



**RDL**<sup>®</sup>  
Radio Design Labs

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

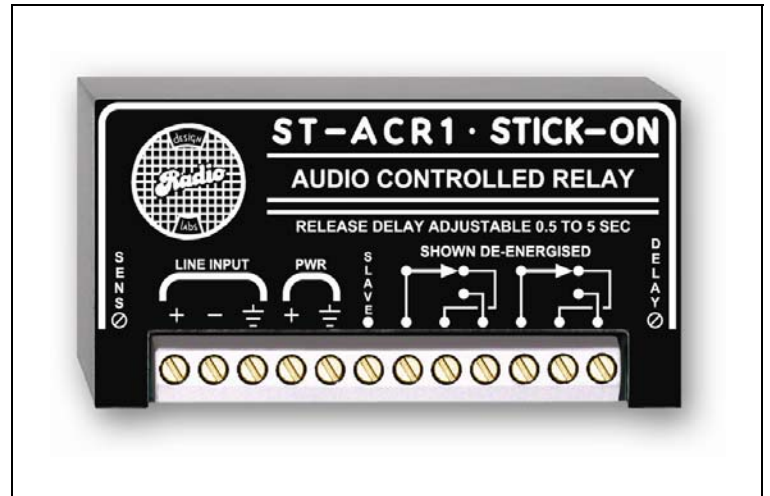
## STICK-ON<sup>®</sup> SERIES

### Model ST-ACR Series

### Audio Controlled Relay

#### ANYWHERE YOU NEED...

- Control Switching from Audio Signal
- Switching from Mic OR Line Signals
- Silence Sensing
- Precise Threshold Adjustment
- DPDT Switching Contacts
- Open-Collector Slave Output



#### *You Need The ST-ACR Series!*

**APPLICATION:** Each of the ST-ACR products is an Audio Controlled Relay in the group of STICK-ON Series products by Radio Design Labs. These products are designed for quick convenient installation, and reliable operation in a variety of control applications.

#### 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** open-collector terminal allows additional relays to be added for more contacts (RDL's ST-LCR1 or ST-LCR2)
- **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

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! Use the ST-ACR's combined with other RDL RACK-UP<sup>®</sup>, STICK-ON, TX<sup>™</sup>, or FLAT-PAK<sup>™</sup> series products as part of a complete audio/video system.

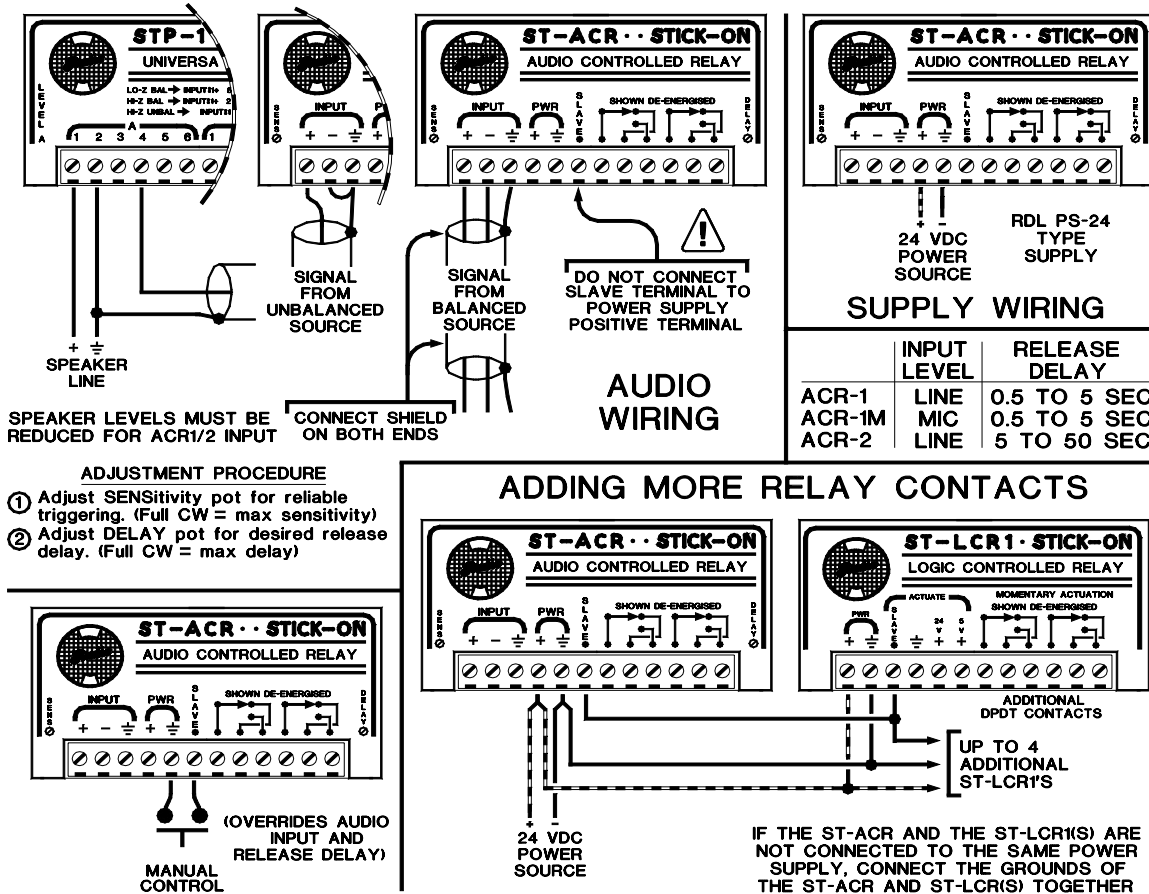
# STICK-ON<sup>®</sup> SERIES

## 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 seconds (Multi-turn adjustable)

#### ST-ACR1M:

Input Sensitivity: -60 dBu to -30 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 seconds (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 seconds (Multi-turn adjustable)

### COMMON TO ALL ST-ACRs:

Audio Input: 10 kΩ balanced bridging

Input Connections: Balanced or unbalanced

Control Output: Open-collector @ 100 mA  
Suitable to drive indicators or slave LCR

Relay Contacts: Double-Pole, Double-Throw

Maximum Switching Power: 60W (220 Vdc, 125 Vac, 2 A)

Power Requirement: 24 to 33 Vdc @ 50 mA

Ground-referenced

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