

(For In-Grade: Including Poured Concrete)

INSTALLATION INSTRUCTIONS for IG14

READ AND UNDERSTAND ALL INSTALLATION INSTRUCTIONS BEFORE INSTALLING FIXTURE!

## SAVE THESE INSTRUCTIONS

- Danger: Always disconnect power before wiring, or maintenance. Fixture must be installed by a qualified electrician. Fixture must always be installed according to local and national electrical codes, rules & regulations. Fixture must be installed on a circuit protected by Ground Fault Circuit Interrupter (GFCI).
- Warning: Seal all conduit opening(s) and opening(s) from water entry. Before service ensure fixture is cool to touch. Always ensure that all gaskets and sealing surfaces are free of dirt and debris.

WARNING: RISK OF SHOCK. Check fixture for input voltage before connecting power to fixture.

This fixture is suitable for dry, damp and wet locations. Also for use with poured concrete.

LED fixture(s), LED driver(s) and LED electrical components are more precise electrically than standard non LED products (e.g. Incandescent, Compact Fluorescent, H.I.D., etc.). Please follow the following guidelines/requirements when installing LED fixture(s)/LED driver(s).

- 1. Install LED fixture(s) and/or LED driver(s) only on their own circuit. Do not mix any other non LED products/fixtures (e.g., Incandescent, Compact Fluorescent, H.I.D., etc.) with LED fixture(s)/LED driver(s) on a single circuit.
- 2. Do not use any other electrical equipment (e.g., surge protectors, photocells, etc.) that is not (rated) for use with LED fixture(s)/LED driver(s) on the same circuit as LED fixture(s)/LED driver(s).
- 3. Use GFCI's (by others) on each circuit (per installation instructions) appropriate for the installation.
- 4. Install remote surge protector(s) (by others, goes on the circuit with nothing between the surge protector and the LED fixture(s)/LED driver(s)), if the fixture in not already installed with a surge protector, to help remove power surges that may harm LED fixture(s), appropriate for the installation.

Periodically check and make sure that your remote surge protector(s) are in good working order.

CAUTION: Ingrade fixture MUST be installed to allow for drainage and prevention of water from collecting ground and in the bottom of the outer housing and/or housing of the fixture. A layer of gravel and/or additional drainage material and/or drainage pipe or other system may be needed below and/or around the ingrade fixture to prevent water from collecting around and in the bottom of the outer housing and/or around the housing. Test for drainage by installing an outer housing in the ground and then pouring water in the hole and to check for drainage and if needed add gravel and/or additional drainage material, or drainage pipe until there is drainage before pouring cement and installing electrical and the housing.

- Install the outer housing and housing flush at finish grade level (grade finish) of earth, non-organic material or concrete only. Never install the fixture ingrade below finish grade level. Do NOT install fixture above grade level for walk over or drive over applications.
- Make sure to keep any and all debris as well as water, snow and/or ice off of top of fixture at
- Installation should not be done under high humidity (e.g. rainy day or after rain, foggy weather... etc.).
- If moisture is observed in fixture, remove trim and glass from fixture. Dry fixture thoroughly and operate lamp to remove moisture.
- Periodically check lens for cracks, check lens gasket for cracks, worn, torn and/or if it badly deformed and replace as needed with factory parts only.
- When installing trim center the lens and gasket in housing.
- Periodically check screw tightness on the trim that holds the lens in place and tighten. Clean

#### Tools: FIG A Phillips Head Screwdriver ¾6° M2.5 Allen Key Ī GRADE LEVEL FIG B Housing Assy (with LED, LED driver and (ord) 33/4 Separate sleeve (by others) to prevent concrete / cement / earth from coming in contact with the direct burial j-box (by others). Cord (0.30" O.D. ee Fixture Installation #6 x 20" Long) 45/16" (Outer Grade level Shown: Separate sleeve, cord in underground junction box (by others, below outer housing). Housing' Stainless Steel Trim above grade level with a cove around outer housing to protect from ground ø41/8" echnical: IK10 - Walk over or Drive over

## FIG C (2) M4 X 8mm Long Hex Flat Head Screws (M2.5 Allen Key) Trim (Stainless Steel) Glass Lens (Glass lip upwards) Gasket (ridge downward) Reflector (3) M4 x 8mm L Phillips Hex Screws to Mount Hsg to Trim (M2.5 Allen Key) Cord. (0.30" O.D. x 20" Long) IG14 - EXPLODED VIEW

### Fixture Installation:

### NOTE: READ AND FOLLOW ALL INSTALLATION INSTRUCTIONS BEFORE INSTALLING FIXTURE. DO NOT USE POWER TOOLS TO REMOVE/INSTALL SCREWS OR FIXTURE.

1. Make sure supply wiring and direct burial j-box (by others) is in place below outer housing before installing fixture and before completing graded surface. Make sure that the cord from the fixture reaches direct burial j-box.

Note: Small Nema 6P or NEMA 4X direct burial j-boxes can be purchased from a variety of manufactures with cable glands. Two (2) manufacturers are Bud Industries (http://www.budind.com/, Example: PTS-25301, PN-1320 (or PN-1320-C), PN-1321 (or PN-1321-C)) and Carlon (http://www.carlonsales.com/, Example: E989NNJ-CAR) and can be ordered with cable glands.

- 2. Remove the two (2) Stainless Steel screws in Trim (FIG A) using M2.5 Allen Kev.
- 3. Remove Housing Assembly (with trim, glass, cord, etc.) from outer housing.
- 4. Place Outer Housing in the ground so the top of the outer housing is at grade level.
- 5. Check to see that hole is at least deep enough for fixtures outer housing and underground j-box (by others) (see FIG. B),
- 6. When using the outer housing if water does drain out of the hole/well and concrete/cement/earth does not come in contact with the direct burial j-box and wiring (by others) then a separate sleeving (by others) is not needed. Use of a separate sleeve (by others, e.g.: aluminum flashing, tube, PVC Pipe for underground use, etc. depending on installation) may be needed (in addition to the outer housing) around and, as needed, below the outer housing 1) to ensure that water drains out the bottom of the hole and/or 2) to prevent concrete/cement/earth from coming in contact with the direct burial j-box and wiring (by others), see FIG B. Make sure to block/cover the top of the outer housing to prevent debris from going in the outer housing. 7. Secure Outer Housing in solid substrate as needed for walk over or drive over applications. See spec sheet on line for Walk
- over and Drive over technical information. 8. Connect the supply wiring to the fixture cord in the direct burial j-box (by others) under the outer housing and secure from
- water entry (per manufactures instructions). See "Wiring" instructions below.
- 9. Place Housing Assembly (with trim, glass, etc.) in outer housing and secure using the two (2) M4 FH Hex head screws. Tighten screws with M2.5 hex key. Do NOT over tighten screws.
- 10. If cleaning moisture from the inside of the lens (FIG C) do so only when humitidy is low so not to trap moisture in fixture. Remove Housing Assembly from Outer Housing (see #2-#3 above). Then turn over fixture and remove the three (3) screws from under the housing with M2.5 allen key and carefully remove trim, and glass lens; Keep gasket and reflector in housing. Clean lens with glass cleaner and carefully reassemble glass lens on fixture and tightening screws (do not over tighten and break glass). Replace fixture in outer housing and tighten securely with 2 screws on top of the fixture. Do not over tighten screws.

#### Wiring:

NOTE: Check fixture for input voltage before connecting power to fixture.

- Make sure that water will not get inside fixture by entering in through the end of fixture cord. Use of a underground junction box (by others) or other connection may be necessary (Fig. B) depending on your installation.

  1. Connect ground wire (green or bare copper/aluminum) from the supply circuit to the ground wire (green or bare copper)
- /screw/connector from the luminaire.
- 2. Connect the neutral (common) wire from the power supply circuit to the neutral wire from the luminaire.
- 3. Connect the main voltage supply wire (line/lead) from the power supply to the line (lead) wire from the luminaire.
- 4. Secure connection using UL Listed wire nuts/connectors and then with UL Listed Electrical tape (by others), as required, appropriate for the connection. If connections are underground an underground junction box (by others) may be needed (see
- 5. For Dimming wiring see Liton web site.





## For Wall Mount: Type IC (Dry Location) or Pourded Concrete (Wet Location)

INSTALLATION INSTRUCTIONS for IG14

SHEET 2 OF 2

READ AND UNDERSTAND ALL INSTALLATION INSTRUCTIONS BEFORE INSTALLING FIXTURE!

## SAVE THESE INSTRUCTIONS

Important: Please read and understand all instructions completely before installing this fixture.

CAUTION — RISK OF FIRE. WARNING: Fixture installation (and use) and all electrical connections must be in accordance with the applicable installation local and National Electrical Codes (N.E.C.) rules, regulations codes and standards by a person familiar with the construction and operation of the product and the hazards involved. If you are unfamiliar with installing fixture(s), accessories and/or electrical wiring have a qualified licensed electrician install this fixture for you. Fixture must be installed by a qualified electrician.

WARNING: RISK OF SHOCK. House electric current can cause painful shock or serious injury.

WARNING (DANGER - RISK OF SHOCK): Always disconnect power before fixture installation, wiring, or maintenance.

WARNING: Before starting the wire connections, disconnect the power by turning off the circuit breaker or removing the fuse at the fuse panel. Turning the power off using the light switch is not sufficient to prevent electrical shock.

For installation use supply conductors rated  $90^{\circ}$  C. This luminaire must be connected with supply wire rated at  $90^{\circ}$  C. Most dwellings built before 1985 have supply wire rated at  $60^{\circ}$  C; consult a qualified electrician before installing.

WARNING: Before service insure fixture is cool to touch.

WARNING: Check fixture for input voltage before connecting power to fixture.

Consult a qualified electrician to ensure correct branch circuit conductor.

DO NOT INSTALL DAMAGED PRODUCT!

Do not make or alter any open holes in a wiring enclosure nor any electrical components during kit installation.

WARNING: RISK OF SHOCK. This Luminaire is suitable for Dry Location. TYPE IC (INHERENTLY PROTECTED) Suitable for installation in direct contact with insulation.

Do not install in locations where water collects and/or stands for prolonged periods of time. Fixture must always be installed according to local and national electrical codes, rules & regulations. Fixture must be installed on a circuit protected by Ground Fault Circuit Interrupter (GFCI)

Warning: The joint MUST be sealed between the mounting surface (e.g., wall, ground, ceiling, etc.) and the fixture with an appropriate sealing / caulking compound to provide a watertight seal. Seal all conduit opening(s) and opening(s) from water entry. Before service ensure fixture is cool to touch. Always ensure that all gaskets and sealing surfaces are free of dirt and debris.

LED fixture(s), LED driver(s) and LED electrical components are more precise electrically than standard non LED products (e.g. Incandescent, Compact Fluorescent, H.I.D., etc.). Please follow the following guidelines/requirements when installing LED fixture(s)/LED driver(s).

#### WARNING.

- Install LED fixture(s)/LED driver(s) only on their own circuit. Do not mix any other products (Incandescent, Compact Fluorescent, H.I.D. products/fixtures, etc...) with LED fixture(s)/LED driver(s) on a single circuit.
- 2. Do not use any other electrical equipment (example: surge protector photocell, etc.) that is not (rated) for use with LED fixture(s)/LED driver(s) on the same circuit as LED fixture(s)/LED driver(s).
- 3. Fixture must be installed on a circuit protected by Ground Fault Circuit Interrupter (GFCI).
- 4. Install remote surge protector(s) (by others, goes on the circuit with nothing between the surge protector and the LED fixture(s)/LED driver(s)), if the fixture is not already installed with a surge protector, to help remove power surges that may harm LED fixture(s), appropriate for the installation. Periodically check and make sure that your remote surge protector(s) are in good working order.

### Fixture Installation: (Wall: Type IC or Poured Concrete)

- NOTE: READ AND FOLLOW ALL INSTALLATION INSTRUCTIONS BEFORE INSTALLING FIXTURE.
- DO NOT USE POWER TOOLS TO REMOVE/INSTALL SCREWS OR FIXTURE.
- 1. Make sure supply wiring and j-box (by others) is in place (behind/below outer housing) before installing fixture and before completing graded surface (see FIG C). Make sure that the cord from the fixture reaches j-box approiate for your installation. For some underground j-box sizes please see sheet 1 of 1 fixture installation note 1.
- 2. Remove Housing Assembly (with glass, gasket, etc.) from outer housing by removing the (2) phillips head screws on top of the housing (FIG A).
- 3. Place Outer Housing in the inset wall (by others) so the top of the outer housing is at flush with the wall or above wall grade level (see below and FIG C).
- 4. Check to see that hole is at least deep enough for fixtures outer housing and j-box (by others) (see below and FIG. C), as needed/required.
- 5. As needed, drill max 03/16'' holes in outer housing for use with #8 screws max (by others, see below) for securement of outer housing in wall. Then secure outer housing in wall.
- 6. Connect the supply wiring to the fixture cord in the direct burial j-box under the outer housing and secure from water entry (per manufactures instructions). See "Wiring" instructions below.

support with brackets (by others)

7. Place Housing Assembly in outer housing and secure using the two (2) phillips head screws. Do NOT over tighten screws.

## Wiring:

NOTE: Check fixture for input voltage before connecting power to fixture.

- Make sure that water will not get inside fixture by entering in through the end of fixture cord. Use of a underground junction box (by others) or other connection may be necessary (Fig. B & C) depending on your installation.
- 1. Connect ground wire (green or bare copper/aluminum) from the supply circuit to the ground wire (green or bare copper) /screw/connector from the luminaire.
- 2. Connect the neutral (common) wire from the power supply circuit to the neutral wire from the luminaire.
- 3. Connect the main voltage supply wire (line/lead) from the power supply to the line (lead) wire from the luminaire.
- 4. Secure connection using UL Listed wire nuts/connectors and then with UL Listed Electrical tape (by others), as required, appropriate for the connection. If connections are underground an underground junction box (by others) may be needed (see FIG.B).
- 5. For Dimming wiring see Liton web site.

# IG14 SHOWN (Wall mount: Type IC or Pourded Concrete) (Typical installation. Your installation may differ)







