

**APPLICATION NOTES**
**LIGHTING INVERTERS - # 06**

# LOCAL CONTROL OVERRIDE" WITH ZONESAVER-2

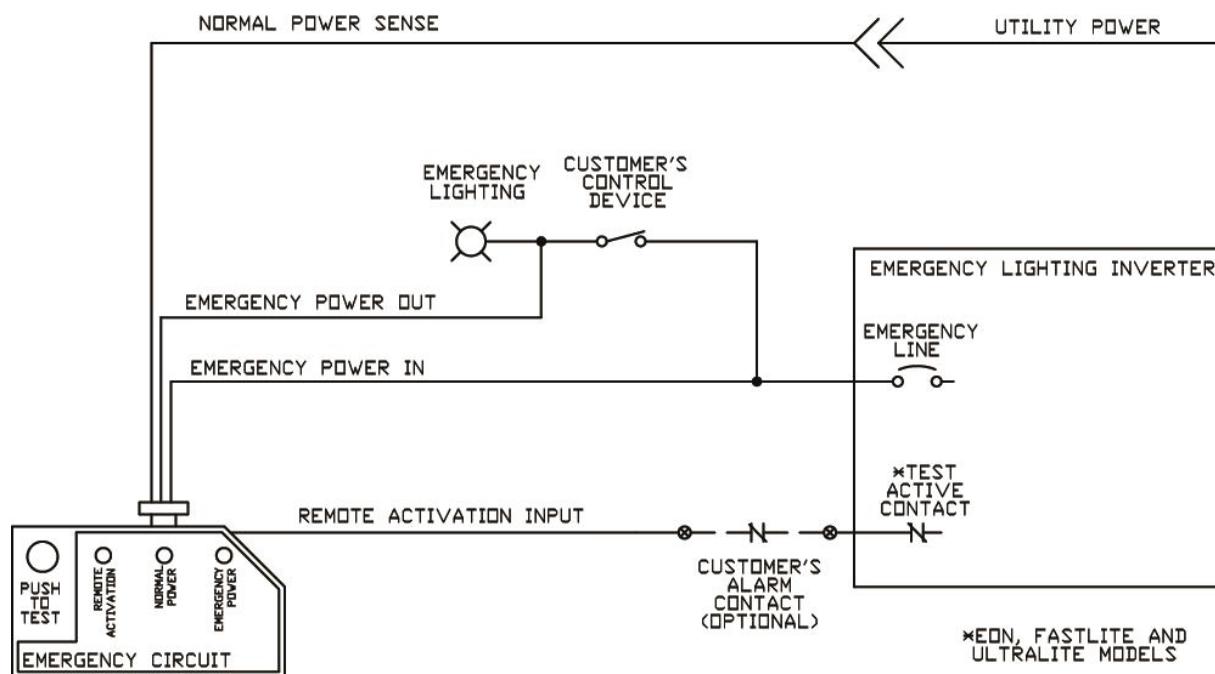
**General**

The ability to manually control emergency egress lighting can provide significant energy savings while still assuring occupant safety. In the event of a power failure, it is necessary to bypass a control device (e.g. wall switch, dimmer, occupancy sensor, photocell, energy management system, etc.) to ensure that full illumination of the lighting fixtures is achieved during the emergency condition, thus providing safe egress.

**ZoneSaver-2 & Local Control Override**

The ZoneSaver-2 emergency lighting control unit is a UL 924 listed load control relay wired to shunt around a local control device (e.g. dimmer control, wall switch, occupancy sensor) powered from the emergency lighting inverter's normally on output. This is done in order to provide emergency power to designated emergency lights upon the failure or loss of commercial AC power.

The ZoneSaver-2 is a single circuit, single pole 120 VAC or 277 VAC, control unit that allows independent control of lighting fixtures during normal power conditions. However in the event of a power failure, or if remotely activated by a signal from a customer's alarm contact (e.g. fire alarm panel, security panel, or test switch), or the inverter's "test active" contact ... the ZoneSaver-2 will automatically override the local control of selected fixtures and ensure their full illumination for safe egress.



**Note:** The Remote Activation Input of up to five (5) ZoneSaver-2 units may be wired in parallel to the same alarm contact (500 ft. maximum wire length using #18 AWG). An integral push-to-test button is also provided to manually test the emergency circuits.

When utility power is available at the Normal Power Sense input, the "Normal Power" light is illuminated indicating a normal condition, and local control is allowed. Note that when emergency power is available at the Emergency Power input, the "Emergency Power" light is illuminated.

When utility power is lost, the normal power light turns off. The control device is then bypassed, and emergency power is diverted to the selected emergency fixtures. Once power returns to the Normal Power Sense input, the local control device regains control of the circuit and the Zone-Saver-2 indicates a normal operating condition.

The "Remote Activation" light is illuminated under a normal condition, and turns off when the ZoneSaver-2 is activated by a customer's alarm contact, or the emergency lighting inverter's test active contact when performing an automatic "periodic" system test per NFPA 101. When activated, the local control device is bypassed, and emergency power is diverted to the selected emergency fixtures.

**Note:** The Remote Activation Input of up to five (5) ZoneSaver-2 units may be wired in parallel to the same alarm contact (500 ft. maximum wire length using #18 AWG). An integral push-to-test button is also provided to manually test the emergency circuits.

## Features

- Integral Push-To-Test Button
- LED Indication for Emergency and Normal Power
- Remote Activation with LED Indication
- Zero Cross Switching for Reliability
- "Fail-To-On" Emergency Lighting
- Half-Second Delayed On Positively Identifies Emergency Fixtures for Required Maintenance
- UL 924 Listed, Meets NEC, OSHA and NFPA Safety Codes; UL 2043 Plenum Rated

## Specifications

- 120/277 VAC; 60Hz
- Maximum Load:
  - LED Lighting 18A @ 120/277 VAC
  - Ballast 20A @ 120/277 VAC
  - Incandescent 10A @ 120 VAC
  - Motor 1HP @ 120 VAC
- Remote Activation: Supplies 24 VDC source for dry contact closure
- Integral Control: Push-to-test button on unit
- Housing: Fire rated V-0, 176 F (80 C)
- Operating Temperature: 32 to 131 F (0 to 50 C)
- Relative Humidity: 5 to 95% noncondensing
- Dimensions: 1.7" x 2.97" x 1.64" (43.2mm x 75.4mm x 41.7mm) H x

W x D with a 1/2" (75.4mm) threaded nipple

- Agency Approval: UL, C-UL listed Emergency Lighting and Power Equipment
- Warranty: 5 year part replacement

#### Summary

The purpose of a local control override device is to bypass a control device (such as a wall switch, dimmer, occupancy sensor, photocell, energy management system etc.) so that the designated lighting fixtures illuminate fully during an emergency condition, thus ensuring safe egress. When ZoneSaver-2 is used with a Controlled Power Lighting Inverter, a local control device can be automatically bypassed during NFPA 101-mandated test periods. Note that multiple ZoneSaver-2's can be used for larger applications involving a number of lighting control devices. A test switch is also provided to manually test the emergency circuits per NFPA 101.

