

# MR16 In Ground Up Light MODEL IG2

12V, 20W Max., MR16 Halogen 12-24V, 10W or 12V, 12.5W LED

# **Installation Instructions**

# INSTRUCTIONS PERTAINING TO A RISK OF FIRE, OR INJURY TO PERSONS. IMPORTANT SAFETY INSTRUCTIONS. SAVE THESE INSTRUCTIONS.

(Failure to follow the warnings and instructions on this sheet could result in fire, injury, failure of product, and/or voiding of warranty.)

- Do not touch luminaire (lens, faceplate, brackets or housing) while lamp is on. Turn off/unplug and allow to cool before replacing lamp.
- 2. Lamp gets HOT quickly! Contact only switch/plug when turning on.
- 3. Keep lamp away from materials that may burn.
- 4. Do not install fixture in contact with combustible materials.
- Do not touch lamp at any time. Use a soft cloth. Oil from your skin may damage lamp.
- 6. Do not operate with damaged or missing parts.
- Do not disassemble beyond faceplate removal to facilitate lamp and accessory installation/replacement, or as otherwise directed in the installation instructions below.
- Remove any debris or build-up accumulated on the faceplate or lens periodically. Failure to do so could result in reduction in performance, fixture overheating, or fire.

- 9. Do not install within 10 feet of a pool, spa, or fountain.
- 10. Have installed in accordance with all applicable installation codes and standards by a person familiar with the construction, operation, and hazards involved. Consult a qualified electrician to ensure correct branch circuit conductor.
- 11. Use only cable rated for low voltage. Cable buried more than 6" must be suitable for direct burial. Direct burial cable may be ordered from Vision3 Lighting.
- 12. Lens temperatures can get hot enough, with some lamps, to cause injury when touched.
- Failure to follow these instructions can cause fire, injury, and/or void warranty.

#### Notes:

- This fixture requires a remote transformer.
- LED models should only be powered by a magnetic transformer or Vision3 Lighting approved electronic transformer. Contact Vision3 Lighting for further information.
- 10W LED module requires up to 13W at startup. 12.5W LED module requires up to 15W at startup. This must be allowed for when designing system.
- 10W LED comes with a High/Low switch (10W/6.7W @ 12VAC). See 'LED Switching' instructions on next page. Switch will be set to 'High' setting at the factory, unless otherwise specified when ordered.
- 12.5W LED comes with a push button that allows for selection of 4 different outputs. See 'LED Switching' instructions on next page. Output will be set at factory to highest setting, unless otherwise specified when ordered.
- LED ratings subject to change without notice. See website or contact V3 for most current info.

#### Unpack:

- 1. Unpack the fixture from it's box.
- Check through all packaging material to make sure there aren't any items hidden in it before discarding.
- 3. Remove the Faceplate Screws (4X) and remove the Faceplate/Cap and Body assembly from the Housing (if shipped assembled).

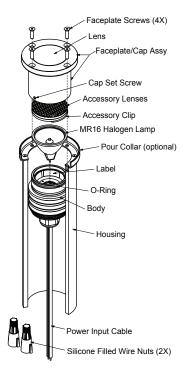
#### Inspection:

- Referring to the sketch at right, along with the packing list and order, check
  that all components are accounted for. Contact Vision3 lighting immediately
  if any discrepancies are found. Note: depending on the options and accessories ordered, certain components may not be included.
- 2. Inspect all parts for shipping damage, such as: broken lenses, broken lamps, cut or nicked cable, damage to the cable connector on the Body, cut O-ring, etc. If any damage is found, do not install fixture. Contact Vision3 lighting so that damaged items can be repaired or replaced.
- Cover and store all parts in a clean, dry, and safe place until it is time for installation. Note: Plastic bags are handy for keeping parts organized and clean during storage.

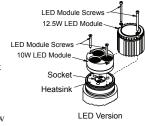
#### **Housing Installation:**

- Before beginning Housing installation, examine Housing to ensure that there is no damage, visible defects, or missing parts. Contact Vision3 lighting if any issues are found.
- 2. Dig an appropriately sized hole for the Housing and trench for direct burial power cable.
- Run power supply cable (not supplied) in the trench to the hole in accordance with all applicable installation codes and standards.
- 4. Feed the power supply cable thru the bottom of the Housing. Note: Feed enough thru so that there will be at least 12" of excess cable past the top of the Housing when installed in the hole.

- 5. Place the Housing in the hole so that it is at the desired elevation. If using with the Pour Collar option, the housing should be placed such that the top of the Pour Collar is flush or above grade level. If not using the optional Pour Collar, the Housing should be placed such that the top of the Housing is at least 1/8" above grade level. Note: If there is to be ground cover (such as rock, bark, or low growing plants) used around the fixture, allow for that during installation and raise the installed height accordingly. Caution!: The fixture gets hot when operated and should not be installed so that it is in contact with combustible materials!
- 6. Coil any excess power supply cable in to the Housing.
- Stuff a rag in to the top of the Housing to keep dirt/concrete from entering the Housing and threaded holes during the rest of installation. Alternatively, a cover can be fashioned from wood or cardboard.
- 8. Fill in around the Housing: <u>Landscape Install</u>
  - a. Begin filling in the hole around the Housing with soil in 1" to 2" increments, compacting as you go. Note: If the local soil conditions prevent proper drainage, such as with clay, it is recommended that sand or a loose soil/peat gravel mixture be used to backfill the hole. It may also be required to dig a deeper hole to allow for thorough drainage around fixture.
  - b. Continue filling around the Housing, compacting as you go. Be careful to not damage the power cable when compacting. Fill up to the desired level. Note: The Housing should never be placed such that the top of the Faceplate is below grade level or in an area where there is the



Note: Label on LED version may be on inside of each cap.

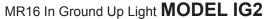


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VISIO

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# **Installation Instructions**

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- possibility of being covered by water. The landscape contour should be such that water flows away from the fixture.
- c. Fill in the trenches and cover the power supply cable.
- d. Install appropriate ground cover, if being used.

#### Concrete Install

- a. Slightly back fill a few inches of dirt around the housing to hold it in place.
- b. Fill in the trenches and cover the power supply cable.
- Pour concrete around the Housing, up to the top of the Pour Collar. Do not allow any concrete to enter the Housing or screw holes. Reinforcing rods must be used in the concrete to prevent cracking of the concrete from the heat of the fixture. Note: The Housing should never be placed such that the top of the Faceplate is below grade level or in an area where there is the possibility of being covered by water. The concrete should be contoured such that water flows away from the
- 9. Remove the rag from the Housing. Clean the threaded holes and top of the Housing. Note: A can of compressed air (such as used for cleaning computers) is handy for blowing out threaded holes.
- 10. Cut and strip the power supply cable and Power Input Cable. Note: Cut such that, after cables are wired together, there is enough slack to pull the Body in and out of the Housing for maintenance, but don't leave so long that it is difficult to coil the cables into the Housing.
- 11. Attach the power supply cable to the Power Input Cable using the supplied Silicone Filled Wire Nuts (2X). Note the wattage of the lamps being used and make sure the power supply is properly sized and delivers the proper voltage
- 12. Install the Lamp and Accessory Lenses as described below, if not already installed.
- 13. Slide the Faceplate/Cap and Body assembly in to the Housing. Note: Coil the cables at the bottom of the Housing to keep them from kinking.
- 14. Bolt the Faceplate to the Housing using the Faceplate Screws (4X) Note: Apply a small dab of anti-seize to each screw (not supplied) to keep screws from seizing over time.

#### **Lamp/LED Module Maintenance:**

- 1. Remove power from fixture and let cool before touching. Caution! Fixture may still be hot!
- 2. Loosen and remove the Faceplate Screws (4X). Note: Thoroughly clean any dirt and debris from the hex in each screw before attempting to loosen. Failure to do so will cause the screw heads to strip.
- 3. Pull the Faceplate/Cap and Body assembly out of the Housing.
- 4. Loosen the Cap Set Screw using a 3/32" hex tool do not remove screw!
- 5. Remove the Faceplate/Cap Assembly. Holding the Body and twisting while removing reduces the risk of damaging the O-ring.
- 6. Inspect O-ring for damage. Replace if necessary.
- Replace lamp/LED.

### For MR16 Halogen Lamp:

- a. Pull lamp straight out. Caution! Lamp may still be hot! Be sure lamp has cooled before touching.
- b. Inspect socket for any damage.
- c. Clean inside of fixture and Cap with a clean dry cloth.
- d. Push new lamp straight in, being careful to align pins. Note: Replacement lamp must not exceed ratings on Label.

#### For LED Module:

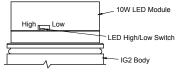
- a. Loosen and remove the LED Module Screws.
- b. Pull LED straight out. Do not twist or the pins will break off in the socket. Caution! LED may still be hot! Be sure LED has cooled before touching.
- c. Clean the grease off of the Heatsink top surface using a rag dipped in
- d. Inspect the socket for any damage.

- e. If the replacement LED Module does not come with a thermal transfer pad on the base, apply a thin layer of thermal grease (not supplied) to the surface of the Heatsink that will contact the bottom of the LED Module.
- f. Align the pins on the LED Module with the socket and push straight in. Do not twist or push in at an angle or the pins may be damaged.
- g. Install and tighten the LED Module Screws. Caution! Over tightening of screws could crack the LED Module case.
- 8. Install Faceplate/Cap Assembly on to Body by pushing and twisting slowly. If O-ring is excessively dry, use a small amount of Krytox lubricant.
- 9. Tighten Cap Set Screw with the 3/32" hex tool so that is just bottoms out. Do not over tighten the Cap Set Screw! This may cause the fixture to not seal properly.
- 10. Clean the threaded holes and top of the Housing. Note: A can of compressed air (such as used for cleaning computers is handy for blowing out threaded
- 11. Slide the Faceplate/Cap and Body assembly in to the Housing. Note: Coil the cables at the bottom of the Housing ti keep them from kinking.
- 12. Bolt the Faceplate to the Housing using the Faceplate Screws (4X) Note: Apply a small dab of anti-seize to each screw (not supplied) to keep screws from seizing over time.

#### **LED Switching (on certain models):**

#### 10W LED Module:

1. Remove cap as explained in Lamp Maintenance steps 1 thru



- 2. Inspect for damage. Replace any damaged parts, if necessary.
- Clean inside of fixture and Cap with a clean, damp cotton cloth.
- Find LED High/Low Switch on side of LED Module.
- Using a pin, small nail, etc, flip the switch in the desired direction. See the LED Module Switch sketch for which direction corresponds to which
- Install cap as explained in Lamp Maintenance steps 8 thru 12 above.

#### 12.5W LED Module:

- 1. Remove cap as explained in Lamp Maintenance steps 1 thru 6 above.
- Inspect for damage. Replace any damaged parts, if necessary.
- Clean inside of fixture and Cap with a clean, damp cotton cloth.
- With fixture powered up, push the Output Button with your finger to cycle thru the different output levels until you reach the desired output.
- Install cap as explained in Lamp Maintenance steps 8 thru 12 above.

## **Accessory Maintenance:**

- 1. Remove Faceplate/Cap and Body assembly as explained in Lamp Maintenance steps 1 thru 6 above.
- Remove Accessory Clip from Faceplate/Cap Assembly.
- 3. Carefully remove Accessories, if any.
- 4. Inspect Faceplate/Cap, Accessories, and Clip for damage. Replace if
- 5. Clean Faceplate/Cap and Accessories with a clean, damp cotton cloth.
- 6. Carefully install new Accessories into Faceplate/Cap.
- Compress Clip and push into Faceplate/Cap until it holds Accessories
- 8. Install Faceplate/Cap and Body assembly as explained in Lamp Maintenance steps 8 thru 12 above.

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12.5W LED Module

IG2 Body