ROAM REN127-CM1 Deco-Utility Photocontrol

Installation Guide



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Before starting installation, you will need the following tools:

Volt-Ohm meter, 1 inch open ended wrench adapter for torque wrench, torque wrench with scale in inch pounds, slotted or Philips screwdriver as necessary for fixture panel disassembly

- 1. Ensure the fixture is not powered. To avoid electrical shock, power must be disconnected from the field wiring terminal block. Verify power is removed using a working VOM before working inside the fixture.
- 2. Open the fixture electronics enclosure or photocontrol access panel (process varies depending on the fixture make/model).
- 3. Locate the fixture field wiring and ensure that it feeds the black and white leads on the installed NEMA receptacle.
- 4. Locate the red conductor coming out of the NEMA receptacle. Ensure that it feeds the fixture ballast in addition to a neutral connection. If these wires are not connected as described, then there is likely a mis-wire within the fixture. Refer to the fixture wiring diagram and/or fixture manufacturer as wiring methods/colors may differ from model to model.
- 5. Locate the Deco-Utility node to be installed. There are two segments to the control; a base node with NEMA plug base and a rectangular-shaped external radio module (ERM). Ensure that the MAC ID number printed on the silver barcode label matches for these two components. They must be paired correctly or the Deco-Utility photocontrol will not operate to its full potential once installed.





6. If a transparent window or lens is installed in the photocontrol eye port of the fixture housing, this must be removed. These are typically affixed with silicone adhesive and occasionally a small locking ramp fastened with a screw. Remove all lens hardware, leaving only an open hole through the outer fixture enclosure wall. Clean any remaining silicone residue from the area surrounding the lens hole from the fixture enclosure walls that might inhibit clean gasket seating from the interior of the fixture.



Locate the washer set in the Deco-Utility packaging and identify which washer is appropriately sized to fit the open lens hole above, while providing good overlap with the fixture enclosure around the lens opening. The correct size will fit flat against the interior wall of the fixture housing, without leaving gaps between the washer and enclosure wall or openings from the exterior of the fixture to the interior.







WASHER SET

WASHERS ARRANGED BY SIZE

TEST FIT WASHER

8. Remove the paper backing from the adhesive side of the washer gasket and apply the washer with the adhesive against the interior of the fixture wall so that the center of the hole in the washer lines up with the center of the lens hole in the fixture enclosure wall. As noted earlier, make sure that the final placement of the washer fits it flat against the interior wall of the fixture housing, without leaving gaps between the washer and enclosure wall or openings from the exterior of the fixture to the interior



- 9. Next, remove the vented screw from the stem of the ERM, this is threaded right handed like a normal screw. Rotate it counter clockwise to loosen and remove it from the threaded ERM stalk.
- 10. Feed the ERM cable assembly through the lens hole in the fixture enclosure wall and washer from the exterior and thread the vented screw into the stalk of the ERM from the interior wall of the fixture until it is finger tight. When done properly, the threaded screw and ERM stalk should capture the washer and fixture enclosure wall between them.



- 11. On the exterior of the fixture enclosure wall, gently rotate the ERM unit until the ROAM logo on it will read right side up. If needed, the vented screw may need to be loosened slightly to accomplish this.
- 12. Using a 1 inch open style torque wrench or torque wrench adapter, tighten the vented screw using the octagonal screw head from the interior of the fixture enclosure housing to no more than 35 inch pounds. The technician may need to hold the body of the ERM on the fixture exterior while tightening to ensure that it does not rotate from the previously aligned position. When complete, this operation should result in a water-tight seal at the gasket on the washer with the enclosure housing with no gaps through visible.



13. Next locate the base node that was set aside earlier. Double check that the ERM MACID and base node MAC ID numbers match as instructed in step 5. Install the Deco Utility base node into the NEMA receptacle within the fixture housing. Ensure that the base node does not pinch the ERM cable during insertion or when fully seated in the NEMA receptacle. Ensure that the base node is twisted and locked properly into place in the NEMA receptacle.



14. Next, snap the connectors on the ERM cable and base node cable together, lining up the white arrows. Push the locking ring on the base node connector toward the ERM side connector gently, in the direction of the white arrow printed on the connector body, to ensure that the parts mate and lock together properly. During interconnection, there should be two audible clicks. Gently pulling the two cables in opposite directions will ensure that the locking action is secure. In some cases, the connector slide mechanism may have settled during shipping and may need to be exercised before mating the connector parts to allow it to engage and lock correctly. Simply slide the mechanism back and forth on the connector a few times, ensuring that the spring return is operating freely.



15. While carefully managing wires and cables to ensure that they don't get pinched, re-assemble/close the fixture enclosure.





- 16. Deco Utility photocontrol installation is now complete. Different methods may be employed to electrically test the fixture or proof the wiring at this point. Due to differences in manufacturing processes and fixtures, the remaining steps are included only as an example of possible fixture tests.
- 17. An AC power source can again be installed to the fixture at the field wiring terminal blocks if desired for fixture testing. Preferably, this is a switched source and it can be turned off during installation of the wiring to be made safe.

- 18. Once power is applied to the fixture, the LEDs in the window of the ERM should be observed. Immediately upon power up, both a green and red LED will be illuminated constantly for about 4 seconds. After 4 seconds, the red LED should turn off and the green LED should blink on for one second, then off for one second repeatedly.
- 19. A flashlight can be used to test operation of the Deco Utility relay to control the fixture. First, shine the flashlight into the ERM window. This should cause the fixture to turn off. Next, remove the flashlight and cover the ERM window with an opaque material so that no light enters the window. This should cause the fixture to turn on.



CAUTIONARY NOTE ON REPACKAGING HANDLING AND SHIPPING FIXTURES ONCE THE ROAM REN127-CM1 PHOTO CONTROL IS INSTALLED:

ENSURE THAT THE ERM PROTRUDING THROUGH THE FIXTURE WALL DOES NOT COME INTO CONTACT WITH PACKAGING OR SPACERS THAT ARE SUBJECT TO ROUGH HANDLING OR MAY TRASMIT THE FORCE OF BLOWS DIRECTLY FROM THE PACKAGING EXTERIOR THROUGH TO THE ERM DEVICE.

DO NOT USE THE ERM AS A HANDLE TO MOVE OR HOLD THE FIXTURE.

DO NOT REST THE WEIGHT OF THE FIXTURE DIRECTLY ON THE ERM.