

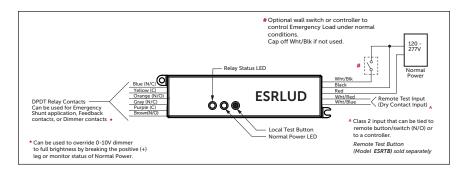
Functional Devices, Inc. 101 Commerce Drive Sharpsville, IN 46068 Confidence & Peace of Mind in Every Box™ www.functionaldevices.com sales@functionaldevices.com

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### UL924 / 10 AMP AUTOMATIC LOAD CONTROL RELAY

### **ESRLUD**

UL924 Emergency Lighting Automatic Load Control Relay, 10 Amp DPDT, Universal 120-277 Vac, 0-10 Vdc Dimmer Override, Dry Contact Fire Alarm Interface, DALI Dimmable Loads







#### BALLAST SIZE HOUSING

### SPECIFICATIONS

	One (1) DPDT Continuous Duty Coil 10 million cycles minimum mechanical -30 to 140° F
Operate Time:	18ms
LED:	Green = Normal Power
	Red = Relay Status
Dimensions:	1.40"H x 5.63"W x 1.00"D
	See Housing F in housing guide for dimensions
	Made of US and non-US parts
Wires:	16 <sup>°°</sup> , 600V Rated
Approvals:	UL Listed, UL924, C-UL, CE, RoHS
Gold Flash:	No
Override (Test Switch):	No
Humidity Range:	5-95% (noncondensing)

**Coil Current:** Normal Power =6 mA max

Coil Voltage Input: 120-277Vac (50/60 Hz)

Relay Contact Ratings: 10 Amp Resistive @ 30 Vdc 10 amp General Use @ 277 Vac

Notes: Device draws no current from Emergency source

#### AUTOMATIC LOAD CONTROL RELAYS & DIMMING OVERRIDE APPLICATION

With our Automatic Load Control Relays (ALCR), you will complete your emergency lighting application as specified. Designed specifically for applications that require emergency load to be switched during a loss of normal power, creating a path to illuminate your emergency fixture.

### TROUBLESHOOTING

CONDITION	ACTION
Green LED is OFF	Check Normal Power Input wiring (Black and Red wires) and voltage.
Red LED is OFF but Load is OFF	<ul> <li>Check bulbs and ballast.</li> <li>Check Load wiring (Blue wire and Load's neutral).</li> <li>Replace unit. (Assuming N/C contact is used)</li> </ul>
Load is ON but Red LED is ON	Replace unit. (Assuming N/C contact is used)
Red LED does not turn OFF and Load does not turn ON when being tested	<ul> <li>Check bulbs and ballast.</li> <li>Check wiring connections if using a remote test option.</li> <li>Press local test button on the unit.</li> <li>Replace unit.</li> </ul>
Red LED will not turn ON and Load will not turn OFF	<ul> <li>Verify status of Normal Power Input.</li> <li>Open Wall Switch Input.</li> <li>Verify that no test inputs are stuck closed. (i.e. Remote Test Input is not closed)</li> </ul>

# TESTING

### Initial Test for Correct Wiring:

Apply Normal Power to the Normal Power Input. (If using the Wall Switch Input, apply Normal Power to the switch also, but keep the switch OFF/ OPEN).

- a. The Green LED (Normal Power available) should be ON.b. The Red LED (Relay Status) should
- be ON.
- c. The Load should be OFF.
- d. The Relay Contact (N/O) should be CLOSED.

#### Local Test Button:

- 1. Turn switched circuit OFF. Load
- should be OFF.
- Press and hold "Local Test Button"
   Load should turn ON.
- 4. Release "Local Test Button" and
- emergency light should turn OFF.

#### Remote Test Button:

- (Model ESRTB sold separately) 1. Turn switched circuit OFF. Load
  - should be OFF.
- 2. Press and hold "Remote Test Button"
- 3. Load should turn ON.
- 4. Release "Remote Test Button" and Load should turn OFF.

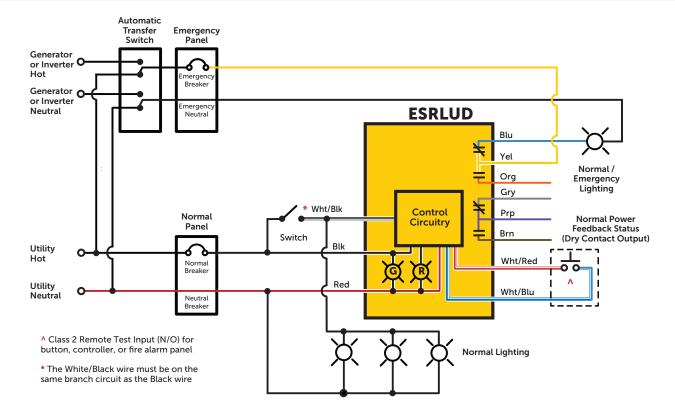
#### Wall Switch

- 1. Turn ON wall switch if not already on.
- 2. Load should turn ON.
- 3. Turn wall switch OFF.
- 4. Load will turn OFF.



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## **USING EMERGENCY LIGHTING AS NORMAL LIGHTING**



# **OVERRIDING A 0-10V DIMMER**

