



RDL[®]
Radio Design Labs

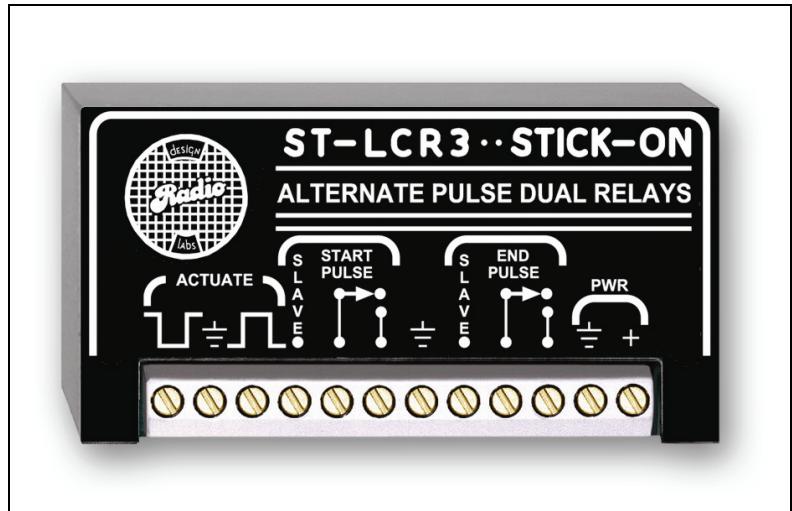
SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

STICK-ON[®] SERIES

Model ST-LCR3

Alternate Pulse Dual Relays

- Pulse at the Start of a Logic Signal
- Pulse at the End of a Logic Signal
- Relay Contact and Open-Collector Pulse
- Active High or Active Low Inputs
- Input Control Voltage From 3.3 to 24 Vdc
- Control from Switch, Pushbutton, or Logic Circuits



The ST-LCR3 Alternate Pulse Dual Relays are part of the group of products in the STICK-ON series by Radio Design Labs. These products are designed for quick, convenient installation, and reliable operation with a variety of control input options. STICK-ONS are designed, built and rated for continuous duty in professional A/V systems.

APPLICATION: The ST-LCR3 is ideally suited to applications where momentary pulses are needed from a single control signal. The module provides a momentary pulse when a logic signal at its input first becomes active. A separate momentary pulse is provided when the logic signal at the module input becomes inactive.

Two logic inputs are available on the ST-LCR3. Either of these inputs may be used. Terminal 1 is internally pulled high to +5 Vdc. This input becomes active when an external closure or open-collector pulls the terminal to ground. The external switching device does not need to pull the terminal high, however the terminal may be pulled high with any voltage from +5 Vdc to +24 Vdc without any risk of damage to the ST-LCR3 input. Terminal 3 is internally pulled to ground. This input becomes active when an external closure or logic device applies a positive voltage from +5 Vdc to + 24 Vdc.

When the input being used first becomes active the **START PULSE** output from the module is triggered. When the input first becomes inactive (after first being active) the **END PULSE** output from the module is triggered. Both the start and end pulses have a nominal duration of 250 ms. LED indicators show when the start and end pulses are active.

Each pulse output provides both an open-collector **SLAVE** terminal and relay contacts. The **SLAVE** terminal may be used to control other RDL modules and a variety of other equipment. The relay contacts may be used to control modules or equipment that do not operate from open-collector control.

The module operates from a ground-referenced 24 Vdc power supply.

The wide range of input voltages allows the ST-LCR3 to be controlled from a variety of modules, equipment or switches. The ST-LCR3 is ideal in most applications requiring a control pulse at the beginning of a switched signal, at the end of a switched signal, or at both the beginning and end of a switched control signal.

Use the ST-LCR3 individually, or combine it with other RDL products as part of a complete audio/video system.

STICK-ON® SERIES

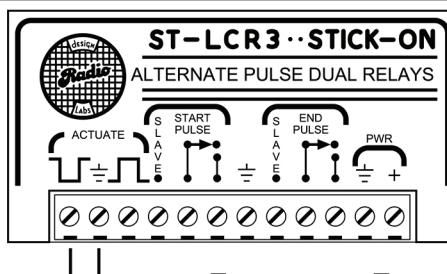
Model ST-LCR3 Alternate Pulse Dual Relays

Installation/Operation



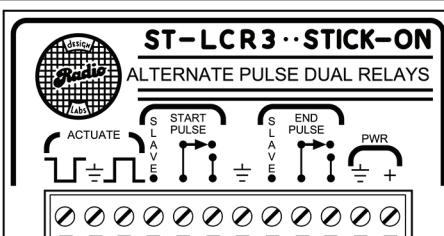
EN55103-1 E1-E5; EN55103-2 E1-E4

Typical Performance reflects product at publication time exclusive of EMC data, if any, supplied with product. Specifications are subject to change without notice.

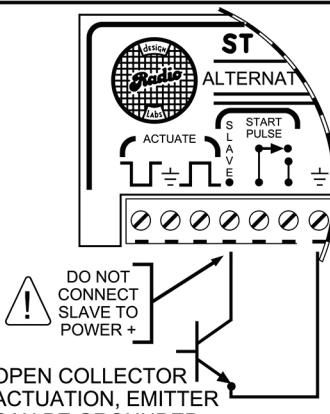


OPEN COLLECTOR CONTROL SIGNAL CONNECTION

TYPICAL MODULE ACTUATION

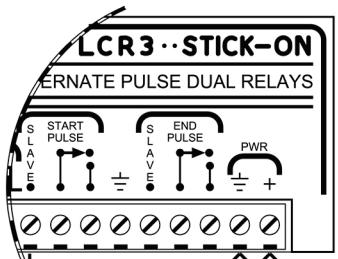


NOTE ACTUATION VOLTAGE CAN BE
3.5 Vdc TO 24 Vdc

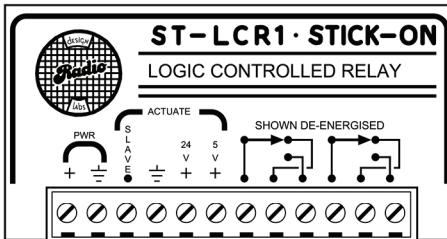


DIRECT RELAY ACTUATION

ADDING ADDITIONAL CONTACTS



MASTER



UP TO
4 MORE
UNITS

SLAVE

TERM 1 INPUT

TERM 3 INPUT

START PULSE

END PULSE

250 mS NOMINAL

TIMING

TYPICAL PERFORMANCE

Inputs (2):

Outputs (2):

Indicators (2):

Relay Contacts (2):

Maximum Switching Power:

Ambient Operating Environment:

Power Requirement:

Logic High or Logic Low (Low = ground, < 1 mA; High = 5 Vdc to 24 Vdc)

Open collector @ 25 mA suitable to drive indicators or slave LCRs.

Pulse active LEDs

Single-Pole, Single-Throw; High-reliability; 1,000,000 operations

60 W (220 Vdc, 125 Vac, 2 A)

0° C to 55° C

GROUND-REFERENCED, 24 Vdc @ 100 mA

(assuming 20 mA max load at **SLAVE** output)