

**RDL**® Radio Design Labs™

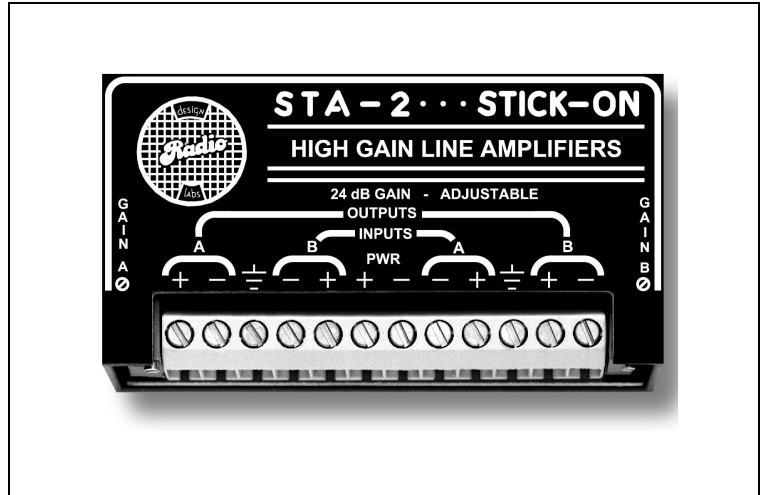
SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

## STICK-ON® SERIES

### Model STA-2 Electronic Transformer/ Line Amplifier Pair

#### ANYWHERE YOU NEED...

- Up to 24 dB Gain in an Audio Line
- Conversion from Unbalanced to Balanced
- Conversion from High to Low impedance
- Low Impedance, High Current Line Drivers
- A Two-channel Line-Level Preamplifier
- High Gain, High Output, High Performance



#### ***You Need The STA-2!***

The STA-2 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 racking accessories. The STA-2 offers the ultimate in high performance line-level preamplification, with the big *plus*, you can put it right where you need it!

**APPLICATION:** The STA-2 is a two channel, line-level audio preamplifier. Each channel is identical. The audio inputs are bridged at 5 k $\Omega$  and accept either an unbalanced or a balanced audio signal. Gain is adjustable from unity gain to +24 dB using a 25-turn precision trimming potentiometer. The output line driver circuits are designed to drive long balanced audio lines into 600  $\Omega$  loads.

The audio circuits in the STA-2 are all dc coupled for the ultimate in pure, transparent audio clarity. The power supply input may be fed from a floating (not ground-referenced) 24 Vdc power source, or from a bipolar power supply (+/-12 Vdc or +/-15 Vdc).

Many audio products provide optimum performance when feeding into a bridging input, but may not provide the output needed to directly drive low-impedance lines terminated with 600  $\Omega$  transformers. The STA-2 is specifically designed for such installations, and is also ideal in installations requiring high gain in line-level audio transmission.

Both the input and output circuits function as electronic transformers, permitting either balanced or unbalanced audio connections. The STA-2 may be used as a balanced input/balanced high-level output, two-channel (stereo) preamplifier, or may be used to convert unbalanced sources to 600  $\Omega$  balanced lines.

In installations where high gain may be required and balanced signals must drive terminated 600  $\Omega$  lines, the STA-2 is the ultimate choice. The STA-2 offers the unparalleled longevity and audio clarity for which RDL products are known. Used in conjunction with other STICK-ON audio and control modules, the STA-2 can be the foundation for many high quality, innovative audio systems!



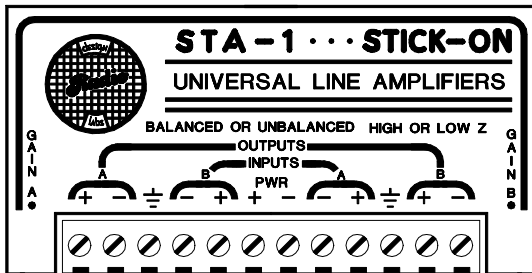
# STICK-ON® SERIES

## Model STA-2 Electronic Transformer/ Line Amplifier Pair

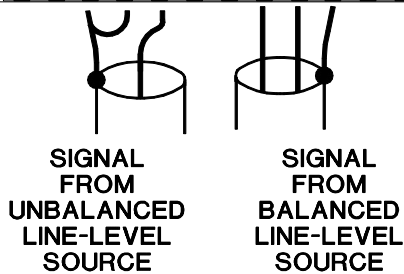
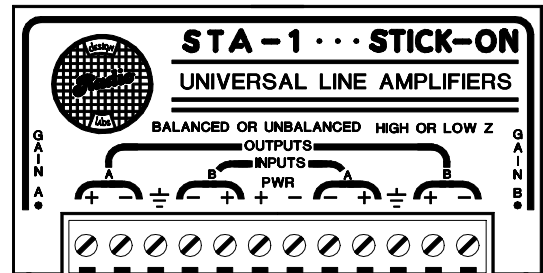
## Installation/Operation



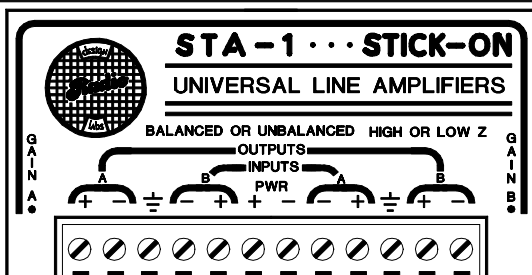
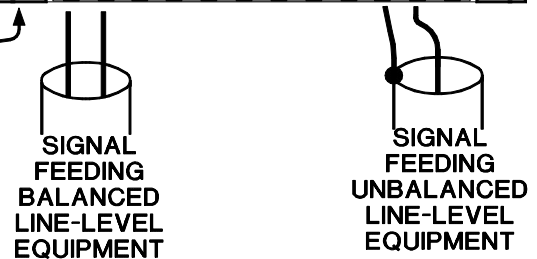
EN55103-1 E1-E5; EN55103-2 E1-E4  
Typical Performance reflects product at publication time  
exclusive of EMC data, if any, supplied with product.  
Specifications are subject to change without notice.



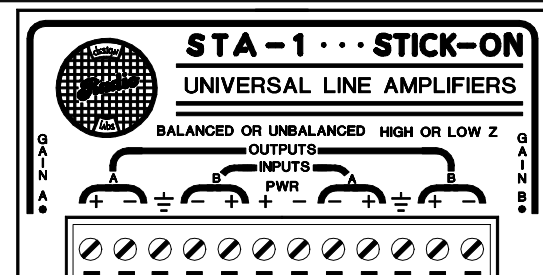
### AUDIO WIRING



25 TURN  
GAIN SET  
ADJUSTMENTS



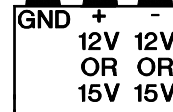
### SUPPLY WIRING



RDL PS-24  
TYPE  
24 VDC  
POWER  
SOURCE



DO NOT  
GROUND  
NEGATIVE



AUXILIARY  
BIPOLAR

(NOTE: STA-2 Connections are identical to those of STA-1)

### TYPICAL PERFORMANCE

Amps per STA-2:  
Gain:  
Input impedance:  
Input configuration:  
Output impedance:  
Output configuration:  
Frequency Response:  
Total Harmonic Distortion:  
Output Level:  
Headroom:  
Noise:  
CMRR:  
Crosstalk:  
Power Requirement:

2 identical circuits (stereo or dual mono operation)  
Unity to 24 dB adjustable, into 600 Ω (separate controls for each channel)  
5 kΩ bridging  
Balanced or unbalanced  
150Ω balanced, drives 600Ω or 10kΩ lines  
Balanced or unbalanced  
10 Hz to 50 kHz +/- 0.25 dB  
< 0.020%  
+4 dBu  
18 dB (at rated output level of +4 dBu)  
-80 dB referred to 4 dBu (20 Hz to 20 kHz)  
-65 dB at 100 Hz  
Better than 80 dB (10 Hz to 20 kHz)  
24 to 33 Vdc @ 50 mA, Floating