



**RDL**®  
Radio Design Labs

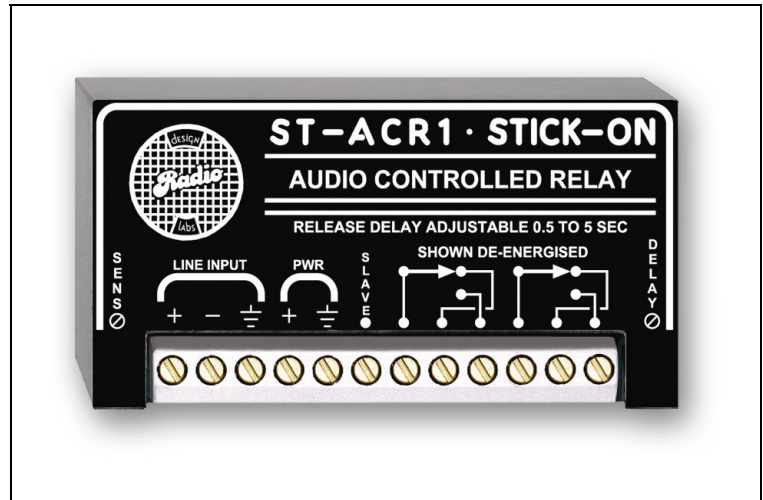
SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

## STICK-ON® SERIES

### Model ST-ACR Series

### Audio Controlled Relay

- Switching Controlled by Audio Signal
- Switching from Mic OR Line Signals
- Silence Sensing
- DPDT Switching Contacts
- Open-Collector Slave Output



The ST-ACR is part of a group of products in the STICK-ON series from Radio Design Labs. The durable adhesives provided with the ST-ACR permit permanent or removable mounting. Numerous available 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.

#### THREE MODELS TO FIT SPECIFIC APPLICATIONS:

**ST-ACR1** This module is designed to switch on *line-level* sources. Its relatively short release delay time makes it the optimum choice for voice applications.

**ST-ACR1M** This module is designed to switch on *low-level* sources, such as microphones or mic-level sources. Its relatively short release delay time makes it the optimum choice for voice applications where the source has not been pre-amped up to a line level.

**ST-ACR2** This module is designed to switch on *line-level* sources, and has a longer release delay time making it the optimum choice for most music applications. The ST-ACR2 is widely used as a *Silence Sensor*.

#### FEATURES IN COMMON TO ALL ACR PRODUCTS:

- High-impedance bridging input connects across any audio line
- Input may be connected to either balanced or unbalanced sources
- Multi-turn sensitivity adjustment permits precise threshold setting
- Multi-turn **DELAY** control adjusts relay release delay
- Band-pass filtering yields triggering on characteristic audio spectrum
- **SLAVE** terminal may also be used to trigger the control inputs on various other RDL Modules
- **SLAVE** terminal may be used with remote switch to manually override the control circuit and turn on the relay
- **SLAVE** open-collector terminal allows additional relays to be added for more contacts (RDL's ST-LCR1 or ST-LCR2)

All this is available in the unbelievable compactness and convenience of the RDL STICK-ONS. Put them right where you need them, or design them in with our optional racking kits. Anytime you need DPDT contact closures controlled by ANY audio source, your simple, cost-effective solution is found in the ST-ACR product group! Uses the ST-ACR's individually, or combine them with other RDL products as part of a complete audio/video system.



## STICK-ON<sup>®</sup> SERIES

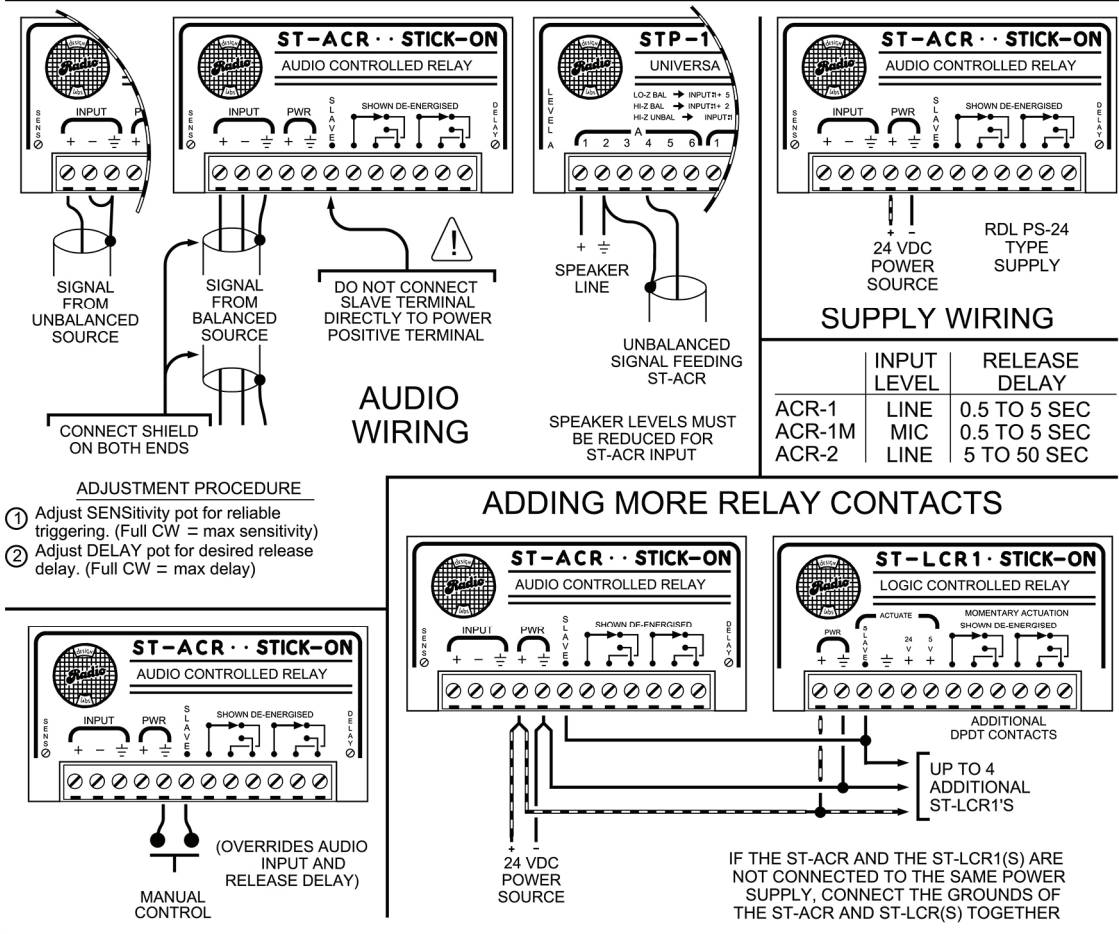
### Model ST-ACR Series

### Audio Controlled Relay

## 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

#### ST-ACR1:

Input Sensitivity: -30 dBu to 0 dBu, (adjustable, provides switching at a -20 dB threshold for signals of -10 dBu to +20 dBu)

Relay Release Delay: 0.5 to 5.0 sec. nominal (Multi-turn adjustable)

#### ST-ACR1M:

Input Sensitivity: -60 dBu to -20 dBu, (adjustable, provides switching at a -20 dB threshold for signals of -40 dBu to -10 dBu)

Relay Release Delay: 0.5 to 5.0 sec. nominal (Multi-turn adjustable)

#### ST-ACR2:

Input Sensitivity: -30 dBu to 0 dBu (adjustable, provides switching at a -20 dB threshold for signals of -10 dBu to +20 dBu)

Relay Release Delay: 5.0 to 50.0 sec. nominal (Multi-turn adjustable)

#### COMMON TO ALL ST-ACRS:

Audio Input: 10 kΩ balanced bridging

Input Connections: May be connected balanced or unbalanced

Control Output: Open-collector @ 25 mA suitable to drive indicators or slave LCR relay

Indicators: Audio threshold LED (for setting sensitivity)

Relay Contacts: Double-pole-double-throw; High-reliability; 1,000,000 operations

Maximum Switching Power: 60W, 125 VA

Maximum Switching Voltage: 220 Vdc, 250 Vac

Maximum Switching Current: 2A

Retrigger delay: 250 ms

Activation response time: 25 ms

Ambient Operating Environment: 0° C to 55° C

Power Requirement: GROUND-REFERENCED 24 @ 50 mA\*

\* Assumes 20 mA max load at SLAVE output

Dimensions:

Height:	1.55 in.	3.94 cm
Width:	3.00 in.	7.62 cm
Depth:	0.65 in.	1.65 cm

Radio Design Labs Technical Support Centers

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