EXTERNAL-MOUNT LUMINAIRE CONTROLLER
RETOFIT KIT INSTALLATION INSTRUCTIONS

OPERATING VOLTAGE
SCD1000-EM/LCE20A1000: 120/277V AC
SCDMET-277: 277V AC
SCDMET1002: 347V AC

Maximum Ampere draw: 5.0 Amps (20 Amps for LCE20A1000)

“Suitable for Use In Air Handling Spaces”

Wiring must comply with all applicable electrical codes. Turn off power before removing or installing controller.

WARNING: THIS IS A CURRENT RATED DEVICE. USE IN APPLICATIONS INVOLVING AMPERAGE BEYOND ITS RATING CAN BE DANGEROUS AND CAUSE ELECTRICAL FIRES.

WARNING: RISK OF FIRE OR ELECTRICAL SHOCK. CONVERSION KIT INSTALLATION REQUIRES KNOWLEDGE OF FLUORESCENT AND LED LIGHTING LUMINAIRE'S ELECTRICAL SYSTEMS. IF NOT QUALIFIED, DO NOT ATTEMPT INSTALLATION. CONTACT A QUALIFIED ELECTRICIAN.

WARNING: ONLY THOSE OPEN HOLES INDICATED IN THE PHOTOGRAPHS AND/OR DRAWINGS MAY BE MADE OR ALTERED AS A RESULT OF KIT INSTALLATION. DO NOT LEAVE ANY OTHER OPEN HOLES IN AN ENCLOSURE OF WIRING OR ELECTRICAL COMPONENTS.

WARNING: TO PREVENT WIRING DAMAGE OR ABRASION, DO NOT EXPOSE WIRING TO EDGES OF SHEET METAL OR OTHER SHARP OBJECTS.


THIS RETROFIT KIT IS ACCEPTED AS A COMPONENT OF A LUMINAIRE WHERE THE SUITABILITY OF THE COMBINATION SHALL BE DETERMINED BY AUTHORITIES HAVING JURISDICTION.

LIST OF MATERIALS
1. LCE20A1000, SCD1000-EM, SCDMET1002, or SCDMET-277 Luminaire Controller
2. Installation Instructions

Figure A

SCD1000-EM/LCE20A CASE:
BLACK PLASTIC
SCDMET1002/SCDMET-277 CASE:
METAL

GREEN: GROUND WIRE
HEAT SHRINK:
SEPARATES DC WIRES
PURPLE:
DIMMING (+)
GREY:
DIMMING (-)
ANTENNA
BLACK:
LINE HOT
WHITE:
LINE/LOAD NEUTRAL
RED:
LOAD HOT
(SWITCHED)
**Retrofit Installation**

1. Locate and remove a ½” knockout in fixture or junction box that will allow for sufficient clearance and vertical antenna orientation while minimizing metallic obstruction near the antenna. Figure B is an example using a CFL ballast and its adjoining wiring enclosure. The External-Mount Luminaire Controllers can be mounted in any electrical enclosure with a ½” KO available.

2. Feed wires through the knock-out opening and secure Luminaire Controller to junction box or fixture with lock nut.

3. If necessary, bend the antenna near the base to ensure it is in a vertical orientation. See Figure B.

**Connecting the Wires**

**Power Connections**

1. Attach the black conductor of the Luminaire Controller to the line voltage using a splicing wire connector. If a ballast disconnect is required per the local jurisdiction then install as required.

2. Splice the white conductor of the Luminaire Controller to LINE neutral and to the neutral wire of the ballast or LED driver using a splicing wire connector. See Figure C.

3. Connect the red LOAD hot switched wire to the hot wire of the ballast or LED driver. See Figure C.

4. Connect the Green GROUND wire from the SCDMET1002 or SCDMET-277 to the equipment ground conductor.

**Wiring Reference**

- **LINE HOT (BLACK):** Incoming power feed from premise wiring
- **LOAD HOT (RED):** Power output from Luminaire Controller to Driver AC power input
- **NEUTRAL (WHITE):** Power feed and power output neutral connection
- **GROUND (GREEN):** (ONLY on SCDMET1002/SCDMET-277 units ) is for AC Ground connections
- **DIMMING (PURPLE +, GRAY - ):** 0-10 VDC dimming control output from Luminaire Controller to ballast/LED driver dimming input
WIRING DIAGRAMS

Exhibit 1: FIXTURE BEFORE RETROFIT

AC Supply

0 to 10V Dimmer

J-Box

- NEUTRAL-Wht
- HOT-Blk

Purple(+)

Gray(-)

Light Fixture

Power IN

LED Driver

Dim IN

Exhibit 2: FIXTURE CONFIGURATION AFTER RETROFIT 1

AC Supply

0 to 10V Dimmer

Wire-Nut Splice Connector

Cap Off with Wire-Nut Connector

J-Box

- NEUTRAL-Wht
- HOT-Blk

Purple(+)

Gray(-)

Light Fixture

Power IN

LED Driver

Dim IN

Daisychain Multiple Fixtures Upto 5 Amps Load Max.

Exhibit 3: FIXTURE CONFIGURATION AFTER RETROFIT 2

AC Supply

0 to 10V Dimmer

Wire-Nut Splice Connector

Cap Off with Wire-Nut Connector

Mechanically Ground Wire to J-Box

J-Box

- NEUTRAL-Wht
- HOT-Blk

Purple(+)

Gray(-)

Light Fixture

Power IN

LED Driver

Dim IN

Daisychain Multiple Fixtures Upto 5 Amps Load Max.

SCD1000-EM
LCE20A1000

SCDMET1000
SCDMET-277
SCDMET1002
**DIMMING CONNECTIONS**

Ensure that no copper is exposed on any of the wires after installation.

If not using a dimmable ballast or LED driver ensure that the Purple and Gray dimming wires are properly capped so no copper is exposed. The dimming circuit can drive a maximum of 20 dimmable ballasts or LED drivers.

1. Connect the positive/(+)/purple DIM conductor of the Luminaire Controller to the positive/(+) dimming input of the ballast or LED driver. See Figure D.

2. Connect the negative/(-)/gray DIM conductor of the Luminaire Controller to the negative/(-) dimming input of the ballast or LED driver. See Figure D.

**SERIAL NUMBER TRACKING**

1. Remove the 2 tear-away stickers that contain the serial number of the Luminaire Controller. See Figure E.

2. Apply these to a drawing of the space containing the fixture or a tracking sheet to identify the serial number and its location in the room.

3. If these tear away labels are missing, please write down the serial number of the Luminaire Controller in a safe place.

4. These serial numbers are required in order to have a complete Audacy operating system.