

## **RDL**® Radio Design Labs®

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

# STICK-ON® SERIES Model ST-MPA2 Microphone Phantom Adapter

### ANYWHERE YOU NEED...

- To Add Phantom Microphones to Standard Inputs
- Two Phantom Adapters in One Module
- Phantom Conversion with Full Frequency Response
- Fully Trimpot Adjustable Phantom Voltage
- Highly Filtered Phantom Power



#### You Need The ST-MPA2!

The ST-MPA2 is part of a group of products in the STICK-ON series from Radio Design Labs. The durable bottom adhesive permits quick, permanent or removable mounting nearly anywhere or it may be used with RDL's STR-19A or STR-19B racking adapters for rack mounting! The ST-MPA2 allows any existing microphone input to be converted to a phantom mic input for use with any condenser microphone, with a big plus, you can put it where you need it!

**APPLICATION:** The ST-MPA2 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-MPA2 can convert any existing mic input into a phantom input!

The power supply input terminals may be fed with any dc voltage from 6 Vdc to 52 Vdc. The ST-MPA2 has an internal pass-transistor/regulator filter circuit, which permits this incoming voltage to be adjusted to the desired phantom voltage, up to about 92% of the supply input voltage. A multi-turn trimming potentiometer is provided for you to adjust for the correct phantom voltage.

Most presently produced mics will operate on phantom voltages of 30 Vdc or less. Some microphones will accept a maximum voltage of no more than 12 Vdc. All of these mics will work with the ST-MPA2, supplied with the standard RDL power supply. In applications where the mic requires 48 Vdc phantom, and a standard 52 Vdc phantom supply is available, the ST-MPA2 may be used to feed these mics.

In applications where older mic mixers (or new mixers are not equipped for phantom) are being used, the ST-MPA2 is the ideal way to add phantom power without compromising sound quality!

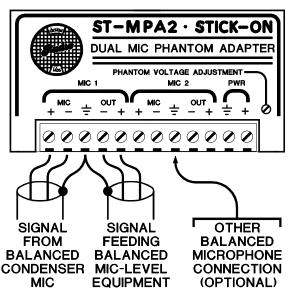


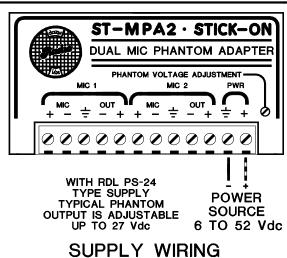
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## STICK-ON® SERIES

## **Model ST-MPA2** Microphone Phantom Adapter



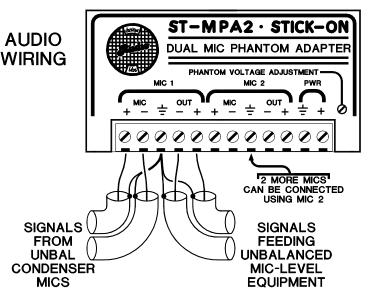


## Installation/Operation



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** 



#### 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.

#### **TYPICAL PERFORMANCE**

15 Hz to 50 kHz (+/- 0.25 dB, 150  $\Omega$  in/out) Frequency Response: 10 Hz to 50 kHz (+/- 0.25 dB, 600  $\Omega$  in/out)

Voltage Range: 12 Vdc supply; 0 to 9.0 Vdc 24 Vdc supply; 0 to 21.5 Vdc

30 Vdc supply; 0 to 26.5 Vdc 52 Vdc supply; 0 to 48.0 Vdc

Power Supply Ripple Rejection: > 70 dBMicrophone Impedance: 5 k $\Omega$  or lower

6 to 52 Vdc @ 30 mA, Ground referenced Supply input: