

STICK-ON® 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



SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

Installation/Operation

Specifications are subject to change without notice

Typical Performance reflects product at publication time exclusive of EMC data, if any, supplied with product.

EN55103-1 E1-E5; EN55103-2 E1-E4

Model STA-1 Electronic Transformer / Line Amplifier Pair

AUDIO STA-1···STICK-ON STA-1···STICK-ON WIRING UNIVERSAL LINE AMPLIFIERS UNIVERSAL LINE AMPLIFIERS BALANCED OR UNBALANCED HIGH OR LOW Z BALANCED OR UNBALANCED HIGH OR LOW Z GA I N G A I N OUTPUTS OUTPUTS NPUTS INPUTS PWR B \$ B \$ Ø Ø Ø Ø Ø \bigcirc $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$ Ø 25 TURN GAIN SET **ADJUSTMENTS** SIGNAL SIGNAL SIGNAL SIGNAL FEEDING FEEDING FROM FROM UNBALANCED BALANCED BALANCED UNBALANCED LINE-LEVEL LINE-LEVEL LINE-LEVEL LINE-LEVEL EQUIPMENT EQUIPMENT SOURCE SOURCE STA-1···STICK-ON STA-1···STICK-ON SUPPLY UNIVERSAL LINE AMPLIFIERS WIRING UNIVERSAL LINE AMPLIFIERS BALANCED OR UNBALANCED HIGH OR LOW Z BALANCED OR UNBALANCED HIGH OR LOW Z G A I N GAL OUTPUTS OUTPUTS INPUTS. **INPUTS** Ň B PWR_ \$ 1 B Ø Ø Ø Ø $\bigcirc \bigcirc$ 00000GND DO NOT 12V 12V RDL PS-24 AUXILIARY 24 VDC GROUND OR TYPE OR BIPOLAR POWER NEGATIVE 15V 15V SOURCE **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 $10k\Omega$ 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) -80 to -85 dB referred to +4 dBu Noise: -70 to -80 dB at 100 Hz CMRR:

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24 to 33 Vdc @ 50 mA, Floating

Better than 75 dB

Crosstalk:

Power Requirement: