Emergency Power Dimmer Control
with Automatic Diagnostic and Manual Test Features
for 4 wire dimmable loads (0-10V and low voltage digital dimming systems including DALI and others)
Cat. No. ECS00-DDW

LEVITON®

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 in. x 3 in. caution label in each fixture or load controlled by an ECD00-DDW 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 this device **WITH COPPER WIRE ONLY.**

INSTALLATION INSTRUCTIONS   **ENGLISH**

Description

In the past, all emergency lights were left on 24 hours a day to meet safety codes. Now you can specify & install a UL924 Listed Emergency Power Control ECS00-DDW, which converts up to 20A of normal light fixtures to approved emergency lights. During normal operation, the ECS00-DDW dims designated emergency lights with the same control as your normal lights. During a utility power interruption, the ECS00-DDW turns designated emergency lights on, at full brightness, regardless of dimmer position.

Intended for use with switching, 0-10V and DALI/EcoSystem dimming controls.

NOTE: For Line Voltage Dimmable Loads, use model ECD00-D0W.

Features

• **Patented Automatic Diagnostic:** When the room switch is turned off, ECS00-DDW tests itself for 2.5 seconds, testing that an emergency power source is available and that the ECS00-DDW, ballast, and lamp(s) are functioning correctly. This feature eliminates the need for manual monthly testing and is approved for this purpose. This allows installation in any location because the test switch does not need to be accessible. This feature can be disabled in the field by cutting the blue jumper.

• **Fire Alarm / Remote Test Switch:** Some applications demand that emergency lighting be activated upon fire alarm, security alarm, or remote test switch activation. The ECS00-DDW is equipped with a low voltage override input (red jumper).

• **Universal Mounting:** Unique enclosure permits flush, fixture, plenum, or panel mounting.

Pre-Installation

WARNING: Install the self-adhesive 2" x 3" caution label (provided) in each fixture or load controlled by an ECS00-DDW unit cautioning that this load is supplied from two different power sources, regular and emergency.

NOTE: Accessibility requirements limit the mounting of emergency controls to accessible areas for testing reasons, however the ECS00-DDW automatic diagnostic exempts it from these requirements.
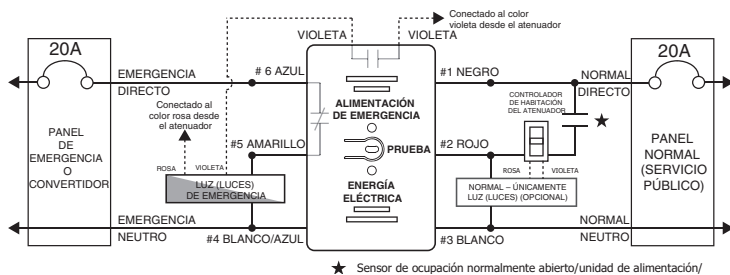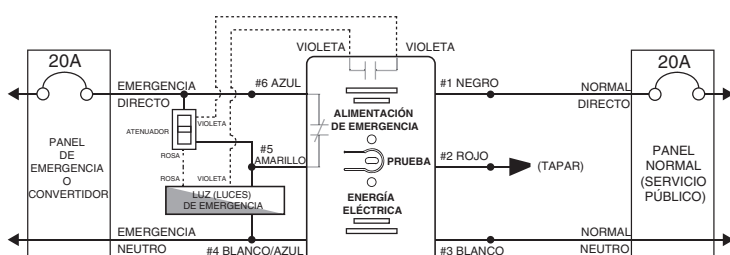
Installation

1. Mount dimmer control.

After the dimmer is installed, install red TEST SWITCH button cover and screw hole covers (provided).

2. Wire according to usage.

Wiring Diagram #1 (Suggested): A common dimmer controls both normal and emergency lighting in a space. Upon loss of normal power, the emergency lighting comes on at full brightness regardless of dimmer position.

Wiring Diagram #2 (Shunt): A dedicated dimmer controls emergency lighting in a space. Upon loss of normal power, the emergency lighting comes on at full brightness regardless of dimmer position.
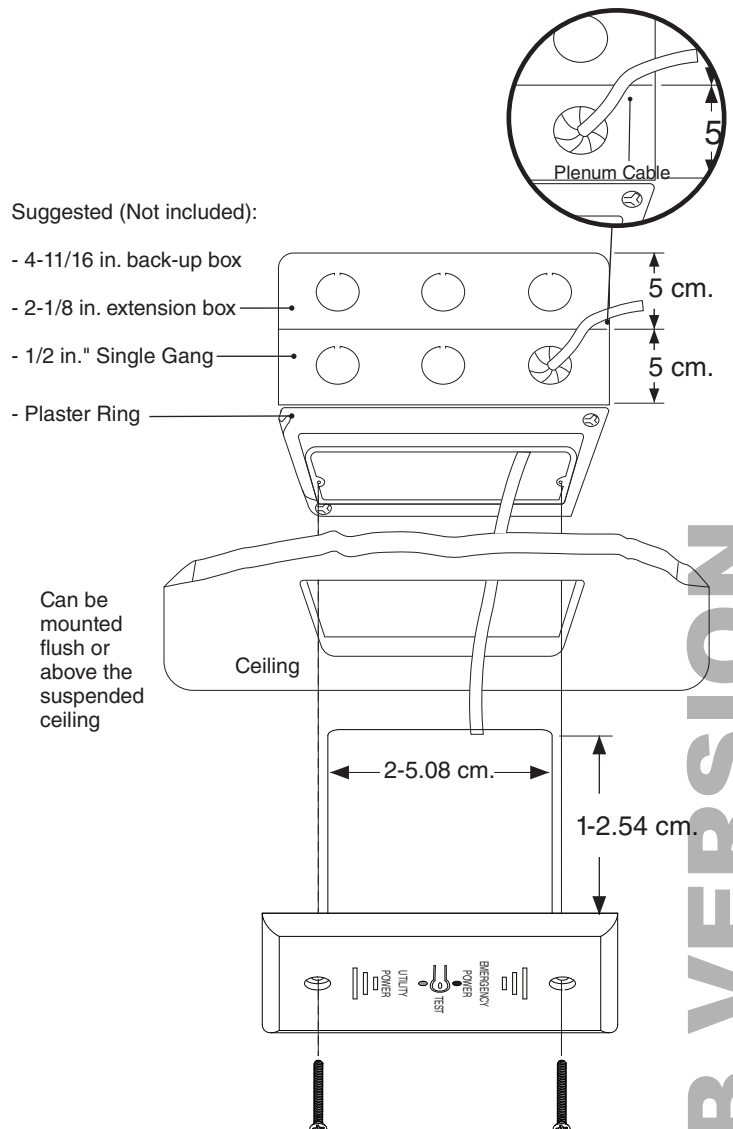

ELECTRICAL SPECIFICATIONS

Unv Voltage	120V-277V Sensing Input 120V-277V Load
Amp Ballast Load Rating	20 Amp
Load	1800W Incandescent Load Rating at 120V 1500W Incandescent Load Rating at 277V
Voltage Surge Protection	

MECHANICAL SPECIFICATIONS

Flush Mounted Size	4.50 in. x 2.75 in. x 0.25 in.
Body Size	2.875 in. x 1.75 in. x 1.22 in.
Color	White
Weight	8 oz
Temperature	-40°F - 140°F (-40°C - 60°C)
UL94-5VA Rating	Safe for installation above suspended ceiling.

Suggested (Not included):

- 4-11/16 in. back-up box

- 2-1/8 in. extension box

- 1/2 in." Single Gang

- Plaster Ring

Can be mounted flush or above the suspended ceiling

Ceiling

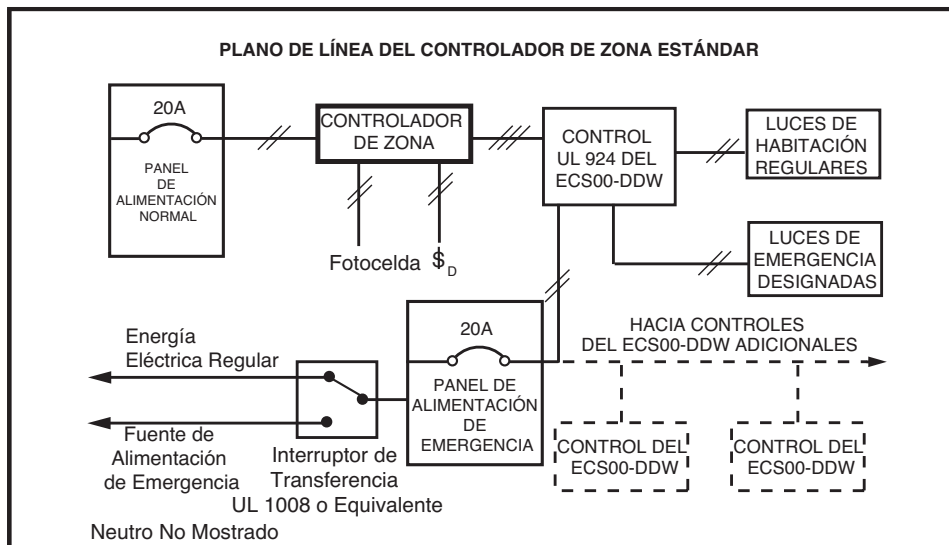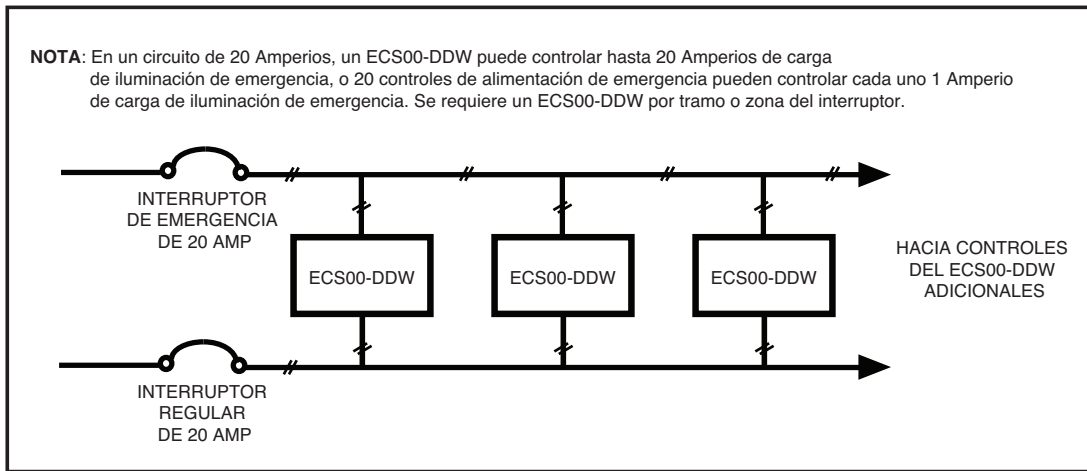# Initial Testing, Troubleshooting and Maintenance

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 and convenient method is used to check connections. To test that the wires are connected correctly, without any inconvenience to occupants, do not turn off regular (utility) power 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 and continuity to branch circuit breaker.

2. Check that emergency branch circuit breaker is connected & emergency power is available. Red LED should be lit. If red LED is not lit, check connections and continuity to branch circuit breaker.

3. Normal Operation Test: Turn dimmer or other control device to the "ON" position. Normal and emergency lights should turn on. Reduce dimmer to 50%, normal and emergency lights should dim together. Turn room switch or control to the "OFF" position. Normal lights should turn off immediately. If blue loop is connected, emergency lights should stay on for at least 2.5 seconds. If blue jumper is cut and capped, emergency lights should turn off immediately.

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 EPC functional. However, regular testing should be performed when the lamps or ballasts have been replaced or when remodeling has taken place.

Single Line Drawings

NOTA: En un circuito de 20 Amperios, un ECS00-DDW puede controlar hasta 20 Amperios de carga de iluminación de emergencia, o 20 controles de alimentación de emergencia pueden controlar cada uno 1 Amperio de carga de iluminación de emergencia. Se requiere un ECS00-DDW por tramo o zona del interruptor.

INTERRUPTOR DE EMERGENCIA DE 20 AMP

ECS00-DDW   ECS00-DDW   ECS00-DDW

HACIA CONTROLES DEL ECS00-DDW ADICIONALES

INTERRUPTOR REGULAR DE 20 AMP

PLANO DE LÍNEA DEL CONTROLADOR DE ZONA ESTÁNDAR

20A — PANEL DE ALIMENTACIÓN NORMAL

CONTROLADOR DE ZONA

CONTROL UL 924 DEL ECS00-DDW

LUCES DE HABITACIÓN REGULARES

LUCES DE EMERGENCIA DESIGNADAS

Fotocelda $_D

Energía Eléctrica Regular

Fuente de Alimentación de Emergencia

Interruptor de Transferencia UL 1008 o Equivalente

Neutro No Mostrado

20A — PANEL DE ALIMENTACIÓN DE EMERGENCIA

HACIA CONTROLES DEL ECS00-DDW ADICIONALES

CONTROL DEL ECS00-DDW   CONTROL DEL ECS00-DDW

For Technical Assistance Call: 1-800-824-3005 (USA Only) or 1-800-405-5320 (Canada Only) www.leviton.com