



RDL®
Radio Design Labs

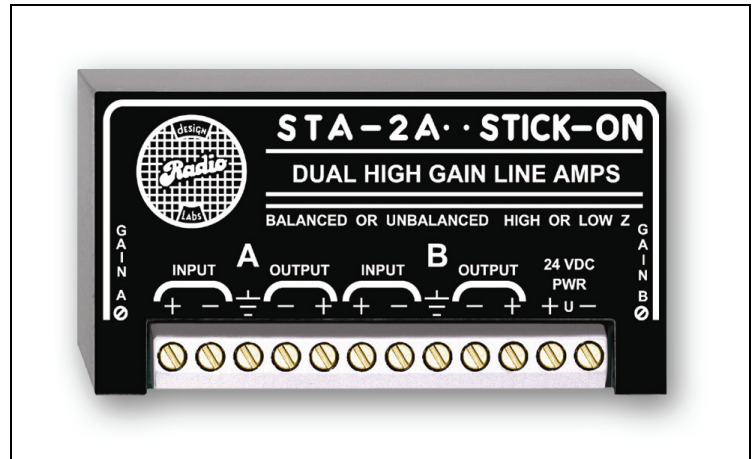
SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

STICK-ON® SERIES

Model STA-2A

Dual High Gain Line Amplifiers

- Up to 24 dB Gain in One or Two Audio Lines
- Conversion between Unbalanced and Balanced
- Conversion between High and Low Impedance
- Low-Impedance, High-Current Line Drivers
- Dual-Channel Line-Level Preamplifier
- High Gain, High Output, High Performance
- RDL SupplyFlex™ Power Input Configuration



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. STICK-ONs are designed, built and rated for continuous duty in professional A/V systems.

APPLICATION: The STA-2A is a two-channel, line-level audio preamplifier. Each channel is identical. The audio inputs are bridged at 20 k Ω 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 Ω 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 Ω 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 Ω balanced lines.

In installations where high gain may be required and balanced signals must drive terminated 600 Ω 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 products, the STA-2A can be the foundation for many high quality, innovative audio systems!

STICK-ON[®] SERIES

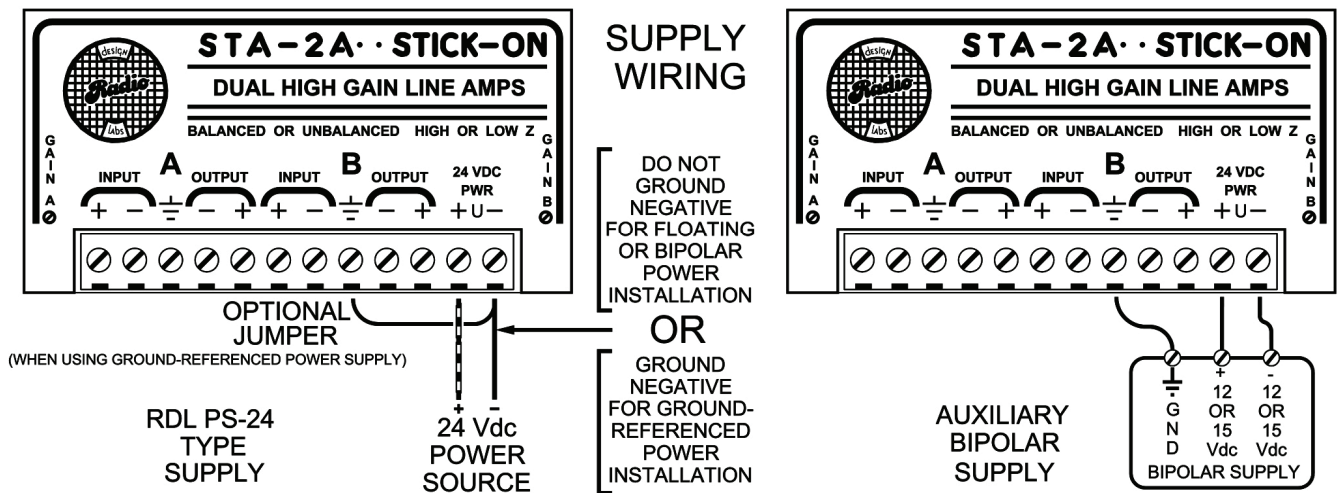
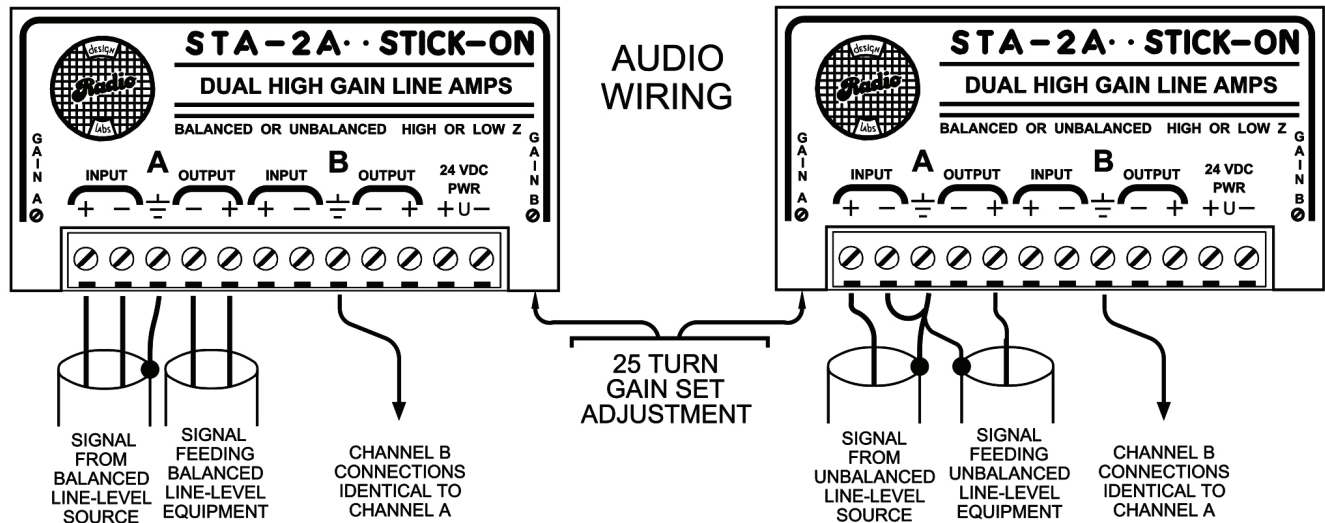
Model STA-2A

Dual High Gain Line Amplifiers

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 Ω balanced or unbalanced
Input Signal: -20 dBu (-18 dBV) to +18 dBu (+4 dBu out)
Maximum Input Level: +24 dBu
Outputs (2): 150 Ω balanced or 75 Ω 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 ($\pm$ 0.05 dB)
THD+N: < 0.004% (unity gain)

IMD: < 0.005% (unity gain)
Noise below +4 dBu: < -90 dB (unity gain)
Crosstalk: < -80 dB (unity gain)
Headroom: > 20 dB (above +4 dBu)
Gain: Unity +24 / -14 dB (adjustable)
CMRR: > 60 dB (50 Hz to 120 Hz)
Ambient Operating Environment: 0° C to 55° C
Power Requirement: GROUND-REFERENCED or FLOATING
24 Vdc @ 50 mA,
Dimensions:
Width: 3.00 in. 7.62 cm
Depth: 1.55 in. 3.94 cm
Height: 0.65 in. 1.65 cm