

CATALOG # : IG16

• **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.

IK10 rated. Static load (Walk over): 440 Lbs. Vehicle dynamic load (Drive over): 4400 Lbs

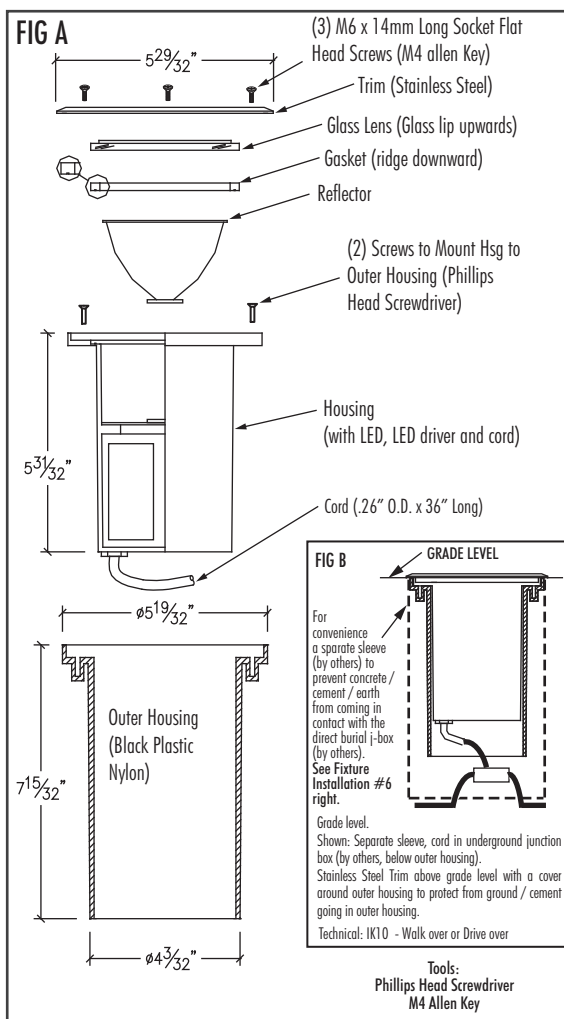
LED fixture(s), LED driver(s) and LED electrical components are more precise electrically than standard non LED products (e.g. Incandescent, Compact Fluorescent, H.I.D., etc.). Please follow the following guidelines/requirements when installing LED fixture(s)/LED driver(s).

CAUTION: Ingrade fixture **MUST** be installed to allow for drainage and prevention of water from collecting around 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.

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 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.

- Make sure to keep any and all debris as well as water, snow and/or ice off of top of fixture at all times!
- 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 lens as need.



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 Stainless Stl Trim from the Housing by removing the (3) M6 socket flat head screws on top of the trim with an M4 allen key.
3. Remove Housing Assembly (while keeping the glass, gasket in place) from outer housing by removing the (2) phillips head screws on top of the 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), as needed/required.
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. For convenience 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.
8. 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.
9. Place Housing Assembly (with glass and gasket) in outer housing and secure using the two (2) phillips head screws. Do NOT over tighten screws.
10. Secure Stainless Steel Trim over glass and secure using the four (4) flat head socket screws with the allen key. Go around the trim and tighten each screw a little until all the screws are tightened. 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 an 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 FIG.B).
5. For Dimming wiring see Liton web site.



For Wet Location. Suitable for Poured Concrete.

INSTALLATION INSTRUCTIONS for IG16

READ AND UNDERSTAND ALL INSTALLATION
INSTRUCTIONS BEFORE INSTALLING FIXTURE!

SAVE THESE INSTRUCTIONS

CATALOG # : IG16 LED plate assembly and LED driver replacement

• **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.

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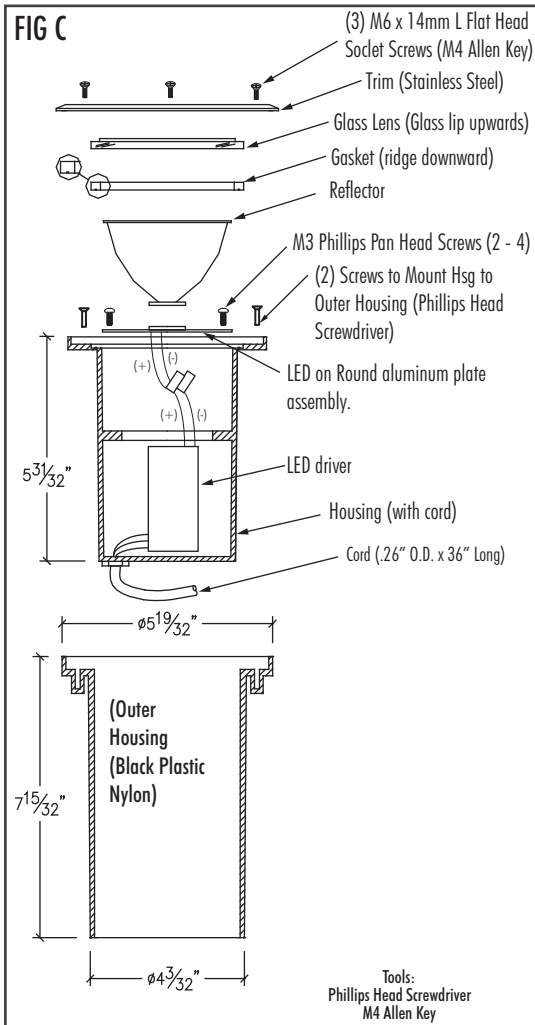
LED fixture(s), LED driver(s) and LED electrical components are more precise electrically than standard non LED products (e.g. Incandescent, Compact Fluorescent, H.I.D., etc.). Please follow the following guidelines/requirements when installing LED fixture(s)/LED driver(s).

CAUTION: Ingrade fixture **MUST** be installed to allow for drainage and prevention of water from collecting around 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.

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 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.

- Make sure to keep any and all debris as well as water, snow and/or ice off of top of fixture at all times!
- 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 lens as need.



Fixture Installation:

- **NOTE: READ AND FOLLOW ALL INSTALLATION INSTRUCTIONS BEFORE INSTALLING FIXTURE.**

DO NOT USE POWER TOOLS TO REMOVE/INSTALL SCREWS OR FIXTURE.

- **Danger:** Always disconnect power before wiring, or maintenance.
 - Read and follow installation instructions for the IG16 Liton web site before removing and replacing the IG16 LED and LED driver.
1. Remove the Stainless Steel Trim from the Housing by removing the (3) M6 socket flat head screws on top of the trim with an M4 allen key.
 2. Remove Housing (FIG. C) while keeping the glass, gasket in place) from outer housing by removing the (2) phillips head screws on top of the housing.
 3. Remove the Glass Lens (Glass lip upwards), Gasket (ridge downward), and Reflector and set aside.
 4. To replace the LED driver do the following (A - G). To replacing the LED with the round plate only steps (A, B, F, G).
 - A) Carefully remove the M3 Phillips Pan Head Screws (2 - 4) holding the Round aluminum plate with the LED and then remove the Round aluminum plate with the LED (see FIG C). Do Not touch the LED COB or have anything touch the LED.
 - B) Disconnect the positive (+) and negative (-) wires from the LED array (under the Round aluminum plate with the LED) to the LED driver without pulling on the wires to the LED array. If only replacing the LED and plate skip to step F.
 - C) Remove the LED driver from the bottom of the Housing and note down (take pictures) how and what color wires are connected from the LED driver to the power cord in the Housing.
 - D) Disconnect the LED driver wires from the power cord in Housing and remove the LED driver.
 - E) Reconnect the wire from the replacement (new) LED driver the power input (see Wiring instructions below - no 1, 2, and 3) using UL Listed or Recognized connectors for 20 AWG and 18 AWG wires (at 105 deg. C temp). As needed see "Dimming Diagrams" "UniDim" Link for dimming wiring diagrams at Liton.com IG16 web page (e.g.: <https://liton.com/6-led-in-grade-700lm-1200lm.html>).
 - F) Reconnect LED COB positive (+) and negative (-) wires to the LED Drivers secondary (+) and negative (-) wires and replace LED driver in the bottom of the Housing using UL Listed or Recognized connectors for 20 AWG and 18 AWG wires (at 105 deg. C temp).
 - G) Carefully replace the Round aluminum plate with the LED back into the housing without touching or pinching any wire between the round aluminum plate and the housing and replace the 3mm screws from note "a" above and tighten securely. Do Not touch the LED COB or have anything touch the LED.
 5. Place the Housing in the outer housing and secure using the two (2) phillips head screws. Do NOT over tighten screws.
 6. Replace the Reflector, Gasket (ridge downward) and finally the Glass Lens (Glass lip upwards) back on the housing.
 7. Secure Stainless Steel Trim over glass and secure using the four (4) flat head socket screws with the allen key. Go around the trim and tighten each screw a little until all the screws are tightened. 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 FIG.B).
5. For Dimming wiring see Liton web site.

INSTALLATION INSTRUCTIONS