

# 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!

ST-ACR1·STICK-ON

AUDIO CONTROLLED RELAY

AUDIO CONTROLLED RELAY

RELEASE DELAY ADJUSTABLE 0.5 TO 5 SEC

SHOWN DE-ENERGISED

PWR

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V

V
</

**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.



SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

**STICK-ON® SERIES** Installation/Operation EN55103-1 E1-E5; EN55103-2 E1-E4 Model ST-ACR Series Typical Performance reflects product at publication time exclusive of EMC data, if any, supplied with product. Specifications are subject to change without notice. **Audio Controlled Relay** STP-ST-ACR · · STICK-ON ST-ACR · · STICK-ON UNIVERSA AUDIO CONTROLLED RELAY AUDIO CONTROLLED RELAY PWR PWR INPU1 -7 1 2 3 5 86 0000000 0000 0000000000000 0000000000000 RDL PS-24 /ľ 24 VDC TYPE POWER SIGNAL FROM SOURCE DO NOT CONNECT SLAVE TERMINAL TO SIGNA FROM SUPPLY UNBALANCED SOURCE BALANCED POWER SUPPLY POSITIVE TERMINAL WIRING RELEASE INPUT SPEAKER LEVEL DELAY AUDIO 0.5 TO 5 SEC 0.5 TO 5 SEC ACR-1 LINE SPEAKER LEVELS MUST BE CONNECT SHIELD REDUCED FOR ACR1/2 INPUT ON BOTH ENDS WIRING ACR-1M MIC ACR-2 LINE 5 TO 50 SEC ADJUSTMENT PROCEDURE ADDING MORE RELAY CONTACTS ① Adjust SENSitivity pot for reliable triggering. (Full CW = max sensitivity) Adjust DELAY pot for desired release delay. (Full CW = max delay) ST-ACR · · STICK-ON ST-LCR1.STICK-ON AUDIO CONTROLLED RELAY LOGIC CONTROLLED BELAY ST-ACR · · STICK-ON AUDIO CONTROLLED RELAY 0000000000000 0000000000000 ADDITIONAL DPDT CONTACTS ٥ -UP TO 4 ADDITIONAL ST-LCR1'S 00000000000000 **(OVERRIDES AUDIO** IF THE ST-ACR AND THE ST-LCR1(S) ARE NOT CONNECTED TO THE SAME POWER SUPPLY, CONNECT THE GROUNDS OF THE ST-ACR AND ST-LCR(S) TOGETHER INPUT AND RELEASE DELAY) 24 VDC POWER MANUAL SOURCE **TYPICAL PERFORMANCE** COMMON TO ALL ST-ACRs: ST-ACR1: Input Sensitivity: -30 dBu to 0 dBu, (adjustable, provides

#### Audio Input: 10 kΩ balanced bridging switching at a -20 dB threshold for Input Connections: Balanced or unbalanced signals of -10 dBu to +20 dBu) Control Output: Open-collector @ 25 mA 0.5 to 5.0 seconds Relay Release Delay: Suitable to drive indicators (Multi-turn adjustable) or slave LCR ST-ACR1M: Double-Pole, Double-Throw **Relay Contacts:** Input Sensitivity: -60 dBu to -30 dBu, (adjustable, provides 60W (220 Vdc, 125 Vac. 2 A) Maximum Switching Power: switching at a -20 dB threshold for Power Requirement: 24 to 33 Vdc @ 50 mA signals of -40 dBu to -10 dBu) Ground-referenced Relay Release Delay: 0.5 to 5.0 seconds Dimensions: Height: 1.55 in. 3.94 cm (Multi-turn adjustable) Width: 3.00 in. 7.62 cm ST-ACR2: 1.65 cm Depth: 0.65 in. -30 dBu to 0 dBu (adjustable, provides Input Sensitivity: switching at a -20 dB threshold for signals of -10 dBu to +20 dBu) 5.0 to 50.0 seconds Relay Release Delay: (Multi-turn adjustable) Radio Design Labs Technical Support Centers

U.S.A. (800) 933-1780, (928) 778-3554; Fax: (928) 778-3506 Europe [NH Amsterdam] (++31) 20-6238 983; Fax: (++31) 20-6225-287