

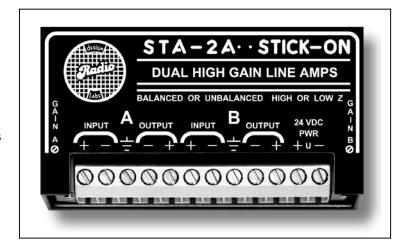
## **RDL**<sup>®</sup> Radio Design Labs<sup>®</sup>

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

# STICK-ON® SERIES Model STA-2A Dual High Gain Line Amplifiers

#### ANYWHERE YOU NEED...

- Up to 24 dB Gain in One or Two Audio Lines
- 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
- Ground-Referenced or Floating Power



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

The STA-2A is part of the group of versatile STICK-ON products from Radio Design Labs, featuring the advanced circuitry for which RDL products are known. The durable adhesives provided with the STA-2A permit permanent or detachable mounting. Numerous mounting accessories, brackets and rack-mount chassis are optionally available to facilitate any system design.

**APPLICATION:** The STA-2A is a two-channel, line-level audio preamplifier. Each channel is identical. The audio inputs are bridged at 20 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 audio taper trimming potentiometer. The output line driver circuits are designed to drive long balanced audio lines into 600  $\Omega$  loads or bridging loads. The STA-2A features wideband circuitry for excellent phase response, low noise, low distortion and exceptional audio clarity.

The power supply input may be fed from a floating (not ground-referenced) 24 Vdc power source, from a bipolar power supply (+/-12 Vdc or +/-15 Vdc) or from a ground-referenced 24 Vdc power supply.

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 which may be terminated with 600  $\Omega$  transformers. The STA-2A 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-2A 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-2A is the ultimate choice. The STA-2A offers the unparalleled longevity and audio clarity for which RDL products are known. Used in conjunction with other RDL RACK-UP®, STICK-ON, TX<sup>TM</sup>, or FLAT-PAK<sup>TM</sup> series products, the STA-2A can be the foundation for many high quality, innovative audio systems!



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## STICK-ON® SERIES

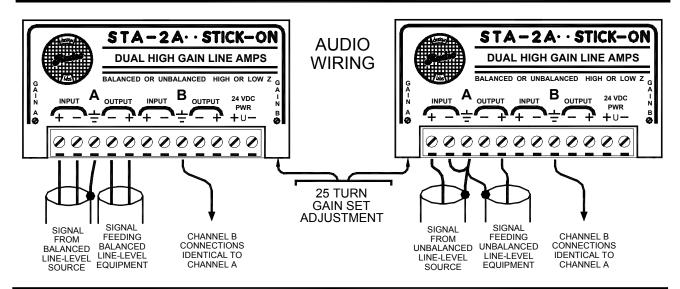
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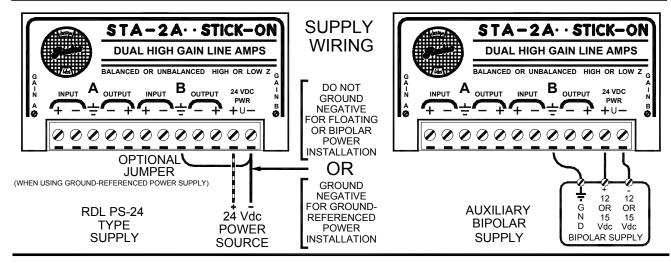
### Installation/Operation



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-2A: 2 identical circuits (stereo or dual mono)

Inputs (2): 20 k $\Omega$  balanced or unbalanced Input Signal: -20 dBu (-18 dBV) to +18 dBu (+4 dBu out)

Maximum Input Level: +24 dBu

Outputs (2): 150  $\Omega$  balanced or 75  $\Omega$  unbalanced

Output Signal:

Balanced: +4 dBu nominal

Unbalanced: 6 dB below balanced line level

Maximum Output Level: +25 dBu

Frequency Response: 10 Hz to 100 kHz (+/- 0.05 dB)

THD+N: < 0.004% (unity gain)

IMD:< 0.005% (unity gain)</td>Noise below +4 dBu:< -90 dB (unity gain)</td>Headroom:> 20 dB (above +4 dBu)Gain:Unity +24 / -14 dB (adjustable)

CMRR: > 60 dB (50 Hz to 120 Hz)
Power Requirement: 24 to 33 Vdc @ 50 mA,

Ground-referenced or Floating
Dimensions: Width: 3.00 in. 7.62 cm

Depth: 1.55 in. 3.94 cm Height: 0.65 in. 1.65cm