fixed Phantom Voltage
- P24 per IEC 61938
- Phantom Voltage Adjustable to IEC Standard 24 Vdc
- Highly-Filtered Phantom Power
- Phantom Conversion with Full Frequency Response



The ST-MPA24 is a utility power amplifier in the convenient line of STICK-ON products. The durable bottom adhesive permits quick, permanent or removable mounting nearly anywhere, or it may be used with RDL's racking accessories. The ST-MPA24 allows two existing microphone inputs to be converted to phantom mic inputs for use with condenser microphones with the added convenience of STICK-ONS! STICK-ONS are designed, built and rated for continuous duty in professional A/V systems.

**APPLICATION:** The ST-MPA24 contains two identical phantom power circuits and a common power supply input. If only one mic input is to be converted for phantom operation, only one circuit needs to be used. Each circuit has a mic input and a mic output. Phantom voltage appears on each of the mic input terminals. There is no voltage on the mic output terminals. Therefore, the ST-MPA24 can convert any existing mic input into a phantom powered input.

Module operation is from a 24 Vdc ground referenced power supply. The ST-MPA24 has an internal pass transistor-regulator filter circuit which permits this incoming voltage to be adjusted to the desired phantom voltage, up to 92% of the supply input voltage. A multi-turn trimming potentiometer is provided to reduce the phantom voltage if desired. In the default fully clockwise position, the ST-MPA24 provides "P24" 24 Vdc phantom voltage conformant to IEC 61938.

In applications where microphone inputs are not equipped for phantom, the ST-MPA24 is the ideal way to add up to 24 Vdc phantom power without compromising sound quality. For installations requiring 48 Vdc phantom (P48), see RDL's ST-MPA48 Microphone Phantom Adapter and other RDL microphone products.

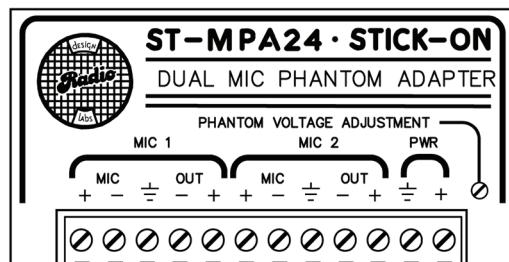
# STICK-ON® SERIES

## Model ST-MPA24 Dual Microphone Phantom Adapter

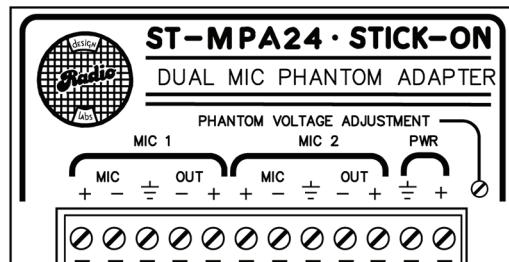
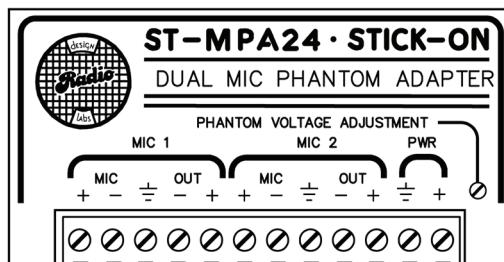
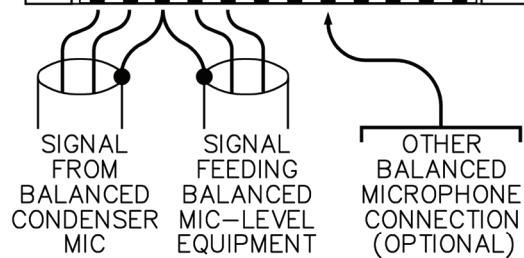
### Installation/Operation



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.



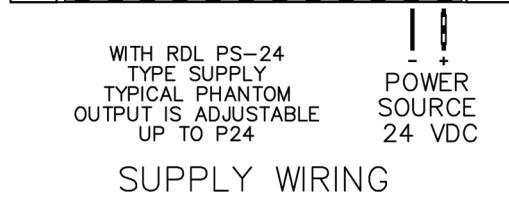
#### AUDIO WIRING



#### ADJUSTMENT PROCEDURE

1. TURN POTS FULLY COUNTER-CLOCKWISE BEFORE CONNECTING MICS.
2. ATTACH A DC VOLTMETER BETWEEN ANY MIC INPUT TERMINAL AND GROUND.
3. ADJUST FOR THE CORRECT OPERATING VOLTAGE RANGE FOR THE MIC TO BE PHANTOM POWERED.

NOTE: FOR P24 IEC 61938 24VDC PHANTOM,  
 SET POT FULLY CLOCK-WISE.  
 (FACTORY DEFAULT POSITION)



#### SUPPLY WIRING

#### TYPICAL PERFORMANCE

Channels:

Frequency Response:

Phantom Voltage:

Standard for Phantom:

Ambient Operating Environment:

Power Requirement:

2

20 Hz to 100 kHz ( $\pm 0.025$  dB, 150  $\Omega$  source, 1 k $\Omega$  load)

P24, 24 Vdc

IEC 61938: 2013

0° C to 55° C

GROUND-REFERENCED, 24 Vdc @ 35 mA (with 20 mA load)