



RDL[®]
Radio Design Labs

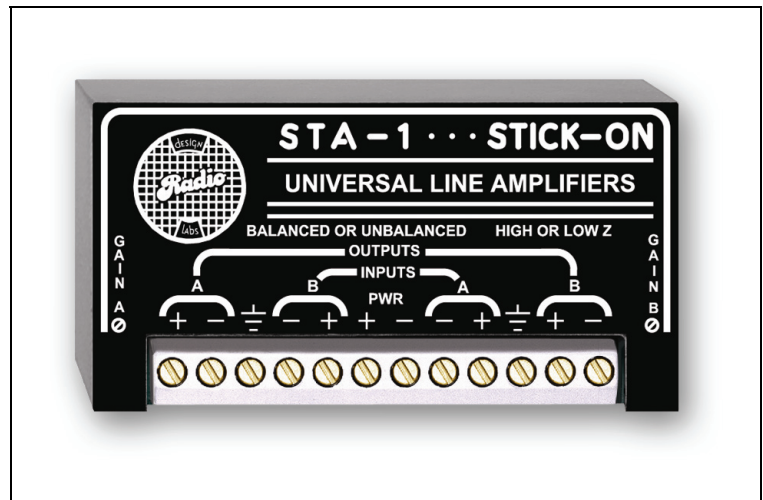
SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

STICK-ON[®] SERIES

Model STA-1

Electronic Transformer / Line Amplifier Pair

- 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
- Bridge an Audio Line Feed
- Precisely Match Audio Levels



The STA-1 is part of a group of products in the STICK-ON series from Radio Design Labs. The durable adhesives provided with the STA-1 permit permanent or removable mounting. Numerous available mounting accessories, brackets and rack-mount chassis are optionally available to facilitate any system design. STICK-ONS are designed, built and rated for continuous duty in professional A/V systems.

APPLICATION: The STA-1 is a dual-channel line-level preamplifier with bridging inputs, adjustable gain or loss, and low-impedance outputs. Each of the two identical circuits is both an electronic line transformer and a line amplifier. Hook up the STA-1 just like a pair of audio transformers with gain. True dc amplifiers produce unsurpassed audio clarity, high common-mode rejection, ultra-low distortion and low noise. The STA-1 is perfect for most line amplification, impedance or balanced/unbalanced conversion. The STA-1 operates from floating or bipolar dc power. For installations where ground-referenced power is preferred, use the STA-2A Dual High Gain Line Amplifiers.

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



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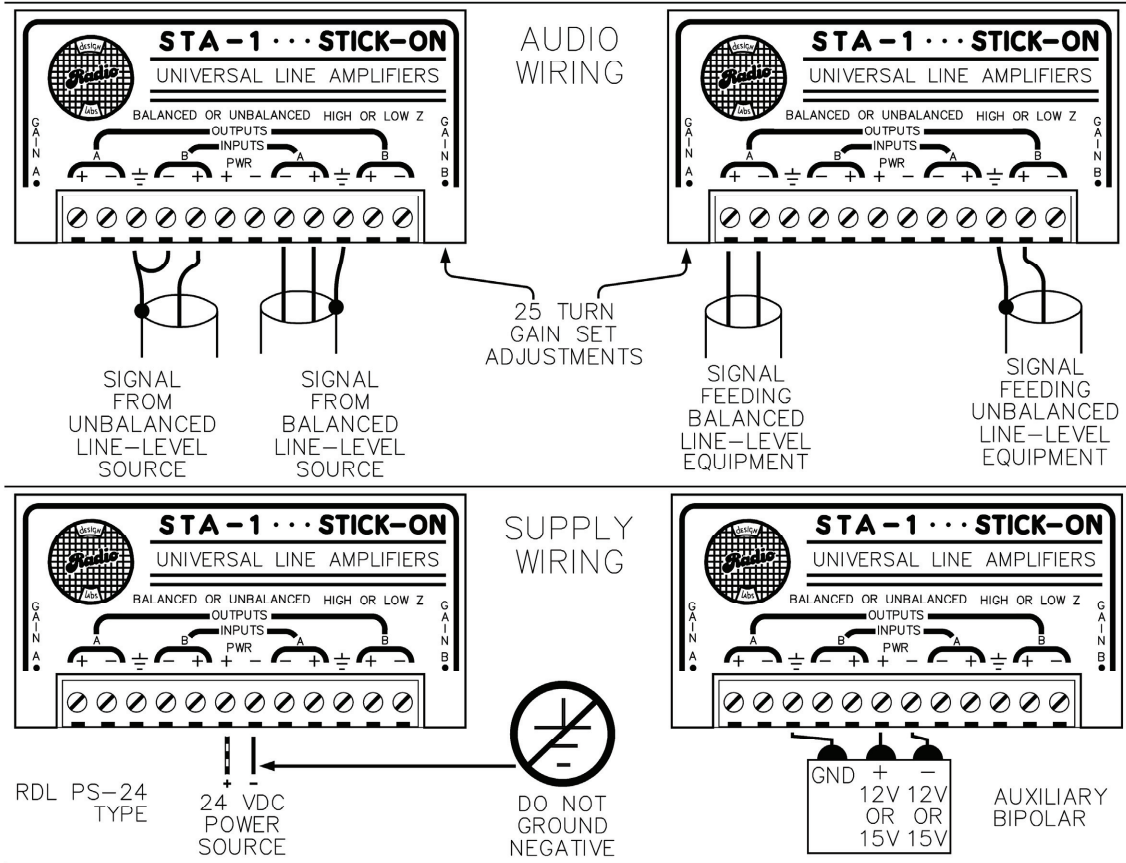
Electronic Transformer / Line Amplifier Pair

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.



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:	200 Ω balanced (drives 600 Ω or 10 kΩ lines)
Output configuration:	Balanced or unbalanced
Frequency Response:	dc to 25 kHz (+/- 0.25 dB)
THD+N:	< 0.03%
Output Level:	+4 dBu
Headroom:	18 dB (at rated output level of +4 dBu)
Noise:	< -75 dB (referred to +4 dBu)
CMRR:	-50 dB (50 to 120 Hz)
Crosstalk:	Better than 75 dB
Ambient Operating Environment:	0° C to 55° C
Power Requirement:	FLOATING, 24 Vdc @ 50 mA

Radio Design Labs Technical Support Centers

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