

# Silent Single Zone Automatic Branch Circuit Emergency Lighting Transfer Switch

for 2 wire, 3 wire and 4 wire dimmable loads  
Cat. No. ECD00-D0W

## WARNINGS

- **TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TURN OFF POWER AT THE 24 HOUR NIGHT LIGHT/EMERGENCY CIRCUIT AND TEST THAT POWER IN BOTH CIRCUITS IS OFF BEFORE WIRING, SERVICING, OR REMOVING FIXTURE.** This fixture is powered by two (2) circuits: the regular power branch circuit and the 24 hour night light/emergency circuit.
- Install a self-adhesive 2" x 3" caution label in each fixture or load controlled by an ECD00-D0W unit cautioning that this load is supplied from 2 different power sources, regular and emergency.

## CAUTIONS

- In order to install device in accordance with national/local code requirements, this product should be installed by an electrician.
- Check voltage and current requirements.
- Use CU wire only.

## INSTALLATION INSTRUCTIONS

ENGLISH

## Description

The Leviton ECD00-D0W is for designated dimmable emergency luminaires in public places such as auditoriums, restaurants, conference rooms, theaters and classrooms. It is a single zone silent transfer switch for emergency lighting applications. Versatile, small and cost effective, and designed to work with all modern dimming types including 2 wire and 3 wire line voltage, and 4 wire 0-10V and DALI low voltage.

The ECD00-D0W allows emergency and normal lighting to be dimmed from the same dimmer during normal operation. During emergency operation (power interruption), it will transfer the emergency

lighting to the emergency power source and bypass all dimming controls, bringing the emergency lighting to 100% (full) brightness, regardless of dimmer level. An integral test switch on the front cover allows the user to simulate a power interruption when pressed.

Leviton emergency power controls are tested, approved and listed by Underwriters Laboratories under UL 1008 standards for emergency transfer switches. They meet and exceed all pertinent code requirements from NEC, NFPA, OSHA and life safety codes, in addition to major local codes.

## Features

- **Voltage surge protection:** Voltage surge protection ensures reliable performance under adverse conditions. All units are tested during production and are burned in upon completion.
- **Status indicators:** Separate indicating LEDs for regular and emergency power and load allow verification of correct wiring connections.
- **Safety and reliability interlocks:**
  - Voltage sensing interlock - optically isolated voltage sensors ensure erroneous voltage is not present at load terminals during transfer.
  - Time delay interlock - break before make operation with time delay ensures all contact arcing has been fully extinguished before attempting transfer to alternate source.
- Relay microswitch circuitry - in the event of relay contact welding or malfunction, microswitches detect and alert microprocessor to prevent phase to phase shorting across relay contacts.
- Mechanical interlock - relay interlock prevents both sides from being interconnected, even if all other interlocks fail.
- Suitable for total system transfer.
- When protected by a fuse of the specific manufacturer, type and ampere rating as marked below, this transfer switch is suitable for use in circuits capable of delivering 5000A at 277V.

Littelfuse	KLK-30	(30 Amps)
Littelfuse	KLKR030	(30 Amps)

ELECTRICAL SPECIFICATIONS	
Unit Power Consumption	7W max. Continuous load current not to exceed 100% of switch rating.
Input	120-277 VAC 50-60 Hz
Load	120-277 VAC Ballast 16 Amp 120V Tungsten 16 Amp (1920 W) 277V Tungsten 16 Amp (4432 W) 120-277V General use 16 Amp
SIL Ambient Temp. Rating	32° F - 140° F

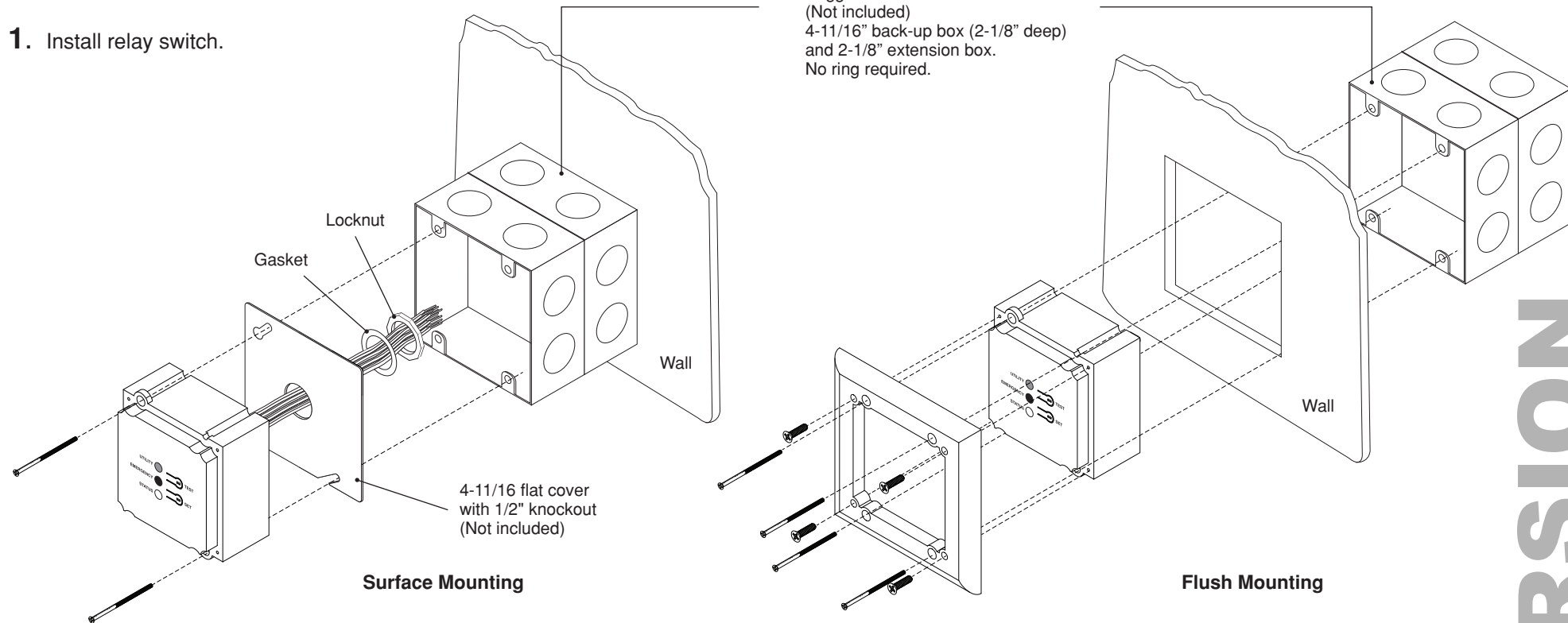
MECHANICAL SPECIFICATIONS	
Flush Mounted Size	6" x 6" x 0.25"
Body Size	4.25" x 4.25" x 2.25"
Color	White
Weight	22 oz
Ratings	UL 94V-0 Flame Rating
Suspended Ceiling Installation	Safe for installation above suspended ceiling.
Plenum Applications	For plenum applications, install in metal box such as 6 x 6 or 8 x 8 and install plenum rated remote test switch if desired.

## Pre-Installation

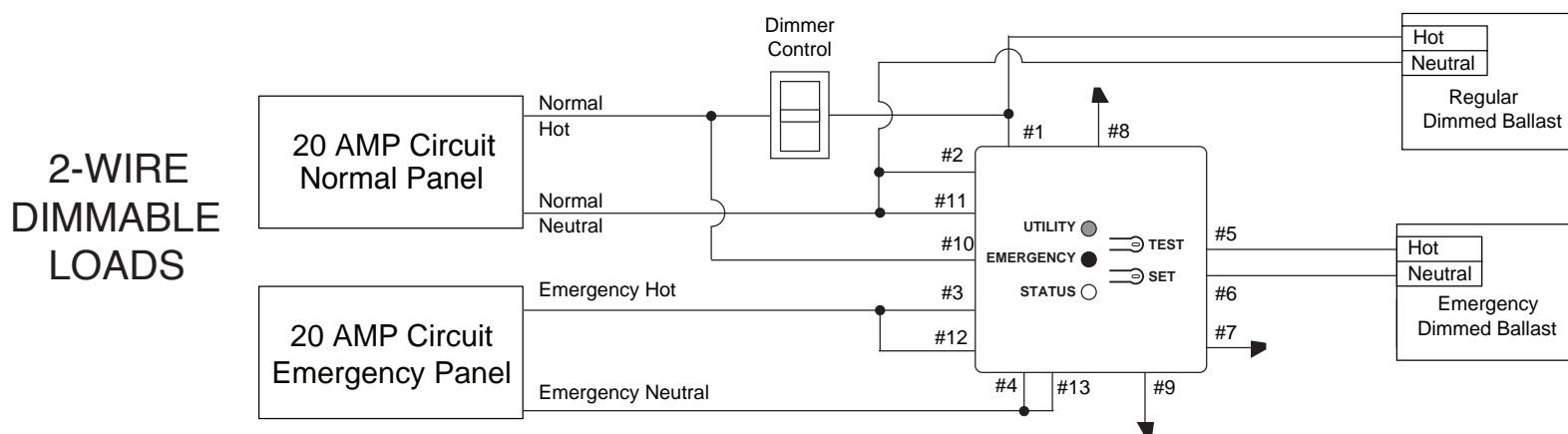
**WARNING:** Install a self-adhesive 2" x 3" caution label in each fixture or load controlled by an ECD00-D0W unit cautioning that this load is supplied from 2 different power sources, regular and emergency.

## Installation

### 1. Install relay switch.



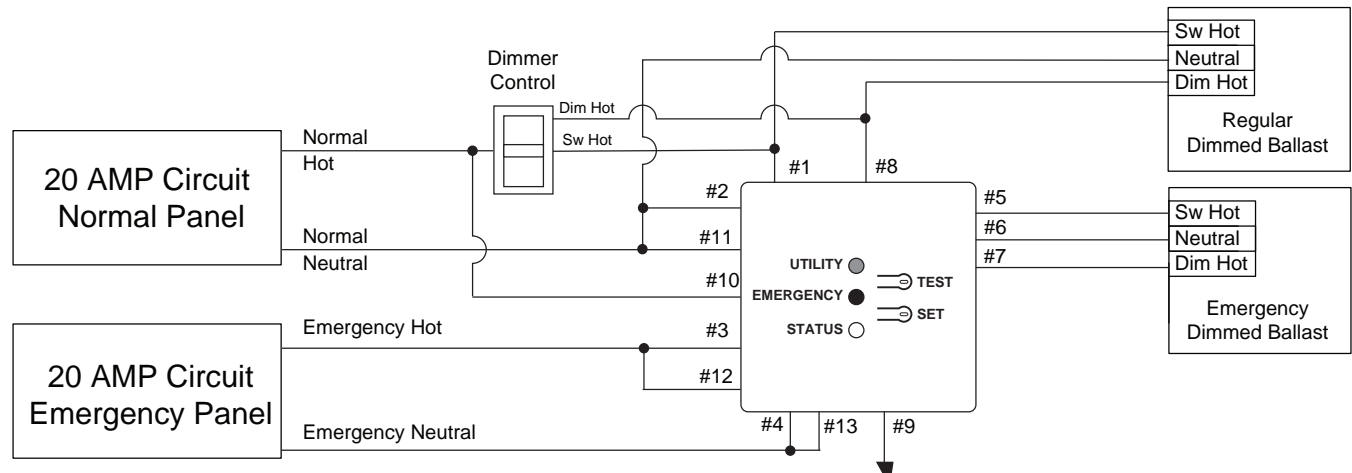
### 2. Connect wires in numeric order.



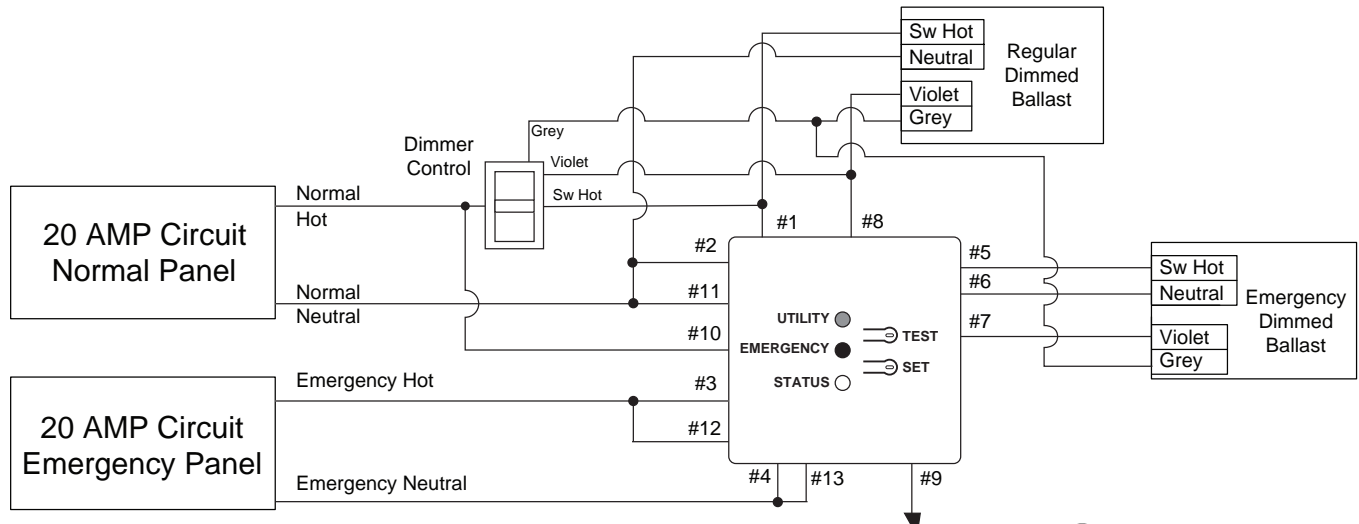
WEB VERSION

2. Connect wires. (cont'd)

3-WIRE DIMMABLE LOADS



4-WIRE DIMMABLE LOADS (0-10V)

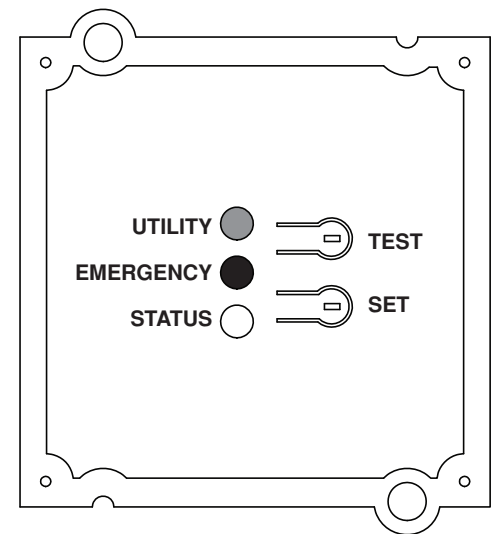


3. Perform initial testing.

- Turn on regular power circuit breaker and if all wire connections are correct, utility power green LED indicator light will be illuminated.
- Turn on 24/7 emergency circuit breaker. At this time, emergency circuit power is still derived from utility power, and if all wire connections are correct, emergency power red LED will be illuminated.
- Do not** turn on dimmer system but press test switch. Designated emergency fixtures should then come on full bright. You can also test the device by turning off the regular power breaker.
- When regular utility breaker is on, operate dimmer control and observe if all fixtures light up, including designated emergency fixtures and if dimmer system lights respond normally when adjusted from low to high level. Blue LED should be lit when load is ON.

4. Perform final testing.

- Choose a time when the main circuit breaker can be turned off and test all emergency lights.
- When main circuit breaker is off emergency circuits will be powered from either a generator, inverter or UPS.
- All designated emergency luminaires should be full bright regardless of dimming system setting. This is the proper function of the switch and conforms to UL1008, NEC and NFPA101 requirements.

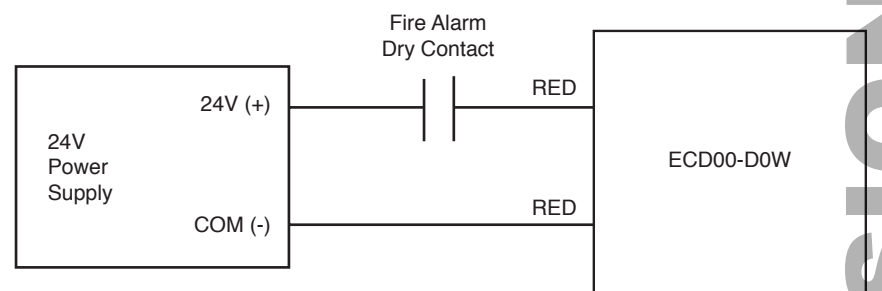


Switch front view

Ongoing Testing

DIP SWITCH SETTINGS		
<p>ON OFF</p> <p>1 2 3 4</p> <p>No Monthly Automatic Test No Fire Alarm/Remote Test Switch <b>DEFAULT</b></p>	<p>ON OFF</p> <p>1 2 3 4</p> <p>No Monthly Automatic Test YES Fire Alarm/Remote Test Switch (N/C)</p>	<p>ON OFF</p> <p>1 2 3 4</p> <p>YES Monthly Automatic Test No Fire Alarm/Remote Test Switch</p>
<p>ON OFF</p> <p>1 2 3 4</p> <p>YES Monthly Automatic Test YES Fire Alarm/Remote Test Switch (N/C)</p>	<p>ON OFF</p> <p>1 2 3 4</p> <p>No Monthly Automatic Test YES Fire Alarm/Remote Test Switch (N/O)</p>	<p>ON OFF</p> <p>1 2 3 4</p> <p>YES Monthly Automatic Test YES Fire Alarm/Remote Test Switch (N/O)</p>

- Monthly Automatic Test Feature:** The monthly automatic test feature will test the Leviton ECD00-D0W for 40 seconds every 25 days and record results on microprocessor. Test results may be played back by holding test button for 3 seconds. Once green LED flashes once, release test button. Every green flash signals a passed test and every red flash signals a failed test. NOTE: Annual testing for 90 minutes is still required and recommended.
- Fire Alarm/Remote Test Switch:** Fire alarm/remote test switch input is optional. Cut red jumper wire and connect 24 VDC power to it through a dry contact. For N/C type, when contact is closed, the switch will transfer to emergency source. For N/O type, when contact is open, the switch will transfer to emergency source.



NOTE: ECD00-D0W red wires are polarity independent.

FCC COMPLIANCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Any changes or modifications not expressly approved by Leviton could void the user's authority to operate this equipment.

**TRADEMARK DISCLAIMER:** Use herein of third party trademarks, service marks, trade names, brand names and/or product names are for informational purposes only, are/may be the trademarks of their respective owners; such use is not meant to imply affiliation, sponsorship, or endorsement.

FOR CANADA ONLY

For warranty information and/or product returns, residents of Canada should contact Leviton in writing at Leviton Manufacturing of Canada Ltd to the attention of the Quality Assurance Department, 165 Hymus Blvd, Pointe-Claire (Quebec), Canada H9R 1E9 or by telephone at 1 800 405-5320.

INDUSTRY CANADA COMPLIANCE STATEMENT

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

IMPORTANT! Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This Class A digital apparatus complies with Canadian ICES-003.

TECHNICAL SUPPORT

For Technical Support, please contact Leviton Manufacturing at EMCATechSupport@Leviton.com, or (800) 959-6004.

**LIMITED 5 YEAR WARRANTY AND EXCLUSIONS**  
Leviton warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Leviton is free of defects in materials and workmanship under normal and proper use for five years from the purchase date. Leviton's only obligation is to correct such defects by repair or replacement, at its option. For details visit [www.leviton.com](http://www.leviton.com) or call 1-800-824-3005. This warranty excludes and there is disclaimed liability for labor for removal of this product or reinstallation. This warranty is void if this product is installed improperly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. There are no other or implied warranties of any kind, including merchantability and fitness for a particular purpose, but if any implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty, including merchantability and fitness for a particular purpose, is limited to five years. Leviton is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, lost sales or profits or delay or failure to perform this warranty obligation. The remedies provided herein are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.