



This alerts you to things that may cause serious injury to a person. Only qualified, properly trained personnel should perform these procedures.



This alerts you to things that may cause loss of data, damage to your computer or device.



#### **1.1 IMPORTANT SAFETY INSTRUCTIONS:**

READ CAREFULLY BEFORE INSTALLING LUMINAIRE

- **WARNING: DISCONNECT POWER BEFORE SERVICING**
- **THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE SPECIFIC INSTALLATION INSTRUCTIONS TO THE APPLICABLE INSTALLATION CODE BY A QUALIFIED PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED.**
- **NO ORIGINAL PARTS ARE ALLOWED TO BE SUBSTITUTED.**
- **Changes or modifications to this equipment, not expressly approved by the manufacturer could void the user's authority to operate the equipment.**
- **This device must be inserted into an appropriate locking photocell receptacle that provides protection from accidental contact with the live "blade" terminals. This device does not rely on the luminaire to prevent accidental exposure to live voltages within the device.**
- **This equipment has been approved for wireless data communications applications where the equipment should be used at distances greater than 20cm from the human body (with the exception of hands, wrists, feet and ankles). Cet équipement a été approuvé pour les applications de communication de données sans fil où il doit être utilisé à une distance supérieure à 20 cm du corps humain (à l'exception des mains, des poignets, des pieds et des chevilles).**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

This device complies with Industry Canada's licence-exempt RSSs. 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.

"Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- 1) l'appareil ne doit pas produire de brouillage;
- 2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement."

"CAN ICES-3 (B)/NMB-3(B)"

Contains FCC ID: 2ACR30115  
Contains IC: 12047A-0115

When equipped with T100 module:  
Contains FCC ID: 2ACR3-T100  
Contains IC: 12047A-T100



# **LUMEN iQ™**

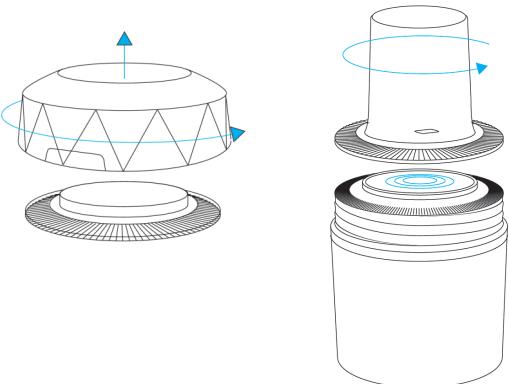
## **A640 CONTROLLER INSTALLATION AND OPERATIONS MANUAL**

**Customer Service Centre**  
(Hours: 8:00 AM – 4:30 PM, AST)  
T: +1.855.667.1228 (Canada & USA)  
F: +1.902.667.1233 (Worldwide)  
[support.ledroadwaylighting.com](http://support.ledroadwaylighting.com)  
[support@ledroadwaylighting.com](mailto:support@ledroadwaylighting.com)

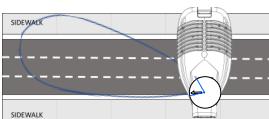
LRL-SUP0085-04-LF- TSP ASSEMBLY -2019-07-25

## TSP (T100) SENSOR ASSEMBLY INSTRUCTIONS

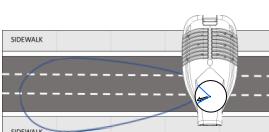
1. Twist and release locking ring from controller base. Remove protective cap.
2. Replace the protective cap with sensor pod. Align sensor pod to center.



3. If your sensor is a directional sensor, rotate and orientate with road or pathway. Sensor can be aimed to target the far sidewalk by aligning the arrow at the top of the unit parallel to the roadway or pathway (as shown in diagram below) then rotate it counter-clockwise by one notch. To target the near sidewalk, align the arrow parallel to the roadway then

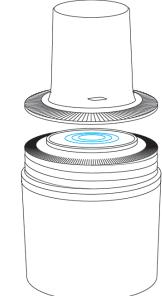
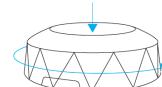


Aiming for far sidewalk



Aiming for near sidewalk

- rotate it counter-clockwise by six notches. The blue lines on both sides of the arrow represent the beam edges.
4. Reattach locking ring to controller base. The locking ring has a 'ratcheting' feature. When tightening the top, ensure the ratcheting feature engages and tighten to a torque value of 8Nm or greater.



## 1.2 INSTALLATION PRECAUTIONS

**WARNING:** 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 in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



## 1.3 INSTALLATION CONDITIONS

**DANGER:** This product is for use with electronic street lighting ballasts/power supplies with 0-10VDC dimming input. Operation in other installation conditions may cause fire, injury, product damage, etc. and will void the product warranty.



## 2.1 INSTALLING THE CONTROLLER

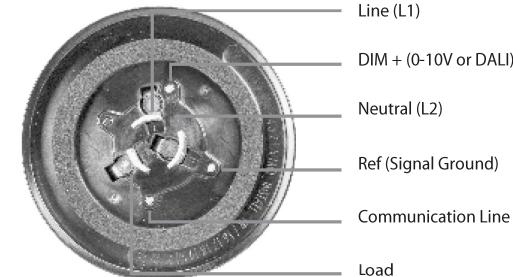
**DANGER:** Disconnect electrical power to luminaire before continuing.

The Lumen IQ controller is intended to be installed on a streetlight luminaire with an ANSI C136.41 compliant 3, 5, or 7 pin photocell socket. The controller produces either a 0-10VDC or DALI dimming signal on the auxiliary lines so the fixture must be wired internally to accept this signal.

Insert the Lumen IQ controller into the receptacle, push down and turn 1/8 turn clockwise to lock.



## 3.1 TERMINAL CONNECTIONS



The controller terminal connections are shown in the diagram below include:

**Power Lines:**

- Line (or L1)
- Neutral (or L2)
- Load (Switched Line)

**Auxiliary Lines:**

- 0-10V DC
- Ref (Signal Ground)
- Communication Line

The control interface is isolated from the mains input by basic insulation. Connection of the auxiliary lines is optional.

## 4. SPECIFICATIONS

|                                    |   |
|------------------------------------|---|
| Voltage Input Range                | 110-277VAC 60Hz (UL Rating)<br>110-250VAC 50/60Hz (CE Rating)   |
| Controlled Luminaire Current Range | 0-6A electronic (ELC) and incandescent (IND) loads<br>0-10A inductive (IND) loads<br>within voltage and current range |
| Power Consumption                  | 2.5W (depending on voltage input)   |
| Operating Temperature Range        | -40° to 60° C   |

## 4.1 FINAL INSTALLATION

The A640 controller will now be ready to operate your luminaire and collect sensor data.

