

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.)

1. Do not touch 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. Do not touch hot lens, faceplate, cover, or body.
4. Keep lamp away from materials that may burn.
5. 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.
7. Do not disassemble beyond cover/faceplate and cap removal to facilitate lamp and/or accessory installation or replacement.
8. Remove any debris accumulated in the cap periodically.
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.
11. Use only cable properly rated for the application. **NOTE: Supply conductors in box must be rated for at least 105°C when using an MR16 halogen lamp, and at least 90°C when using the Vision3 LED options.**

Notes:

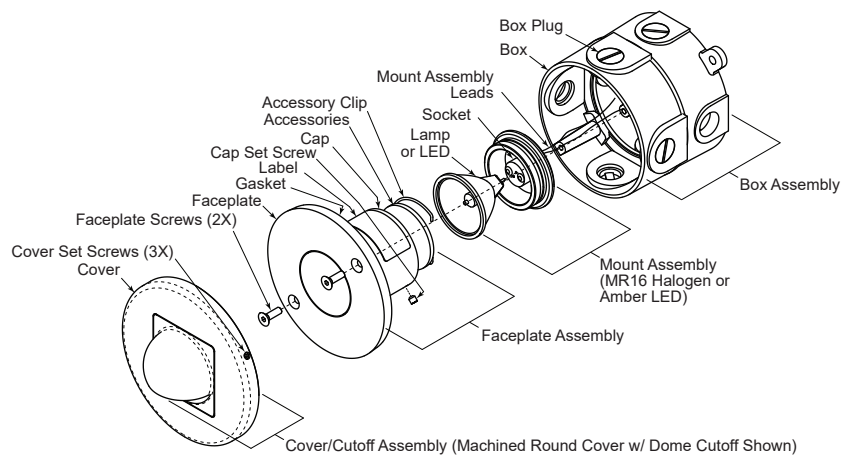
- This fixture should not be mounted in such a way that it is buried or in direct contact with the ground or soil.
- Back end of fixture (behind faceplate) and wiring connections must not be exposed to moisture/water. All mounting, conduit, and wiring must be done in a water tight manner. Failure to do so could result in moisture/water related failure.
- This fixture requires a remote transformer.
- LED & COB LED models should only be powered and controlled by compatible transformers and control systems. Contact Vision3 Lighting for approved transformer / controls list. Using non-approved transformers / controls could cause the LED to not operate properly or fail.
- (For Integral LED option only) Integral LED options come with a High/Low switch. See 'LED Switching' instructions on next page. Switch will be set to 'High' setting at the factory, unless otherwise specified when ordered.
- (For Retrofit LED option only) Use only Vision3 approved Retrofit MR16 LED options and supplied Heatsink Mount, otherwise LED may overheat and fail.
- (For Amber LED option only) Amber retrofit LED option must follow LED manufacture and wildlife certification program installation & configuration requirements.
- (For COB LED w/ Driver option only) COB LED w/ Driver system design should allow an additional 2W per fixture (6W for LE2-0400 & 10W for LE2-0700 or LE2-1000), to reduce system stress during start up.
- LED ratings subject to change without notice. See website or contact V3 for most current info.

Caution! Fixture will be hot if lamp is on. Remove power and allow fixture to cool before performing any adjustments or maintenance.

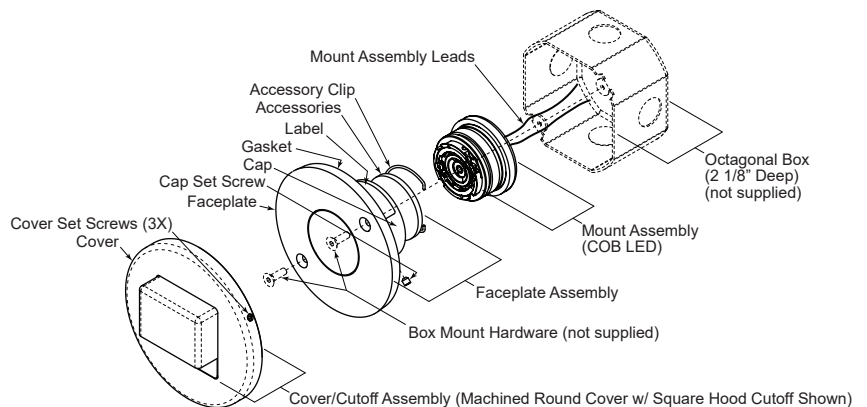
Installation for Cast Box (CB) Mount Options:

1. Unpack the PA5 Step Light from its shipping container.
2. Check to make sure that there are no damaged or missing components
3. Loosen, but do not remove, the Cover Set Screws (3X) with a 3/32" hex tool and remove the Cover / Cutoff Assembly from the Faceplate.
4. Loosen the Faceplate Screws (2X) with a 1/8" Hex tool and remove the Faceplate Assembly from the Box Assembly. Note: The Mount Assembly will be attached to the Faceplate Assembly.
5. Mount the Box Assembly in the wall, per applicable building codes, so that the front face of the box is flush with the outer wall surface. Note: This fixture is not intended for use with combustible surfaces or thermal insulation contact when using the MR16 Halogen lamp option.
6. Run conduit and appropriate power supply cable (not supplied) to the Box Assembly, per applicable codes and standards. Note: Supply conductors in box must be rated for at least 105°C when using the MR16 Halogen lamp option, and 90°C when using the LED lamp options.
7. Connect the Mount Assembly Leads to the power supply cable using the appropriate connectors (not included) per applicable codes. Note: Be sure that

For Cast Box (CB) Mount Options



For Octagonal Box (OB) Mount Options (Integral LED & COB LED only)



the power being supplied matches the rating on the fixture Label.

8. Insert the Faceplate Assembly in to the Box Assembly until the Faceplate meets the wall and the Gasket on the back of the Faceplate is uniformly compressed. Note: Make sure the wiring is not kinked or pinched in any way.
9. Use the Faceplate Screws (2X) to attach the Faceplate Assembly to the Box Assembly. Note: Make sure the gasket is not pinched. For rough surfaces, use silicone on the back of the Box Gasket to make sure it seals against the wall.
10. Place the Cover/Cutoff Assembly over the Faceplate and properly orient. For some options, the Cover and Cutoff will be two separate parts. Make sure the Cutoff fits properly into the recessed groove in the Cover before installing. Note: Cover Assembly should not be installed in an orientation that allows any eyelids or hoods to fill with water or debris.

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11. Gently tighten each Cover Set Screw against the side of the Faceplate. Note: Make sure that the Cover/Cutoff Assembly is tightened onto the Faceplate with all three Cover Set Screws; otherwise, it may loosen.

Installation for Octagonal Box (OB) Mount Options:

The Octagonal Box (OB) mounting option is for mounting the PA5 step light in an industry standard sheet metal octagonal outlet box (not supplied). Due to the size of the Mount Assembly, a 2 1/8" deep octagonal outlet box must be used (not supplied). This box should be mounted in the wall, per applicable building codes and standard practices, so that the front face of the box is flush with the outer wall surface. Appropriate conduit and power supply cable (neither are supplied) should be ran to the box, per applicable codes and standards. Note: Supply conductors and wiring connectors (neither are supplied) must be rated for at least 90°C. After installation of box / conduit / wire (not supplied), install PA5 as follows:

1. Unpack the PA5 Step Light from its shipping container.
2. Check to make sure that there are no damaged or missing components
3. Loosen, but do not remove, the Cover Set Screws (3X) with a 3/32" hex tool and remove the Cover / Cutoff Assembly from the Faceplate.
4. Connect the Mount Assembly Leads to the power supply cable using the appropriate connectors (not included) per applicable codes. Note: Be sure that the power being supplied matches the rating on the fixture Label.
5. Insert the Faceplate Assembly into the Octagonal Box until the Faceplate meets the wall and the Gasket on the back of the Faceplate is uniformly compressed. Note: Make sure the wiring is not kinked or pinched in any way.
6. Use appropriate Box Mount Hardware (not supplied) to attach the Faceplate Assembly to the Octagonal Box. Make sure the Gasket is not pinched. For rough surfaces, use silicone on the back of the Box Gasket to make sure it seals against the wall. Note: Box Mount Hardware is not supplied as it may vary depending on box installed. The counter-sunk holes on the Faceplate will work with #8 or #10 flat head screws. Use proper size, thread, and length to match box used. Stainless steel should be used to prevent corrosion issues.
7. Place the Cover/Cutoff Assembly over the Faceplate and properly orient. For some options, the Cover and Cutoff will be two separate parts. Make sure the Cutoff fits properly into the recessed groove in the Cover before installing. Note: Cover Assembly should not be installed in an orientation that allows any eyelids or hoods to fill with water or debris.
8. Gently tighten each Cover Set Screw against the side of the Faceplate. Note: Make sure that the Cover/Cutoff Assembly is tightened onto the Faceplate with all three Cover Set Screws; otherwise, it may loosen.

Maintenance Disassembly / Reassembly Instructions:

Disassembly:

1. Remove power from fixture and let cool before touching. **Caution! Fixture may still be hot!**
2. Loosen, but do not remove, the Cover Set Screws (3X) and remove the Cover. 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. Loosen the Faceplate Screws / Box Mount Hardware and remove the Faceplate Assembly from the Box. Note: Be careful with the Mount Assembly leads when removing.
4. Loosen the Cap Set Screw using a 3/32" hex tool – do not remove screw!
5. Remove the Mount Assembly from the Faceplate Assembly. Holding the Mount Assembly and twisting while removing reduces the risk of damaging the O-ring, if included.

Reassembly:

1. Install Faceplate Assembly onto Mount Assembly by pushing and twisting slowly. If O-ring is excessively dry, use a small amount of

Krytox lubricant. Note: Not all options have an O-ring.

2. Tighten Cap Set Screw with the 3/32" hex tool so that it just bottoms out.
3. Insert the Faceplate Assembly into the Box Assembly. Note: Make sure the wiring is not kinked or pinched in any way.
4. Use the Faceplate Screws / Box Mount Hardware to attach the Faceplate Assembly to the Box.
5. Slide the Cover over the Faceplate as far as it will go, and properly orient. Note: Eyelid should not be pointed up as it will fill with water and debris.
6. Gently tighten each Cover Set Screw against Faceplate. Note: Make sure that the Cover/Cutoff Assembly is tightened onto the Faceplate with all three Cover Set Screws; otherwise, it may loosen.

Accessory Maintenance:

1. Disassemble as explained in the Disassembly section of the Maintenance Disassembly / Reassembly Instructions.
2. Remove Accessory Clip from Cap.
3. Carefully remove Accessories from Cap, if any.
4. Inspect Cap, Accessories, and Clip for damage. Replace if necessary.
5. Clean Cap and Accessories with a clean, damp cotton cloth.
6. Carefully install new Accessories into Cap.
7. Compress Clip and push into Cap until it holds Accessories tightly in Cap.
8. Reassemble as explained in the Reassembly section of the Maintenance Disassembly / Reassembly Instructions.

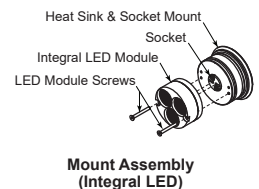
MR16 Halogen Lamp & Amber LED Maintenance:

1. Disassemble as explained in the Disassembly section of the Maintenance Disassembly / Reassembly Instructions.
2. Pull lamp/LED straight out. **Caution! Lamp/LED may still be hot! Be sure lamp has cooled before touching.**
3. Inspect socket for any damage.
4. Clean inside of fixture and Cap with a clean dry cloth.
5. Push new lamp/LED straight in, being careful to align pins. **Note:** Replacement lamp/LED must not exceed ratings on Label.
6. Reassemble as explained in the Reassembly section of the Maintenance Disassembly / Reassembly Instructions.

Integral LED Module Maintenance:

Integral LED Module Replacement:

1. Disassemble as explained in the Disassembly section of the Maintenance Disassembly / Reassembly Instructions.
2. Loosen and remove the LED Module Screws.
3. 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.**
4. Clean the grease off of the Heatsink top surface using a rag dipped in alcohol.
5. Inspect the socket for any damage.
6. (CB option only) Inspect O-ring for damage. Replace if necessary.
7. 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.
8. 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.
9. Install and tighten the LED Module Screws. **Caution!** Over tightening of screws could crack the LED Module case.
10. Reassemble as explained in the Reassembly section of the Maintenance Disassembly / Reassembly Instructions.



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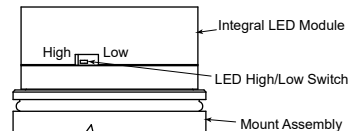
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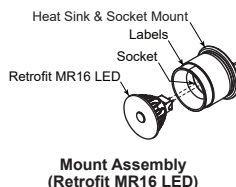
Integral LED Output Switching:

- Disassemble as explained in the Disassembly section of the Maintenance Disassembly / Reassembly Instructions.
- Inspect for damage. Replace any damaged parts, if necessary.
- Clean inside of fixture & Cap with a clean, damp cotton cloth.
- Find LED High/Low Switch on side of Integral 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 setting.
- Reassemble as explained in the Reassembly section of the Maintenance Disassembly / Reassembly Instructions.



Retrofit MR16 LED Maintenance:

- Disassemble as explained in the Disassembly section of the Maintenance Disassembly / Reassembly Instructions.
- Pull lamp straight out. **Caution! Lamp may still be hot! Be sure lamp has cooled before touching.**
- Inspect socket for any damage.
- Clean inside of fixture and Cap with a clean dry cloth.
- Push new lamp straight in, being careful to align pins. Make sure Retrofit MR16 Lamp fully contacts Heatsink Mount, otherwise lamp may overheat and fail prematurely. **Note:** Replacement lamp must not exceed ratings on Label. Only use Vision3 approved Retrofit MR16 Lamp and supplied Heatsink Mount, otherwise LED may overheat and fail.
- Reassemble as explained in the Reassembly section of the Maintenance Disassembly / Reassembly Instructions.



COB LED & Driver Maintenance:

Changing Optics (CB option only):

- Disassemble as explained in the Disassembly section of the Maintenance Disassembly / Reassembly Instructions.
- Twist Reflector counter-clockwise to unlock and remove.
- Inspect Mount Assembly O-ring for any damage, replace if necessary.
- Insert new Reflector and twist clockwise to lock.
- Reassemble as explained in the Reassembly section of the Maintenance Disassembly / Reassembly Instructions.

Changing COB Chip:

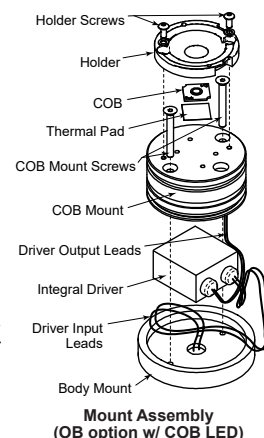
- Disassemble as explained in the Disassembly section of the Maintenance Disassembly / Reassembly Instructions.
- (CB option only) Twist Reflector counter-clockwise to unlock and remove.
- Loosen and remove the two Holder Screws, the Reflector Adapter (CB option only), and the Holder. Note: Twist Holder to facilitate COB removal.
- Note the orientation of the COB. Compress the Holder clip and carefully remove the COB chip.
- Thoroughly clean the COB Mount with a lint free towel. Note: Make sure the old Thermal Pad and any residue are removed from the COB Mount.
- Place the new COB up against the Holder clip in the same orientation as the removed COB. Ensure that the polarity marks on the Holder match the polarity marks on the COB. Slowly press on the opposite side of COB to compress the Holder clip until the COB drops into the recess. Note: Only touch the edges of the COB as oils and dirt from your skin can damage the diodes.
- Remove clear plastic film from supplied Thermal Pad, and, using light pressure, apply to back of the new COB chip. Make sure pad is square and fully covers the back of the COB. Remove secondary clear plastic

film from the exposed side of the Thermal Pad.

- Place the Holder and Reflector Adapter (CB option only) on the COB Mount in the same orientation as it was removed.
- Install and tighten the two Holder Screws. Do not overtighten.
- (CB option only) Inspect Mount Assembly O-ring for any damage, replace if necessary.
- (CB option only) Insert Reflector and twist clockwise to lock.
- Reassemble as explained in the Reassembly section of the Maintenance Disassembly / Reassembly Instructions.

Changing COB LED Integral Driver:

- Disassemble as explained in the Disassembly section of the Maintenance Disassembly / Reassembly Instructions.
- (CB option only) Twist Reflector counter-clockwise to unlock and remove.
- Lightly pull and twist Driver Output Leads (red & blue) until they are removed from the Holder. Note lead position.
- Loosen and remove the two Holder Screws, the Reflector Adapter (CB option only), and the Holder. Note: Twist Holder to facilitate COB removal.
- Loosen and remove the two COB Mount Screws.
- Note the orientation of the COB Mount. Remove the COB Mount by slowly pulling it off the Body Mount.
- Note positioning and routing of Integral Driver wires. Remove Integral Driver from COB Mount.
- (CB option only) Lightly pull and twist Driver Input Leads (black) to remove from Connector.
- (CB option only) Inspect O-rings for any damage, replace if necessary.
- (CB option only) Install new Integral Driver by inserting input leads (black) into Connector. Route Integral Driver leads similarly as the removed Integral Driver.
- (OB option only) Route Integral Driver input leads (black) thru Body Mount wireway.



- Route the Driver Output Leads (red & blue) through the COB Mount and then seat the Integral Driver in the COB Mount.
- Install COB Mount onto the Body Mount in the same orientation as it was removed.
- Install and tighten the two COB Mount Screws. **Caution! Do not pinch leads!**
- Place the Holder with COB and Reflector Adapter (CB option only) on the COB Mount in the same orientation as it was removed. Note: If COB chip needs to be replaced also, do that now, as explained above.
- Install and evenly tighten the two Holder Screws. Do not overtighten.
- Install Driver Output Leads into the Holder (red to '+' & blue to '-'). Excess wire can be pushed into COB Mount.
- (CB option only) Insert Reflector and twist clockwise to lock.
- Reassemble as explained in the Reassembly section of the Maintenance Disassembly / Reassembly Instructions.

