



RDL[®]
Radio Design Labs

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

STICK-ON[®] SERIES Model ST-GLA1 Gated Line Amplifier

- Gated Line-level Preamplifier
- Self-Gating to Suppress Unwanted Noise
- Fast, Silent Audio Switching
- Integral Single-ended Noise Reduction
- Adjustable Gain and Threshold
- Balanced or Unbalanced Input / Output
- Open-Collector Logic Output



The ST-GLA1 is part of a group of products in the STICK-ON series from Radio Design Labs. The durable adhesives provided with the ST-GLA1 permit permanent or removable mounting. Numerous available mounting accessories, brackets and rack-mount chassis are optionally available to facilitate any system design. The ST-GLA1 offers the ultimate in totally solid-state automatic line-level gating, with a big *plus*, you can put it right where you need it! STICK-ONs are designed, built and rated for continuous duty in professional A/V systems.

APPLICATION: The ST-GLA1 is a self-gated line amplifier designed to be used in a variety of situations where it is desired to produce an automatically switched line-level signal with integral noise reduction. This module may be used in conjunction with other RDL modules to configure automatic mixing systems or may be used alone as a noise gate. The open-collector output may be used to trigger other equipment or RDL modules. The versatility of ST-GLA1 applications range from complete automatic mixing system design to the addition of automatic gating to the inputs of conventional mixers or amplifiers to suppress accumulated or induced system noise.

The input and output may be wired balanced or unbalanced. Two LED indicators are provided for adjustment. One LED indicates the correct gain setting. The second indicator shows when the module is switched ON. Gain and threshold levels are adjusted using multi-turn precision trimmers.

The input gain adjustment has sufficient range to accommodate unbalanced consumer or balanced professional audio sources. The threshold adjustment permits setting the audio level at which the preamplifier output turns ON. Internal switching is solid-state and uses a soft-switch transition that sounds instantaneous without annoying clicks or edge transitions. When the audio drops below the preset threshold level, the module mutes 2 seconds later. In circumstances where a longer delay time is desired, an external capacitor may be connected to extend the delay.



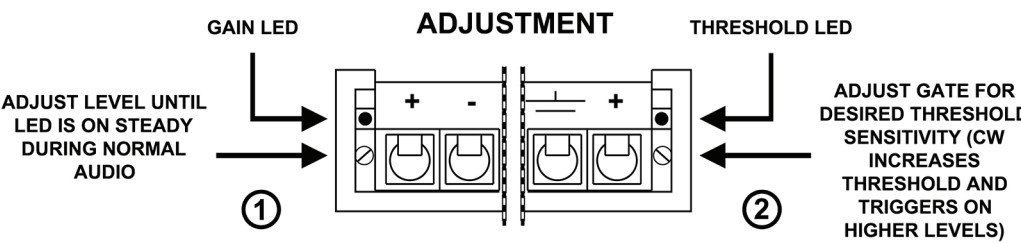
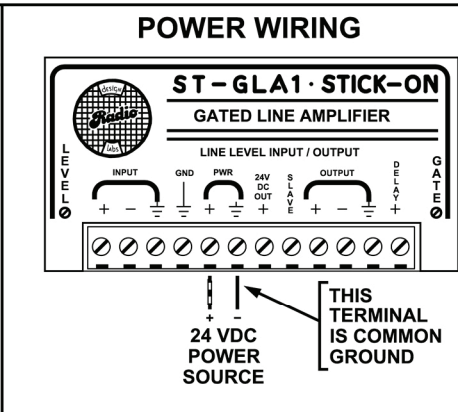
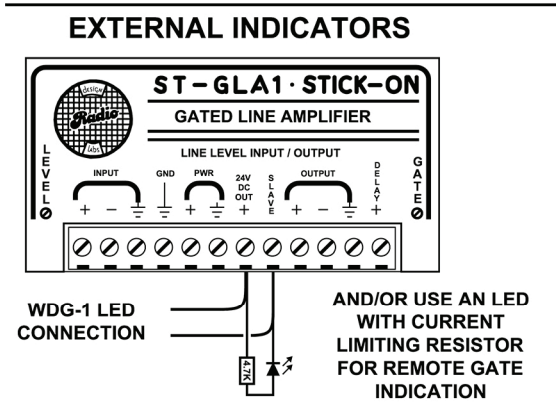
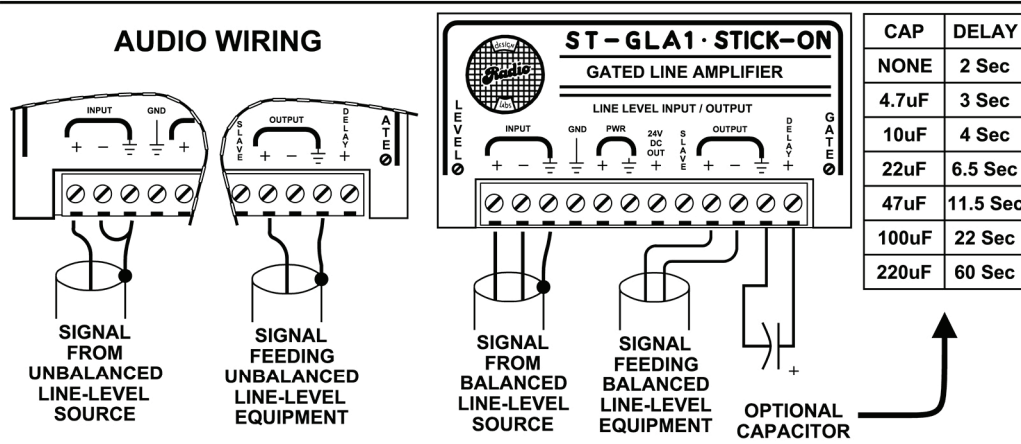
STICK-ON[®] SERIES

Model ST-GLA1 Gated Line Amplifier

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

Input:	10 kΩ Balanced or unbalanced, bridging	Switching Time:	30 ms
Input level:	-15 dBv to +4 dBu	Off delay:	2 seconds nominal (may be extended using external capacitor)
ON Gain:	Adjustable to produce +4 dBu output for rated input signal range	Control Output:	Open-collector @ 50 mA
Headroom:	> 16 dB (above +4 dBu)	Muting Attenuation:	> 60 dB (referred to input level)
THD+N:	< 0.200%	Muting Threshold:	-16 dB to -35 dB (adjustable, referred to +4 dBu)
Freq. Response:	10 Hz to 30 kHz (± 0.25 dB)	Detector Bandwidth:	20 Hz to 5 kHz
Residual Noise:	< -95 dB below +4 dBu (muted)	Ambient Operating Environment:	0° C to 55° C
Output:	150 Ω; +4 dBu balanced, -10 dBv unbalanced	Power Requirement:	GROUND-REFERENCED, 24 Vdc @ 75mA