

MODEL RLY-SW-1 INSTALLATION INSTRUCTIONS

IMPORTANT SAFEGUARDS

WHEN USING ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED. THESE INCLUDE:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. This product can be used with LED, ballast, tungsten, and general use loads.
2. Make sure all connections are in accordance with the National Electrical Code and local regulations.
3. To reduce the risk of electric shock, disconnect both normal and emergency power supplies before servicing.
4. This product is intended to be used to control indoor and outdoor located loads.
5. An unswitched AC power source is required (120-240VAC/ 277VAC).
6. Do not install near gas or electric heaters.
7. Do not attempt to service a sealed Emergency Power Control. If it is malfunctioning, return to the manufacturer, Myers Emergency Power Systems, LLC, 44 S. Commerce Way, Bethlehem, PA 18017.
8. The use of accessory equipment is not recommended by the manufacturer and may cause an unsafe condition.
9. Do not use this product for other than intended use.
10. Servicing should be performed by qualified service personnel.
11. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.

SAVE THESE INSTRUCTIONS

5-Year Limited Warranty

Myers Emergency Power Systems warrants to the original purchaser/users for the published warranty period from the date of shipment that should Myers EPS equipment prove defective by reason of improper workmanship or material, Myers EPS will repair or replace the same equipment without charge. This warranty does not cover defects or malfunctions arising from improper installation, operation, repair or neglect, accident, or abuse. Myers EPS will honor its warranty provided the equipment has not been physically damaged or improperly installed or connected. To obtain warranty/repair within the warranty period, the defective product should be shipped freight prepaid to the address at the bottom of this document. To the extent permitted by applicable law, all warranties extending beyond repair or replacement as described above are disclaimed. This includes implied warranties of merchantability and fitness for a particular purpose. Where applicable law prohibits disclaimers or the implied warranties of merchantability and fitness, those warranties are limited to 12 months from date of shipment. Myers EPS provides a 90-day money back guarantee if equipment does not perform in accordance with the Myers EPS published specifications. The liability of Myers EPS and its agents under all warranties is limited to repair and replacement as described herein and under no circumstances shall there be liability for any other kind of loss, damage, or labor—either consequential or for injury to a person or property or otherwise.

Electrical Specifications

120-240/277V Sensing Input
Form C (N.O+N.C.) Contact
20 Amp Ballast Load Rating (120-277V)
20 Amp General Use Rating (120-277V)
1200W Incandescent Load Rating (120V)
1500W Incandescent Load Rating (277V)
UL924 Listed (US UL/ cUL)



Mechanical Specifications

Mounts in 4-11/16" Junction Box with Extension Box
Use single gang plaster ring or blank cover
Suitable for installation in the plenum
Tested to UL2043 UL94-5VA Plastic Flame Rating
Shipping Weight: 8 oz Color : White
Temperature: -10°C-60°C (14°F - 140°F)
Flush Mounted Size: 4-1/2" x 2-3/4" x 1/4"
Body Size: 2-7/8" x 1-3/4" x 1-7/32"



Myers Emergency Power Systems, LLC

44 S. Commerce Way
Bethlehem PA 18017

610-868-3500 | www.MyersEPS.com

Application

In the past, all emergency lights were left on 24 hours a day to meet safety codes. Now you can specify and install a **UL924 Listed Emergency Shunt Relay, RLY-SW-1**, which converts up to 20A of normal light fixtures to approved emergency lights. During normal operation, the RLY-SW-1 switches designated emergency lights on and off. During a utility power interruption, the RLY-SW-1 turns designated emergency lights on, regardless of switch position. **The RLY-SW-1 is intended for use with a dedicated, emergency-only lighting control device.**

Emergency Shunt Relay (RLY-SW-1) Versus Emergency Power Control (RLY-SW-2)

Emergency Shunt Relay (RLY-SW-1)

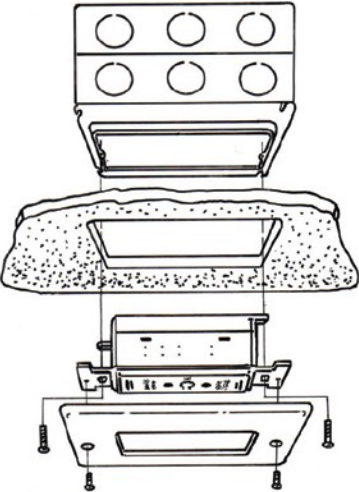
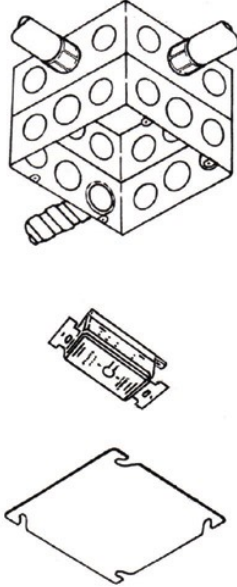
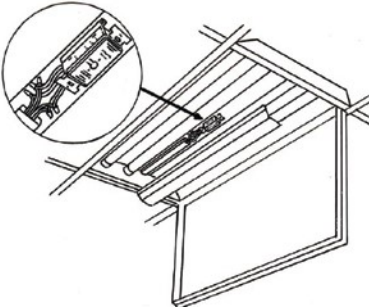
An emergency shunt relay requires a dedicated switch/dimmer to control the emergency lights. In other words, the switch/dimmer must be wired on the emergency power circuit.

Emergency Power Control (RLY-SW-2)

An emergency power control allows the same switch/dimmer to control both normal and emergency lights. In other words, the switch/dimmer can be wired on the normal power circuit.

Mounting

The RLY-SW-1 features a unique universal mounting, which is a single enclosure design that allows flush, fixture, plenum or panel mounting, as shown below.

Flush Mount Installation	Junction Box Installation	Fixture Mount Installation
		
<p>Recommended box size 4-11/16" with extension (total depth 4" minimum)</p>	<p>Recommended box size 4-11/16" with extension (total depth 4" minimum). Tested to UL 2043: suitable for installation in the plenum.</p>	<p>Confirm body size (2-7/8" x 1-3/4" x 17/32") will fit in fixture ballast channel prior to installation.</p>

Installation

In order to install the RLY-SW-1 in accordance with national/local code requirements, a qualified electrician should review and understand the installation instructions: Check voltage and current requirements. Verify and lock out circuit breakers on both regular (utility) power and 24 hours emergency generator or inverter circuit. Install a self-adhesive 2" x 3" caution label in each fixture or load controlled by an RLY-SW-1, indicating that the load is supplied from 2 different power sources: normal and emergency. Review wiring diagram and connect wires, one at a time, in accordance with the numeric identification.

In order to provide a safe light level, when regular power is interrupted, it is recommended that a minimum 5000 lumen are controlled by a 24 hour emergency circuit and are spaced no farther than 24' in any direction from each other in a normal 9' white ceiling environment.

Initial Testing and Troubleshooting

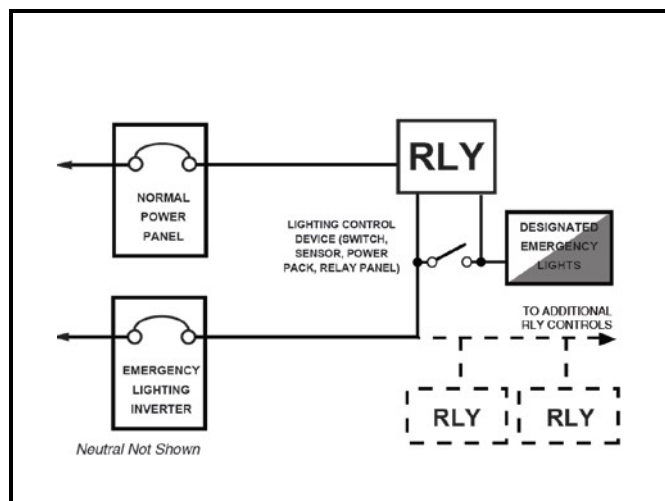
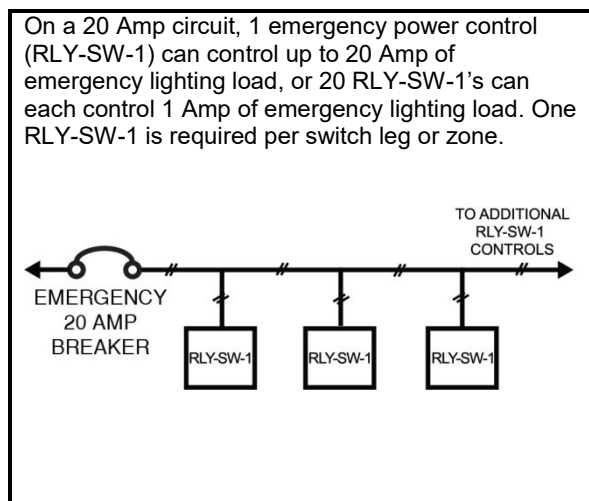
In a new installation, where hundreds of devices may be used, each having as many as 14 wires to be correctly connected, it is important that a fast, convenient method is used to check connections. In order to test that the wires are connected correctly, without any inconvenience to occupants, do not turn regular (utility) power off until you have checked each device as follows:

1. Check that regular branch circuit breaker is connected & utility power is available. Green LED should be lit. If green LED is not lit, check connections & continuity to branch circuit breaker.
2. Check that emergency branch circuit breaker is connected and emergency power is available.
3. Normal Operation Test: Turn switch or other control device to the "ON" position. Emergency lights should turn on. Turn room switch or control to the "OFF" position. Emergency lights should turn off.
4. Emergency Operation Test: Press and hold test button, emergency lights should illuminate at full brightness until test button is released.

Maintenance

No maintenance is required to keep the RLY-SW-1 functional. However, regular testing should be performed when the lamps, ballasts, LED drivers, or arrays have been replaced or when remodeling has taken place.

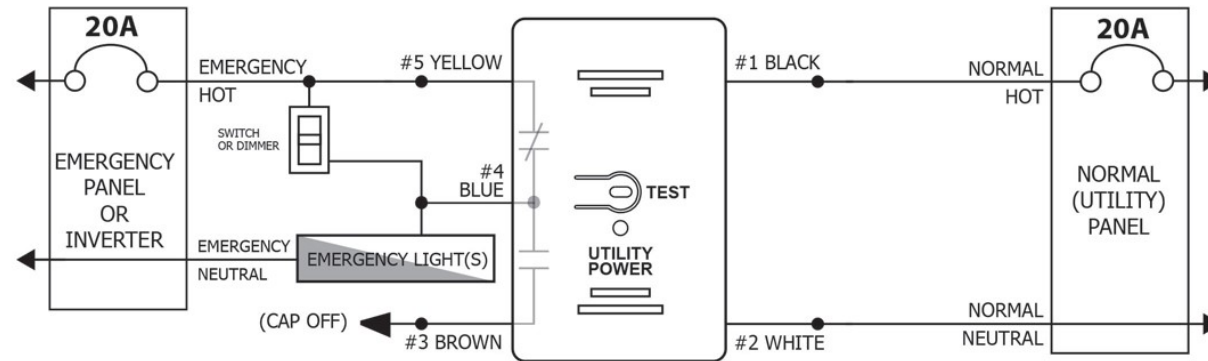
Single Line Drawings



Model RLY-SW-1 Wiring Diagrams

Wiring Diagram 1

A dedicated switch or line voltage dimmer controls emergency lighting in a space. Upon loss of normal power, the emergency lighting comes on at full brightness regardless of switch or dimmer position. NOTE: RLY-SW-1 is not for use with 0-10V DIMMER. Use RLY-DIM-D or RLY-DIM-2D.



Wiring Diagram 2

Slave Relay Application - RLY-SW-1 can be used to switch an auxiliary load (similar to a lighting contactor) in case your switch is rated <20A or to switch a 277V load from a 120V switch.

