

## STICK-ON<sup>®</sup> SERIES Model ST-GLA1 Gated Line Amplifier

## ANYWHERE YOU NEED...

- A 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

## You Need The ST-GLA1!



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!

**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.



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## Installation/Operation **STICK-ON® SERIES** EN55103-1 E1-E5; EN55103-2 E1-E4 Model ST-GLA1 Typical Performance reflects product at publication time exclusive of EMC data, if any, supplied with product. Specifications are subject to change without notice. **Gated Line Amplifier** CAP DELAY **AUDIO WIRING** ST-GLA1.STICK-ON NONE 2 Sec GATED LINE AMPLIFIER 4.7uF 3 Sec LINE LEVEL INPUT / OUTPUT A T E 10uF 4 Sec + 22uF 6.5 Sec 0000 00 000000 Ø Ø 47uF 11.5 Sec Ø Ø 100uF 22 Sec 220uF 60 Sec SIGNAL SIGNAL SIGNAL SIGNAL FROM FEEDING FROM FEEDING UNBALANCED UNBALANCED BALANCED BALANCED LINE-LEVEL LINE-LEVEL LINE-LEVEL LINE-LEVEL SOURCE OPTIONAL EQUIPMENT SOURCE EQUIPMENT CAPACITOR **POWER WIRING** EXTERNAL INDICATORS ST-GLA1 · STICK-ON ST-GLA1.STICK-ON GATED LINE AMPLIFIER GATED LINE AMPLIFIER I INE LEVEL INPUT / OUTPUT LINE LEVEL INPUT / OUTPUT ойт + A V E + 0000000000000 $\bigcirc \bigcirc$ 000000 $\bigcirc \bigcirc$ Ø Ø THIS AND/OR USE AN LED WDG-1 LED TERMINAL WITH CURRENT CONNECTION 24 VDC IS COMMON LIMITING RESISTOR GROUND POWER FOR REMOTE GATE 4.7K SOURCE INDICATION ADJUSTMENT GAIN LED THRESHOLD LED ADJUST GATE FOR ADJUST LEVEL UNTIL DESIRED THRESHOLD LED IS ON STEADY SENSITIVITY (CW DURING NORMAL INCREASES AUDIO THRESHOLD AND (1)(2) TRIGGERS ON HIGHER LEVELS) **TYPICAL PERFORMANCE** Switching Time: Input - 10 k $\Omega$ : Balanced or unbalanced, bridging 30 ms -15 dBv to +4 dBu Input level: Off delay: 2 seconds nominal (may be ON Gain: extended using external capacitor) Adustable to produce +4 dBu output for rated input signal range Control Output: Open-collector @ 50 mA > 60 dB (referred to input level) > 16 dB (above +4 dBu) Muting Attenuation: Headroom: 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) < -95 dB below +4 dBu (muted) Detector Bandwidth: 20 Hz to 3 kHz **Residual Noise:** Power: 24 to 33 Vdc @ 75 mA. Output - 150 $\Omega$ ; +4 dBu balanced. Ground-referenced -10 dBv unbalanced Radio Design Labs Technical Support Centers

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