



RDL[®]
Radio Design Labs

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

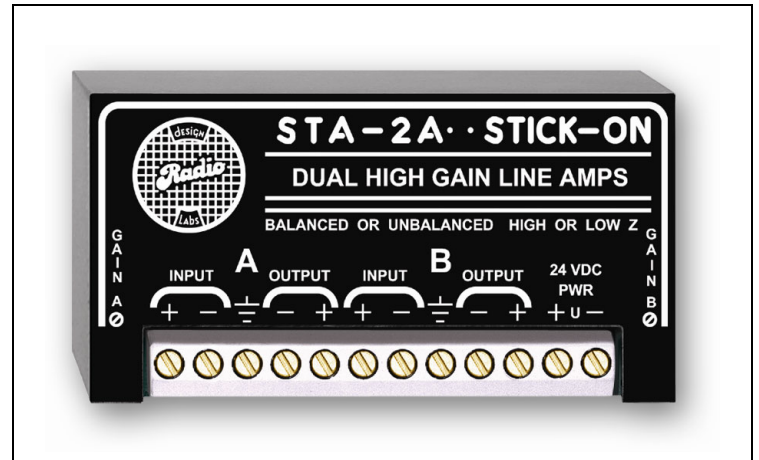
STICK-ON[®] SERIES

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 Preamp
- 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 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 RACK-UP[®], STICK-ON, TX[™], or FLAT-PAK[™] series products, the STA-2A can be the foundation for many high quality, innovative audio systems!

STICK-ON[®] SERIES

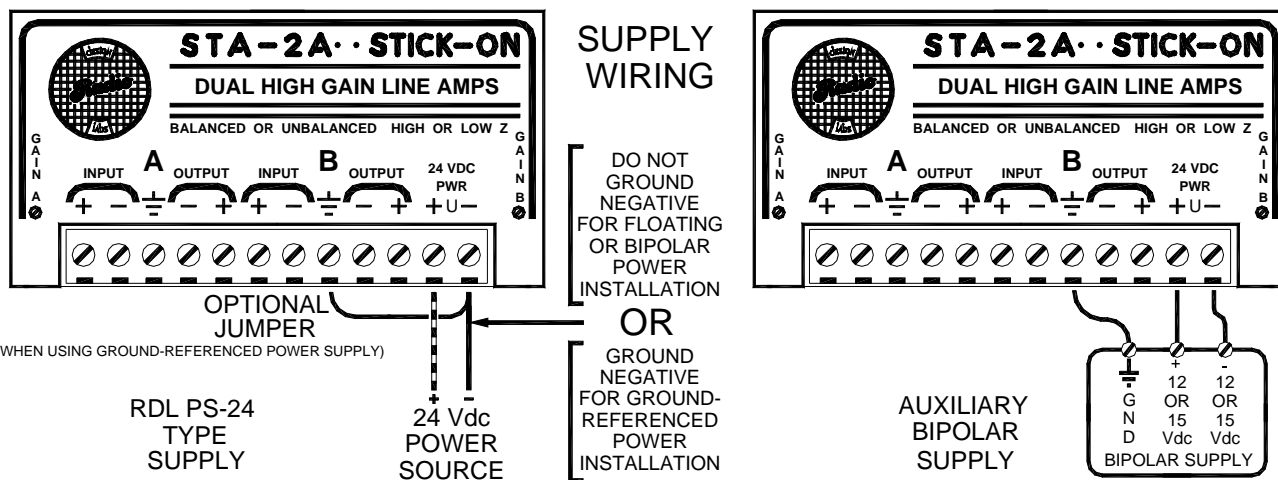
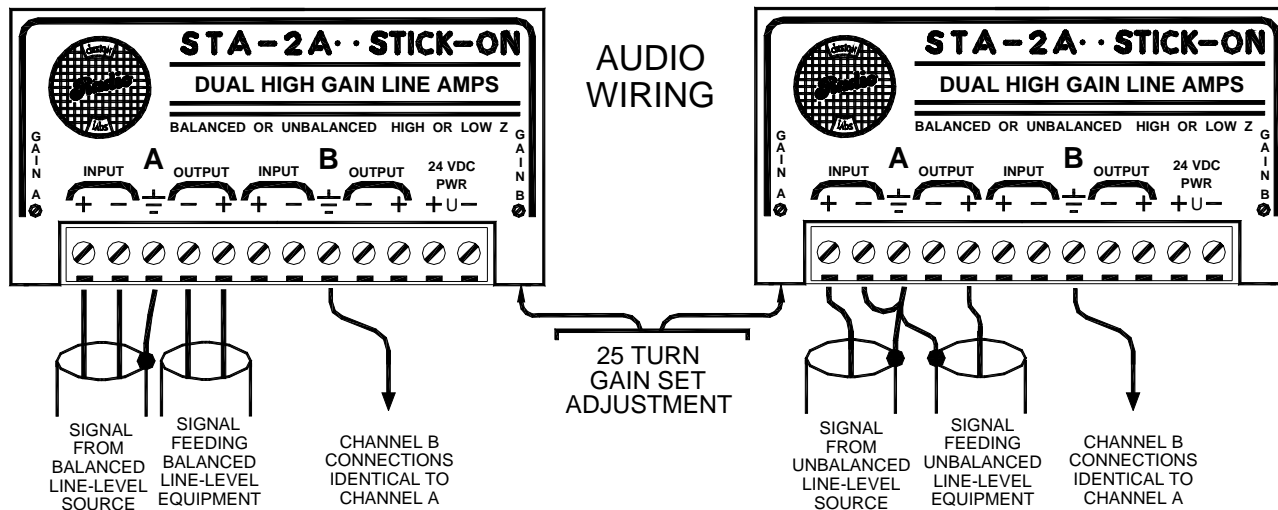
Model STA-2A

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 kΩ 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 (+/- 0.05 dB)
THD+N:	< 0.004% (unity gain)

IMD:	< 0.005% (unity gain)
Noise below +4 dBu:	< -90 dB (unity gain)
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. 1.65 cm