



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

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

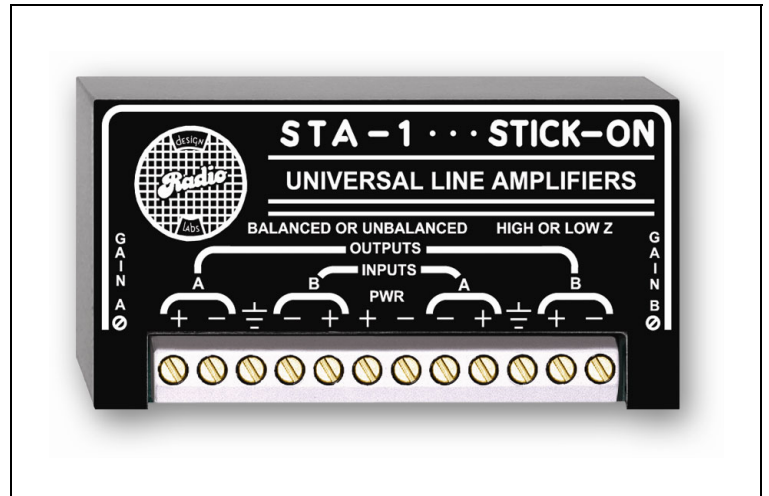
## STICK-ON<sup>®</sup> SERIES

### Model STA-1

### Electronic Transformer / Line Amplifier Pair

#### ANYWHERE YOU NEED...

- Up to 20 dB Gain In an Audio Line
- Conversion from Balanced to Unbalanced
- Conversion from Unbalanced to Balanced
- Conversion from High to Low Impedance
- Conversion from Low to High Impedance
- To Bridge an Audio Line Feed
- To Precisely Match Audio Levels



#### *You Need The STA-1!*

**APPLICATION:** The STA-1 is part of a group of products in the STICK-ON series, designed by Radio Design Labs, the STA-1 contains two identical circuits. Each is both an electronic line transformer, and an amplifier. The durable adhesives provided with the STA-1 permit permanent or removable mounting. The STA-1 can be treated just like a pair of audio transformers with gain making it ideal for most any audio line application requiring amplification and/or conversion between balanced or unbalanced operation! Some features of the STA-1 are:

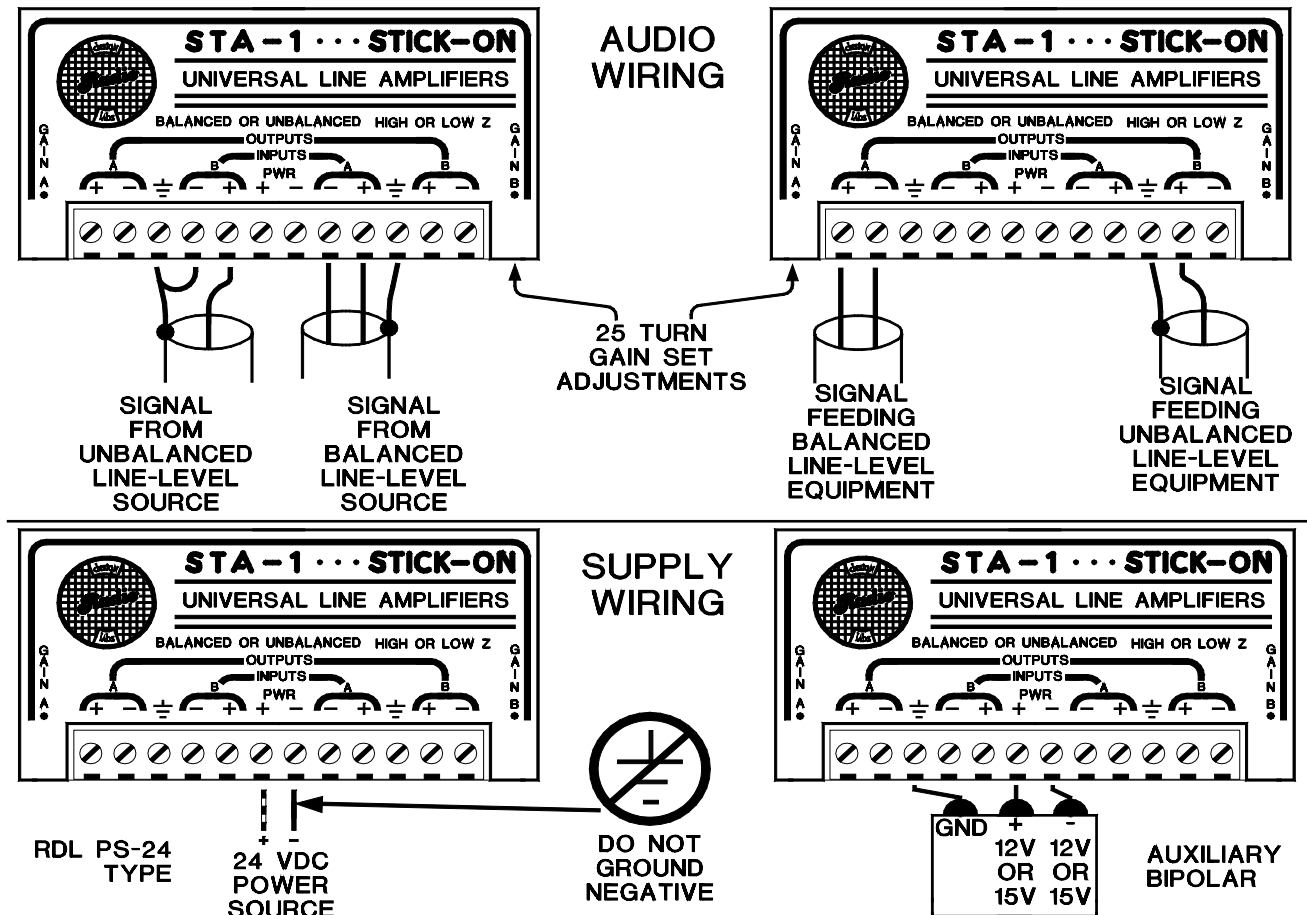
- No capacitors or transformers in the audio circuits
- Two identical amplifier circuits in each STA-1
- True DC amplifiers provide impeccable audio quality
- Ultra-low distortion
- Ultra-low noise
- 18 dB of headroom at operating level
- Output level adjustable from off to 20 dB gain
- Provides -10 dBV unbalanced to +4 dBu balanced conversion
- Multi-turn trimmers for precise level adjustment
- Recessed adjustments discourage tampering
- All inputs and outputs are RF bypassed
- Full operation in either high or low impedance circuits
- Operation unaffected by unbalancing of inputs or outputs
- Outputs short-circuit protected
- Very high common-mode rejection when bridging balanced lines
- Positive connections via barrier block. No audio connectors to wire

## Installation/Operation

### Model STA-1 Electronic Transformer / Line Amplifier Pair



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.



#### TYPICAL PERFORMANCE

Amps per STA-1:	2 identical circuits (stereo or dual mono operation)
Gain:	20 dB adjustable (separate controls for each channel)
Input impedance:	10 kΩ bridging
Input configuration:	Balanced or unbalanced
Output impedance:	200Ω balanced, drives 600Ω or 10kΩ lines
Output configuration:	Balanced or unbalanced
Frequency Response:	DC to 25 kHz +/- 0.25 dB
Total Harmonic Distortion:	0.003% to 0.009%; 0.005% nominal
Output Level:	+4 dBu
Headroom:	18 dB (at rated output level of +4 dBu)
Noise:	-80 to -85 dB referred to +4 dBu
CMRR:	-70 to -80 dB at 100 Hz
Crosstalk:	Better than 75 dB
Power Requirement:	24 to 33 Vdc @ 50 mA, Floating