Installation Guide

LED Lighting Fixture

SAVE THESE INSTRUCTIONS



BEFORE YOU BEGIN Read and follow all safety instructions

RISK OF FIRE, EXPLOSION AND ELECTRIC SHOCK

- This product should be installed, inspected, and maintained by a <u>qualified electrician only</u>, in accordance with the NEC (National Electric Code) and all local codes.
- Turn off electrical power before inspection, installation or removal.
- Use only UL (or other NTRL) approved wire for input/output connections. Minimum size 18 AWG or 14 AWG for continuous runs.
- Make sure LEDs and drivers are cool to touch when performing maintenance. Make sure the supply voltage is the same as the rated voltage of the luminaire.
- Do not install in a hazardous atmosphere, except where the ambient temperature does not exceed the rated operating temperature of the fixture.
- Keep tightly closed when in operation



Prepare Electrical Wiring



Electrical Requirements

• The LED driver must be supplied with the voltage specified on the product label and connected to an individual, properly grounded branch circuit protected by a 20 Ampere circuit breaker. Use min. 75°C supply.



Grounding Instructions

• The grounding and bonding of the overall system shall be done in accordance with NEC Article 600 and local codes

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CAUTION:

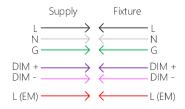
Ensure the branch supply power is shut off at the breaker panel before continuing with the installation.

- Ensure there is no visible damage to the fixture housing, accessories or electrical wires.
- Refer to the Assembly section for labeled callouts of main components.
- Refer to the Accessory section for the components included with your specific mounting kit.
- Refer to the *Mount Spacing* section for specific spacing dimensions. Be sure all measurements are precise for an easy installation. Determine and clearly mark all mounting locations prior to starting the installation.
- All fixtures are pre-wired for input power on one side of the fixture. This side is labeled "AC Input", and will be referred to as **Side A** of the fixture throughout this document. The other end of the fixture will be referred to as **Side B**.
- This installation <u>requires a minimum</u> of two (2) people to reduce risk of injury and/or damage to the fixture(s). Continuous runs longer than 8' or greater than two (2) fixtures <u>requires a minimum</u> of three (3) people.

Single Fixture: Hard Ceiling Mount

- 1. Pull the End Caps off of the fixture. [Figure 1]
- 2. Carefully pull the available length of **Driver Harness** wires out of Side A. [Figure 2]
- 3. Remove the **Cable Plug** and insert the **Power Cable**, feeding the quick disconnects through the hole. [Figure 3]
- 4. Snap the **Strain Relief Bushing** of the Power Cable into the hole.
- 5. Mate the Driver Harness, Power Cable, and **Starter Harness** connectors. Push the connectors and extra lengths of wire back into the fixture.

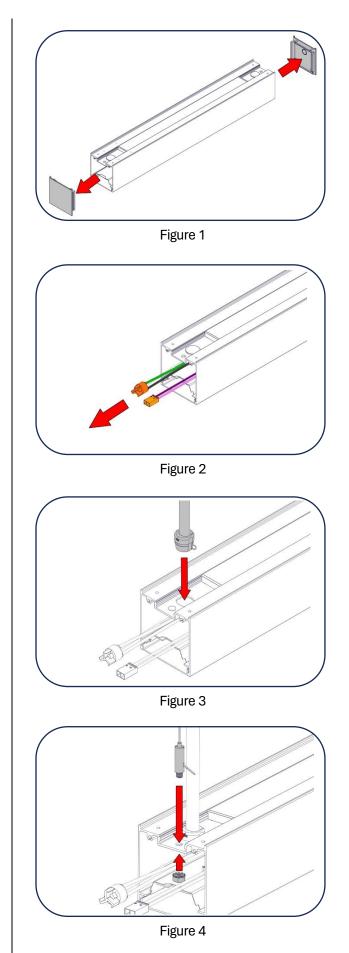
<u>Note</u>: For fixtures with emergency backup, mate the single wire connector from the fixture to the Power Cable connector.



- 6. Remove the small rubber plug at each end of the fixture and install the **Mounting Cables**. Secure with the ¼" lock nuts and replace the End Caps. [Figure 4]
- 7. Remove the **Threaded Insert** from the Mounting Cable attached to Side A and pull the **Aircraft Cable** through the center hole of **Canopy A.** [Figure 5]
- Assemble the Mounting Bracket and Aircraft Cable Grip with the Threaded Insert removed in the previous step. Secure the end of the Aircraft Cable with the Aircraft Cable Grip. [Figure 6]
- 9. Feed the Power Cable through the grommeted hole of Canopy A.
- 10. Drill a hole at the mounting point marked for Side B. A 13/16" drill bit is recommended.

<u>Note</u>: Refer to the *Mount Spacing* section to determine the proper location for this hole.

- 11. Remove the **Threaded Insert** from the Mounting Cable attached to Side B.
- 12. Install the Toggle Bolt Assembly with the other Threaded Insert removed in the previous step. [Figure 7]
- 13. Lift the fixture and mount Side A. Secure the Mounting Bracket to the junction box using the provided screws or screws suitable for the junction box. [Figure 8]



14. Mount Side B by securing **Canopy B** to the pre-installed Threaded Insert with the Threaded Base of the Cable Support.



Do not let the fixture freely hang until both Cable Supports are completely installed and secure.

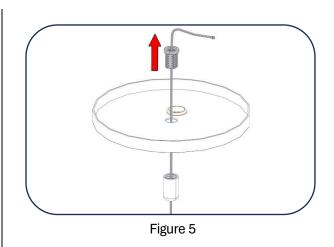
15. Adjust the Aircraft Cables as needed to the desired fixture height and use a level to find the "true horizontal".

Note: Refer to the Adjustments section for further detail.

16. Place Canopy A against the ceiling and push the cable slack into the junction box. Mark the cable where is meets the bottom of the canopy. Install the **Cable Clamp** above the canopy and approximately ¼" above the mark to eliminate slack on the Power Cable.

<u>Note</u>: Depending on the length of fixture suspension, the Power Cable may need to cut and stripped to avoid overfilling the junction box.

- 17. Make the wire connections to the building wiring using the included wire nuts.
- 18. Push the wire connections into the junction box and secure Canopy A to the ceiling with the Threaded Base of the Mounting Cable.
- 19. Restore branch supply power and ensure the fixture functions properly. If the fixture does not turn on or function properly, shut off the branch supply power and check all electrical connections.



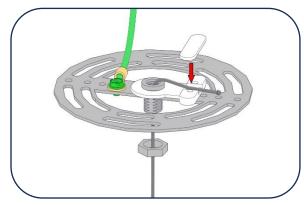
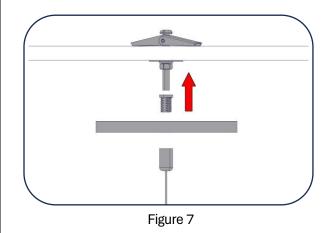
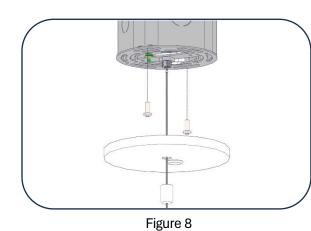


Figure 6

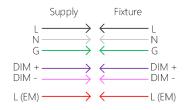




Single Fixture: Drop Ceiling Mount

- 1. Pull the End Caps off of the fixture. [Figure 1]
- 2. Carefully pull the available length of **Driver Harness** wires out of Side A. [Figure 2]
- 3. Remove the **Cable Plug** and insert the **Power Cable**, feeding the quick disconnects through the hole. [Figure 3]
- 4. Snap the **Strain Relief Bushing** of the Power Cable into the hole.
- 5. Mate the Driver Harness, Power Cable, and **Starter Harness** connectors. Push the connectors and extra lengths of wire back into the fixture.

<u>Note</u>: For fixtures with emergency backup, mate the single wire connector from the fixture to the Power Cable connector.



- 6. Remove the small rubber plug at each end of the fixture and install the Mounting Cables. Secure with the ¼" lock nuts and replace the End Caps. [Figure 4]
- 7. Install the **Ceiling Hangers** at the pre-determined locations on the ceiling grid. [Figure 5]

<u>Note</u>: One of the Ceiling Hangers must be installed near a junction box for wiring Side A.

<u>Note</u>: Refer to the *Mount Spacing* section to determine the proper distance between each hanger.

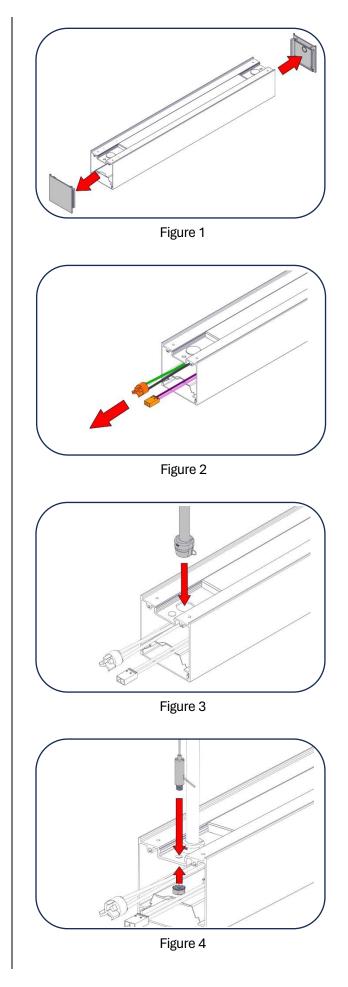
- 8. Fit Canopy A over the over the exposed thread of the Ceiling Hanger installed for Side A and mark the ceiling tile where the Power Cable will pass through. [Figure 6]
- 9. Set aside Canopy A and remove the marked ceiling tile. At the mark, make a 1" hole and replace the ceiling tile.
- 10. Lift the fixture and fit each canopy over the exposed thread of the hangers. Secure the canopies to the hangers with the Threaded Adaptors of the Mounting Cables. [Figure 7]

Note: Side A should be mounted using Canopy A. Canopy A should be oriented so the Power Cable can pass through both the grommeted hole of the canopy and ceiling tile that was modified in the previous step.

Note: Side B should be mounted using Canopy B.



Do not let the fixture freely hang until both Mounting Cables are completely installed and secure.



11. Adjust the Aircraft Cables as needed to the desired fixture height and use a level to find the "true horizontal".

Note: Refer to the Adjustments section for further detail.

- 12. Remove the ceiling tile adjacent to the one modified in step 8 for access to the junction box.
- 13. Pull the Power Cable through the grommeted hole of Canopy A and into the ceiling.
- 14. Install the **Cable Clamp** approximately ¼" above Canopy A and the ceiling tile to eliminate slack on the Power Cable.
- 15. Make the wire connections to the building wiring using the included wire nuts.
- 16. Replace the ceiling tile removed in step 11.
- 17. Restore branch supply power and ensure the fixture functions properly. If the fixture does not turn on or function properly, shut off the branch supply power and check all electrical connections.

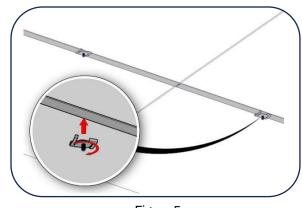


Figure 5

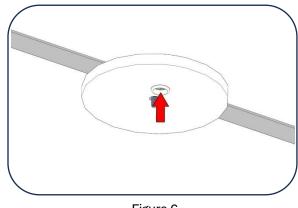
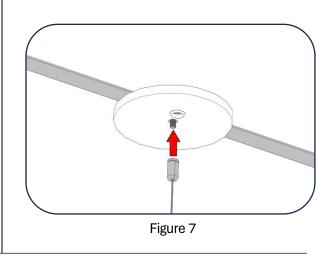


Figure 6



Single Fixture: Stem Mount

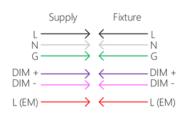
- 1. Determine the location of the supply power drop. A recessed junction box with the incoming power feed must be installed here.
- 2. Determine the second mounting point. It can be a junction box or a location directly on the ceiling.

<u>Note</u>: Refer to the *Mount Spacing* section for specific spacing dimensions.

- 3. Begin assembling a ceiling mount using a **Mounting Bracket**, **Stem Holder**, and ½" lock nut. [Figure 1]
- 4. Feed the **Power Cable** through a **Stem**. The Stem should be oriented so that the quick disconnects of the Power Cable exit the male threading. [Figure 2]
- 5. Install additional Stems by threading them together. If only using a single Stem, skip to the next step. [Figure 2]

Note: Feed the end of the Power Cable through each added Stem.

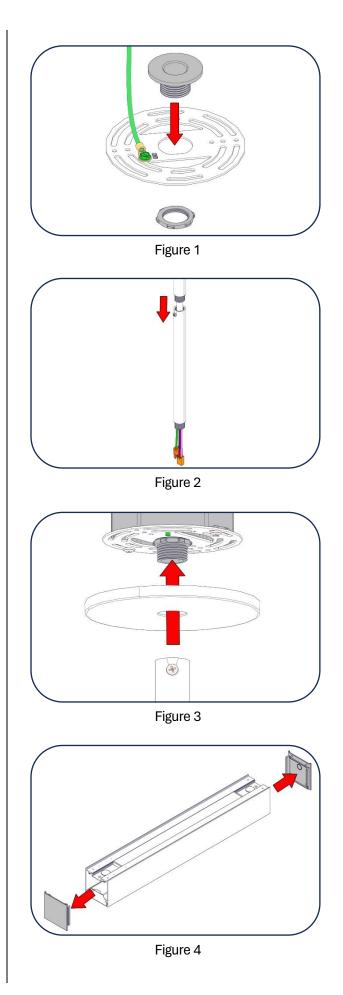
- 6. Feed the Power Cable through the center hole of a **Canopy C** and the ceiling mount assembly from step 3.
- 7. Make the wire connections to the building wiring using the included wire nuts. Push any extra length of wire into the junction box.



- 8. Use the **Cable Clamp** to reduce strain on the Power Cable, leaving at least 1 2 inches of the cable jacket above the clamp.
- 9. Install the assembled ceiling mount to the junction box using the provided screws or screws suitable for the junction box.

Note: Side A of the fixture will be installed to this mount.

- 10. Secure Canopy C to the ceiling mount with the Stem. [Figure 3]
- 11. Assemble the other Mounting Bracket, Stem Holder, and $\ensuremath{\mathscr{V}}\xspace^*$ lock nut.
- Install the assembled ceiling mount at the second mounting point and attach the other Canopy C to this ceiling mount. Use a Stem, equal in length to the first, to secure it.
- 13. Pull the End Caps off of the fixture. [Figure 4]

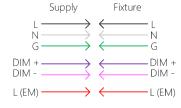


- 14. Carefully pull the available length of **Driver Harness** wires out. [Figure 5]
- 15. Raise the fixture and pass the threading of each Stem through the $\frac{1}{2}$ holes of the fixture.

<u>Note</u>: The Stem with the Power Cable must be mounted to Side A of the fixture. Feed each quick disconnect into the hole and pull them out of the exposed end of the fixture.

- 16. Secure the fixture to each Stem using the included 1/2" lock nuts. [Figure 6]
- 17. Mate the Driver Harness and Power Cable connectors. Push the connectors and extra lengths of wire back into the fixture.

<u>Note</u>: For fixtures with emergency backup, mate the single wire connectors.



- 18. Replace the End Caps.
- Restore branch supply power and ensure the fixture functions properly. If the fixture does not turn on or function properly, shut off the branch supply power and check all electrical connections.

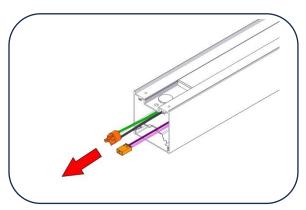


Figure 5

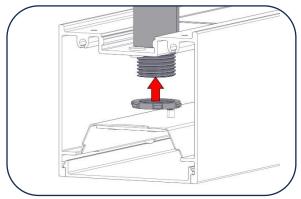


Figure 6

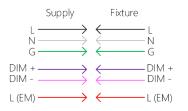
Single Fixture: Wall Mount

- 1. Determine the location of the supply power. A recessed junction box with the incoming power feed must be installed here.
- 2. For fixtures with two **Wall Mounts**, determine the second mounting point. It can be a junction box or a location directly on the wall.

<u>Note</u>: Refer to the Mount Spacing section for specific spacing dimensions.

<u>Note</u>: If the fixture has more than one Wall Mount, the mount with loose power/dimming wires must be installed to the junction box.

- 3. Remove the **Quick Mount Bracket(s)** by loosening the two set screws on the bottom of the Wall Mount(s). [Figure 1]
- Mount the Quick Mount Bracket(s) to the junction box (or mounting surface) using the provided screws or screws suitable for the junction box (or mounting surface). [Figure 2]
- 5. Check the bubble level to ensure the bracket(s) is (are) aligned to "true horizontal".
- 6. Raise the fixture to the mounting location and hook the Safety Cable(s) to the Quick Mount Bracket(s).
- 7. Make the wire connections to the building wiring using the included wire nuts. Push any extra length of wire into the junction box.



- 8. Hook the Wall Mount(s) onto the installed Quick Mount Bracket(s) making sure no wires are pinched.
- 9. Tighten the set screws on the bottom of the Wall Mount(s).
- Restore branch supply power and ensure the fixture functions properly. If the fixture does not turn on or function properly, shut off the branch supply power and check all electrical connections.

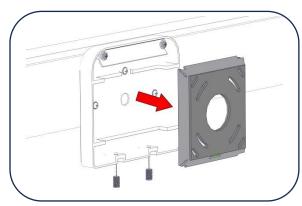


Figure 1

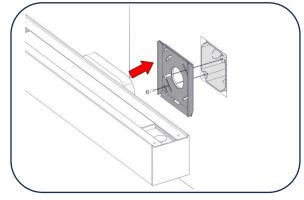
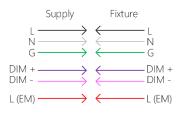


Figure 2

Continuous Run: Hard Ceiling Mount

- 1. Remove the **End Caps** and **Bottom Diffusers** from each fixture. [Figure 1]
- 2. Pull the available length of **Driver Harness** and **Extension Harness** wires out of each fixture. [Figure 2]
- 3. Determine which fixture will be the starter. This may be referenced in the provided shop drawing.
- 4. Remove the **Cable Plug** and insert the **Power Cable**, feeding the quick disconnects through the hole. [Figure 3]
- 5. Snap the **Strain Relief Bushing** of the Power Cable into the hole.
- 6. Mate the Driver Harness, Power Cable, and **Starter Harness** connectors. Push the connectors and extra lengths of wire back into the fixture.

<u>Note</u>: For fixtures with emergency backup, mate the single wire connector from the fixture to the Power Cable connector.



7. Arrange the fixtures (face down) according to the provided shop drawing.

<u>Note</u>: Side A (or B) of one fixture must always be joined with Side B (or A) of another.

Note: Refer to Corner Installation section for runs with corners.

- 8. Unpack the contents of the Hang Kit(s).
- 9. Insert a **Plastic Joiner** into the side(s) of the starter fixture, feeding the Harness Wires through the center. [Figure 4]
- 10. Mate the Harness wire connectors of the starter fixture to the connectors of the adjoining fixture(s) and tuck them into the housing. Push the fixtures together so the ends are flush, making sure no wires are pinched.
- 11. Assemble a **Mounting Cable** to a **Small Joiner Bracket** (or **Large Joiner Bracket** for **Control Boxes** installed in the middle of the run) and secure to the joining fixtures. [Figure 5]

<u>Note</u>: If installing a Control Box in the middle of the run, refer to the *Control Box Installation* section

12. Continue to insert Plastic Joiners and mate the connectors between each additional fixture in the run. Secure each joint with a Mounting Cable / Small (Large) Joiner Bracket assembly.

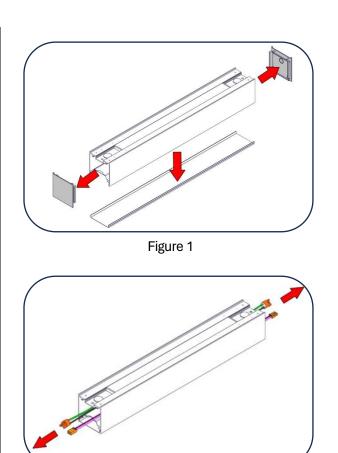


Figure 2

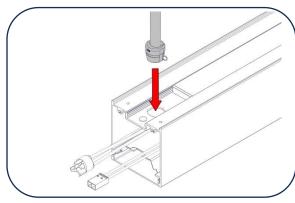
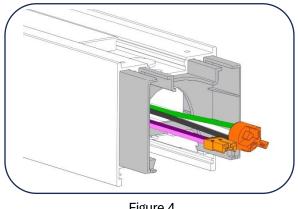


Figure 3



- 13. Flip the assembled run over so the bottom is accessible.
- 14. Install the **Center Support Brackets** using the provided thread-forming screws. [Figure 6]
- 15. Apply the included Tape over the joint, above the Center Support Brackets. Use Tape Tool to easily push the tape into the housing cavities. [Figure 7]
- 16. Reinstall the diffuser for each fixture. Make sure the ends of the diffuser are flush with the ends of the fixture.
- 17. Flip the assembled run over so the top is accessible.
- Remove the small rubber plug at each end of the fixture run and install the remaining **Mounting Cables**. Secure with the ¼" lock nuts and replace the End Caps at each end of the run. [Figure 8]
- 19. Remove and set aside the **Threaded Inserts** from each of the Mounting Cables.
- 20. Pull the **Aircraft Cable** attached to Side A of the starter fixture through the center hole of **Canopy A.** [Figure 9]
- 21. Assemble a **Mounting Bracket** and **Aircraft Cable Grip** with one of the Threaded Inserts removed in the step 19. Secure the end of the Aircraft Cable with the Aircraft Cable Grip. [Figure 10]
- 22. Feed the Power Cable through the grommeted hole of Canopy A.
- 23. Drill holes in the ceiling for each Hang Kit mounting point . A 13/16" drill bit is recommended.

<u>Note</u>: Refer to the *Mount Spacing* section to determine the proper location for these holes.

- 24. Install the Toggle Bolt Assemblies to the ceiling with the remaining Threaded Inserts removed in step 19. [Figure 11]
- 25. Lift the fixture and mount:
 - Secure the Mounting Bracket installed on the Mounting Cable attached to Side A of the starter fixture to the junction box using the provided screws or screws suitable for the junction box. [Figure 12]
 - Secure a Canopy B to each pre-installed Threaded Insert with the Threaded Base of the Cable Support for each additional mounting point. [Figure 11]



Do not let the fixture freely hang until both Mounting Cables are completely installed and secure.

26. Adjust the Aircraft Cables as needed to the desired fixture height and use a level to find the "true horizontal".

Note: Refer to the Adjustments section for further detail.

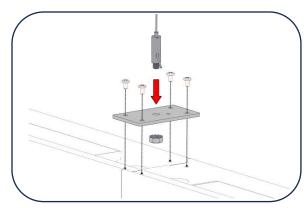


Figure 5

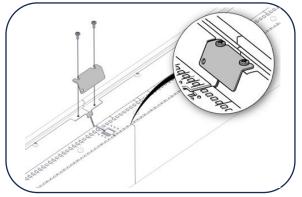


Figure 6

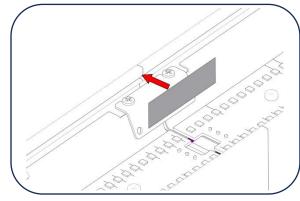
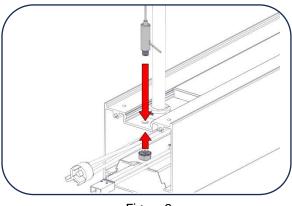


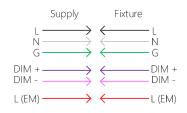
Figure 7



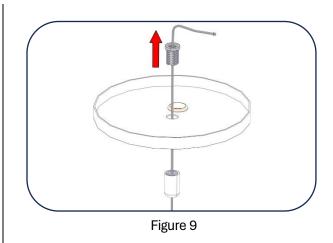
- 27. Place Canopy A against the ceiling and push the Power Cable slack into the junction box. Mark the Power Cable where it meets the bottom of the canopy.
- 28. Install the **Cable Clamp** above the canopy and approximately 1/4" above the mark to eliminate slack on the Power Cable.

<u>Note</u>: Depending on the length of fixture suspension, the Power Cable may need to cut and stripped to avoid overfilling the junction box.

29. Make the wire connections to the building wiring using the included wire nuts. Push any extra length of wire into the junction box.



- 30. Push the wires into the junction box and secure Canopy A with the Threaded Base of the Cable Support.
- 31. Restore branch supply power and ensure the fixture functions properly. If the fixture does not turn on or function properly, shut off the branch supply power and check all electrical connections.



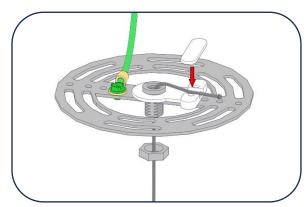


Figure 10

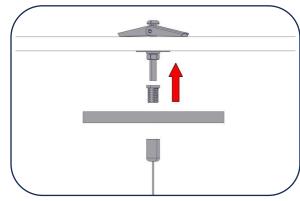
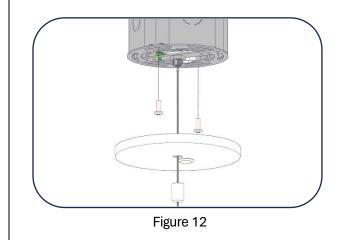


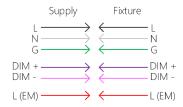
Figure 11



Continuous Run: Drop Ceiling Mount

- 1. Remove the **End Caps** and **Bottom Diffusers** from each fixture. [Figure 1]
- 2. Pull the available length of **Driver Harness** and **Extension Harness** wires out of each fixture. [Figure 2]
- 3. Remove the **Cable Plug** and insert the **Power Cable**, feeding the quick disconnects through the hole. [Figure 3]
- 4. Snap the **Strain Relief Bushing** of the Power Cable into the hole.
- 5. Mate the Driver Harness, Power Cable, and **Starter Harness** connectors for the starter fixture. Push the connectors and extra lengths of wire back into the fixture.

<u>Note</u>: For fixtures with emergency backup, mate the single wire connector from the fixture to the Power Cable connector.



6. Arrange the fixtures (face down) according to the provided shop drawing.

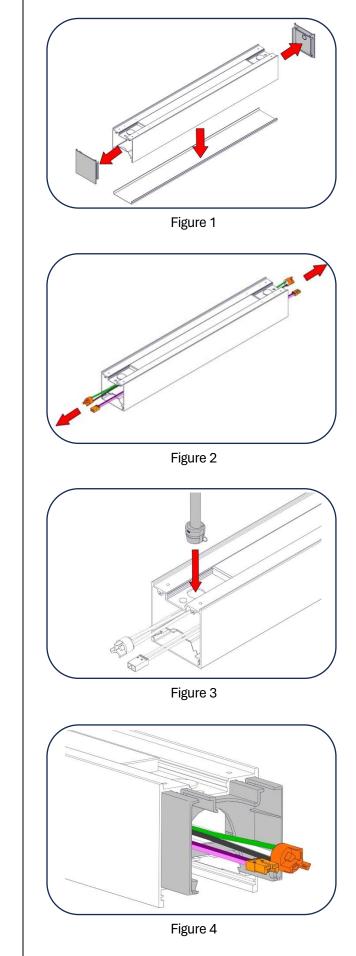
<u>Note</u>: *Side A (or B)* of one fixture must always be joined with *Side B (or A)* of another.

Note: Refer to Corner Installation section for runs with corners.

- 7. Unpack the contents of the Hang Kit(s).
- 8. Determine which fixture will be the starter. This may be referenced in the provided shop drawing.
- 9. Insert a **Plastic Joiner** into the side(s) of the starter fixture, feeding the Harness wires through the center. [Figure 4]
- 10. Mate the Harness wire connectors of the starter fixture to the connectors of the adjoining fixture(s) and tuck them into the fixtures. Push the fixtures together so the ends are flush, making sure no wires are pinched.
- 11. Assemble a **Mounting Cable** to a **Small Joiner Bracket** (or **Large Joiner Bracket** for **Control Boxes** installed in the middle of the run) and secure to the joining fixtures. [Figure 5]

<u>Note</u>: If installing a Control Box in the middle of the run, refer to the *Control Box Installation* section

- 12. Continue to insert Plastic Joiners and mate the connectors between each additional fixture in the run. Secure each joint with a Mounting Cable / Small (Large) Joiner Bracket assembly.
- 13. Flip the assembled run over so the bottom is accessible.



- 14. Install the **Center Support Brackets** using the provided thread-forming screws. [Figure 6]
- 15. Apply the included Tape over the joint, above the Center Support Brackets. Use Tape Tool to easily push the tape into the housing cavities. [Figure 7]
- 16. Reinstall the diffuser for each fixture. Make sure the ends of the diffuser are flush with the ends of the fixture.
- 17. Flip the assembled run over so the top is accessible.
- Remove the small rubber plug at each end of the fixture run and install the remaining **Mounting Cables**. Secure with the ¼" lock nuts and replace the End Caps at each end of the run. [Figure 8]
- 19. Install the **Ceiling Hangers** at the pre-determined locations on the ceiling grid.

<u>Note</u>: One of the Ceiling Hangers must be installed near a junction box for wiring Side A.

<u>Note</u>: Refer to the *Mount Spacing* section to determine the proper distance between each hanger.

- 20. Fit Canopy A over the over the exposed thread of the Ceiling Hanger installed for Side A of the starter fixture and mark the ceiling tile where the Power Cable will pass through.
- 21. Set aside Canopy A and remove the marked ceiling tile. At the mark, make a 1" hole and replace the ceiling tile.
- 22. Lift the fixture and fit each canopy over the exposed thread of the hangers. Secure each Canopy to a Ceiling Hanger with the Threaded Adaptors of the Mounting Cables.
 - Side A of the starter fixture should be mounted using Canopy A. Canopy A should be oriented so the Power Cable can pass through both the grommeted hole of the canopy and ceiling tile that was modified in the previous step.
 - All other mounting points should be mounted using Canopy B.



Do not let the fixture freely hang until both Mounting Cables are completely installed and secure.

23. Adjust the Aircraft Cables as needed to the desired fixture height and use a level to find the "true horizontal".

Note: Refer to the Adjustments section for further detail.

- 24. Remove the ceiling tile adjacent to the one modified in step 21 for access to the junction box.
- 25. Pull the Power Cable through the grommeted hole of Canopy A and into the ceiling.

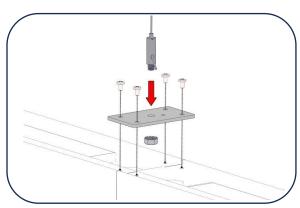


Figure 5

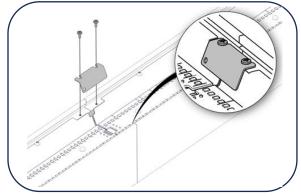


Figure 6

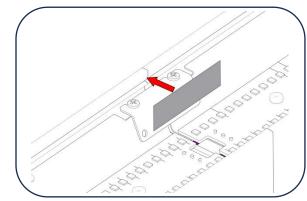
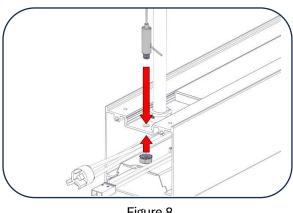


Figure 7



- 26. Install the **Cable Clamp** approximately ¼" above Canopy A and the ceiling tile to eliminate slack on the Power Cable.
- 27. Make the wire connections to the building wiring using the included wire nuts. Push any extra length of wire into the junction box.
- 28. Replace the ceiling tile removed in step 24.
- 29. Restore branch supply power and ensure the fixture functions properly. If the fixture does not turn on or function properly, shut off the branch supply power and check all electrical connections.

Continuous Run: Stem Mount

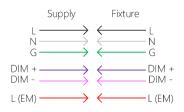
- 1. Remove the End Caps and Bottom Diffusers from each fixture. [Figure 1]
- 2. Pull the available length of **Driver Harness** and **Extension Harness** wires out of each fixture. [Figure 2]
- 3. Determine the location of the supply power drop. A recessed junction box with the incoming power feed must be installed here.
- 4. Determine the mounting points for the rest of the run. They can be junction boxes or locations directly on the ceiling.

<u>Note</u>: Refer to the provided shop drawing and Mount Spacing section for specific spacing dimensions.

- 5. Unpack the contents of the Hang Kit(s).
- 6. Begin assembling a ceiling mount using a **Mounting Bracket**, **Stem Holder**, and ½" lock nut. [Figure 3]
- 7. Feed the **Power Cable** through a **Stem**. The Stem should be oriented so that the quick disconnects of the Power Cable exit the male threading. [Figure 4]
- 8. Add length to the Stem (if required) by threading together additional Stems. If only using a single Stem, skip to the next step. [Figure 4]

Note: Pass the end of the Power Cable through each added Stem.

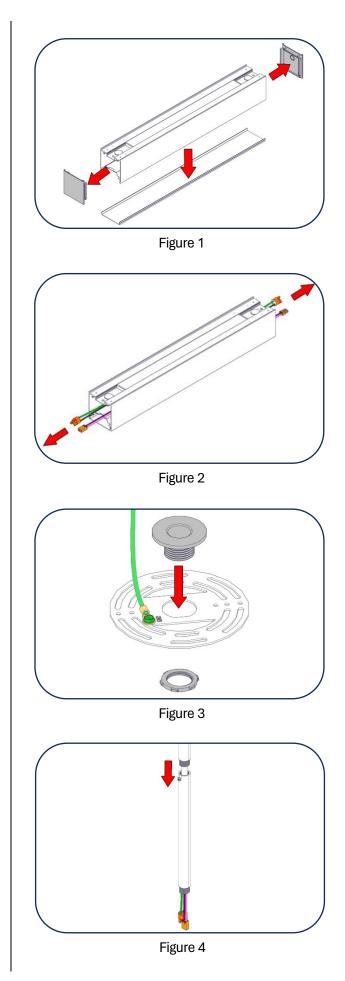
- 9. Feed the Power Cable through the center hole of a **Canopy C** and the ceiling mount assembly from step 3.
- 10. Make the wire connections to the building wiring using the included wire nuts.



- 11. Use the **Cable Clamp** to reduce strain on the Power Cable, leaving at least 1 2 inches of the cable jacket above the clamp.
- 12. Install the assembled ceiling mount to the junction box using the provided screws or screws suitable for the junction box.

Note: Side A of the starter fixture will be installed to this mount.

- 13. Secure Canopy C to the ceiling mount with the Stem.
- Assemble the other ceiling mounts for each required mounting point using a Mounting Bracket, Stem Holder, and ½" lock nut for each mount.



- 15. Install the assembled ceiling mounts at each mounting point and attach a Canopy C to each ceiling mount using a Stem, equal in length to the first stem, to secure it.
- 16. Determine which fixture will be the starter. This may be referenced in the provided shop drawing.
- 17. Arrange the fixtures (face down) according to the provided shop drawing.

<u>Note</u>: Side A (or B) of one fixture must always be joined with Side B (or A) of another.

Note: Refer to Corner Installation section for runs with corners.

- 18. Insert a **Plastic Joiner** into Side B of the starter fixture, feeding the Harness wires through the center. [Figure 5]
- 19. Mate the Harness wire connectors of the starter fixture to the connectors of the adjoining fixture and tuck them into the fixtures. Push the fixtures together so the ends are flush, making sure no wires are pinched.
- 20. Assemble a **Stem Adaptor** and **Small Joiner Bracket** (or **Large Joiner Bracket** for **Control Boxes** installed in the middle of the run) and secure to the joining fixtures. Thread an **Adjustable Stem Adaptor** onto the Stem Adaptor. [Figure 6]

<u>Note</u>: If installing a Control Box in the middle of the run refer to the *Control Box Installation* section

- 21. Continue to insert Plastic Joiners and mate the connectors between each additional fixture in the run. Secure each joint with a Stem Adaptor / Small (Large) Joiner Bracket assembly. Thread an Adjustable Stem Adaptor onto each Stem Adaptor.
- 22. Flip the assembled run over so the bottom is accessible.
- 23. Install the **Center Support Brackets** using the provided thread-forming screws. [Figure 7]
- 24. Apply the included Tape over the joint, above the Center Support Brackets. Use Tape Tool to easily push the tape into the housing cavities. [Figure 8]
- 25. Reinstall the diffuser for each fixture. Make sure the ends of the diffuser are flush with the ends of the fixture.
- 26. Flip the assembled run over so the top is accessible.
- 27. Raise the fixture and pass the male threaded ends of each Stem through the ½" hole on each end of the run. Thread the **Adjustable Stem Adaptors** onto the stems in the middle of the run.

<u>Note</u>: The Stem with the Power Cable must be mounted to Side A of the starter fixture. For this Stem, feed each quick disconnect into the hole and pull them out of the fixture.

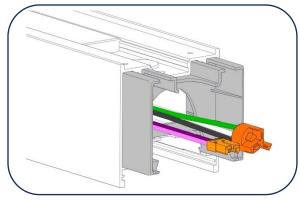


Figure 5

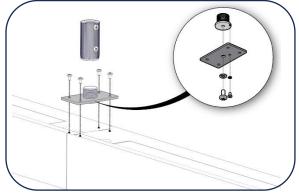


Figure 6

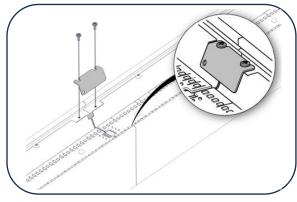


Figure 7

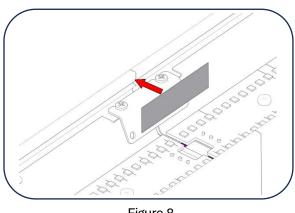
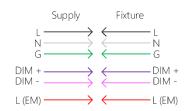
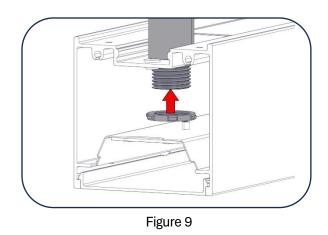


Figure 8

- 28. Secure the fixture to the Stem at each end using the included $\ensuremath{\mathscr{V}}\xspace^{\prime\prime}$ lock nuts. [Figure 9]
- 29. Connect the male quick disconnects of the Power Cable with the Harness Wires using the quick disconnects. Push the extra length of connected wires inside the fixture.



- 30. Replace the End Caps at each end of the run.
- 31. Restore branch supply power and ensure the fixture functions properly. If the fixture does not turn on or function properly, shut off the branch supply power and check all electrical connections.



Continuous Run: Wall Mount

- Remove the Quick Mount Bracket from each Wall Mount by loosening the two set screws on the bottom of each Wall Mount. [Figure 1]
- 2. Remove the **End Caps** and **Bottom Diffusers** from each fixture. [Figure 2]
- 3. Pull the available length of **Driver Harness** and **Extension Harness** wires out of each fixture. [Figure 3]
- 4. Determine the location of the supply power. A recessed junction box with the incoming power feed must be installed here.
- 5. Determine the mounting points for each **Wall Mount** to be installed. The mounting point can be a junction box or a location directly on the wall.

<u>Note</u>: All brackets must be installed at the same distance from the floor/ceiling so that the fixture run is level when completely installed.

<u>Note</u>: Refer to the Mount Spacing section for specific spacing dimensions.

<u>Note</u>: If the fixture has more than one Wall Mount, the mount with loose power/dimming wires must be installed to the junction box.

6. Arrange the fixtures (face down) according to the provided shop drawing.

<u>Note</u>: *Side A (or B)* of one fixture must always be joined with *Side B (or A)* of another.

- 7. Locate the fixture with loose wire leads exiting the back of it, this is the starter fixture.
- 8. Insert a **Plastic Joiner** into the side(s) of the starter fixture, feeding the Harness wires through the center [Figure 4].
- 9. Mate the Harness wire connectors of the starter fixture to the connectors of the adjoining fixture(s) and tuck them into the fixtures. Push the fixtures together so the ends are flush, making sure no wires are pinched.
- Install the Small Joiner Bracket(s) (or Large Joiner Bracket for Control Boxes installed in the middle of the run) between the fixture(s) using the provided thread-forming screws. [Figure 5]

<u>Note</u>: If installing a Control Box in the middle of the run refer to the *Control Box Installation* section.

- 11. Continue to insert Plastic Joiners and mate the connectors between each additional fixture in the run. Secure each joint with a Small (Large) Joiner Bracket.
- 12. Flip the assembled run over so the bottom is accessible.
- 13. Install the **Center Support Brackets** using the provided thread-forming screws. [Figure 6]

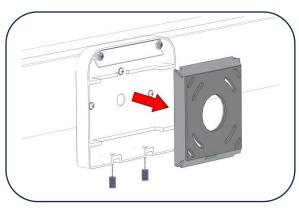


Figure 1

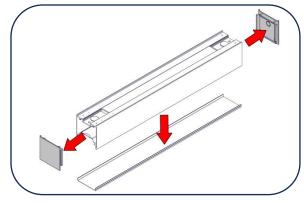


Figure 2

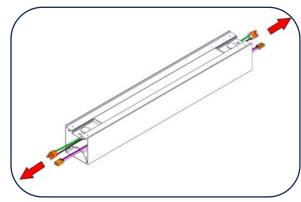
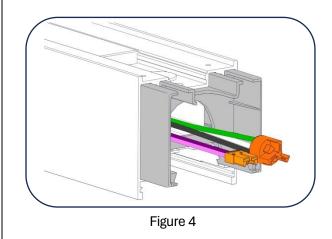
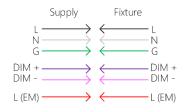


Figure 3



- 14. Apply the included Tape over the joint, above the Center Support Brackets. Use Tape Tool to easily push the tape into the housing cavities. [Figure 7]
- 15. Reinstall the diffuser for each fixture. Make sure the ends of the diffuser are flush with the ends of the fixture.
- 16. Flip the assembled run over so the top is accessible.
- 17. Mount the Quick Mount Brackets to the junction box (or mounting surface) at the pre-determined locations using the provided screws or screws suitable for the junction box (or mounting surface).
- 18. Use the bubble level on each bracket to ensure it is aligned with "true horizontal".
- 19. Raise the assembled fixture run to the mounting location and hook the Safety Cables to each Quick Mount Bracket.
- 20. Make the wire connections from the starter fixture to the building wiring using the included wire nuts. Push any extra length of wire into the junction box.



- 21. Hook the Wall Mounts onto the installed Quick Mount Brackets making sure no wires are pinched at the starter fixture and no Safety Cables are visible anywhere along the run.
- 22. Tighten the set screws on the bottom of the Wall Mounts.
- 23. Restore branch supply power and ensure the fixture functions properly. If the fixture does not turn on or function properly, shut off the branch supply power and check all electrical connections.

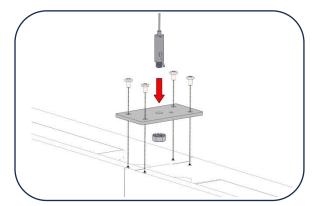


Figure 5

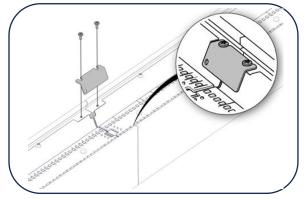
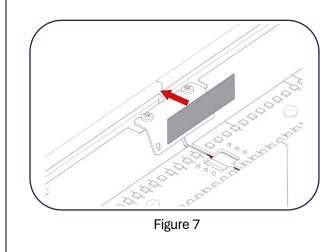


Figure 6

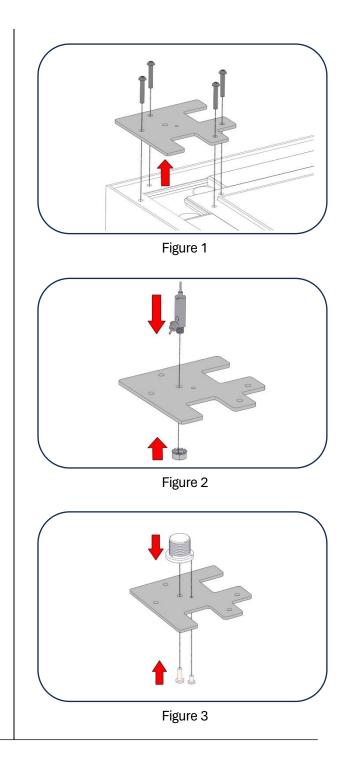


Corner Fixture: Cable Mount

- 1. Remove the Corner Bracket. [Figure 1]
- 2. Unpack the contents of the Hang Kit.
- 3. Install one of the **Mounting Cables** and secure it with the included ¼" lock nut. [Figure 2]
- 4. Reinstall the Corner Bracket.

Corner Fixture: Stem Mount

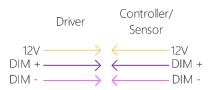
- 1. Remove the Corner Bracket. [Figure 1]
- 2. Unpack the contents of the Hang Kit.
- 3. Assemble the **Stem Adaptor** to the Corner Bracket using the provided screws. [Figure 3]
- 4. Thread the Adjustable Stem Adaptor onto the Stem Adaptor.
- 5. Reinstall the Corner Bracket.



Control Box: End Mount

- 1. Install a Plastic Joiner in Side B of the fixture.
- 2. Pull the dimming and 12V aux leads from the fixture and make the wire connections to the sensor/controller leads.

<u>Note</u>: Do not connect the fixture's input dimming leads to the building's supply wiring.

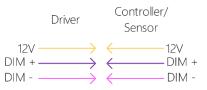


- 3. Attach the Control Box to one end of the fixture.
- 4. Install the appropriate mounting hardware to the Small Joiner Bracket. [Figure 1].
- 5. Secure the Control Box to the two fixtures using the Large Joiner Bracket assembled with the mounting hardware from step 4. [Figure 2]

Control Box: Inline Mount

- 1. Install a Plastic Joiner in each end of the fixtures to be joined.
- 2. Pull the dimming and 12V aux leads from one fixture and make the wire connections to the sensor/controller leads.

<u>Note</u>: Do not connect the fixture's input dimming leads to the building's supply wiring.



- 3. Install the appropriate mounting hardware to the Large Joiner Bracket. If installing in a Wall Mount run, only the Large Joiner Bracket is required. [Figure 1]
- 4. The Control Box must be joined with Side B of one fixture and Side A of another fixture.
- 5. Pass the Harness wires from Side A (or B) of one fixture through the center of the Plastic Joiner and the Control Box, and mate the connectors with the Harness wires from Side B (or A) of another fixture. [Figure 3]
- 6. Secure the Control Box to the two fixtures using the Large Joiner Bracket assembled with the mounting hardware from step 3. [Figure 3]

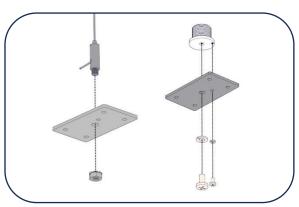


Figure 1

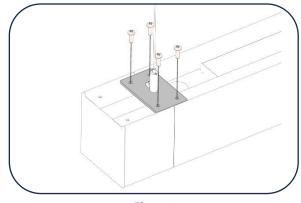
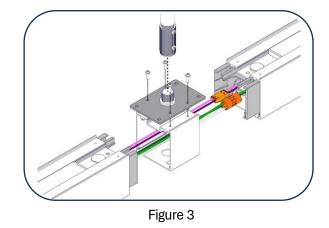
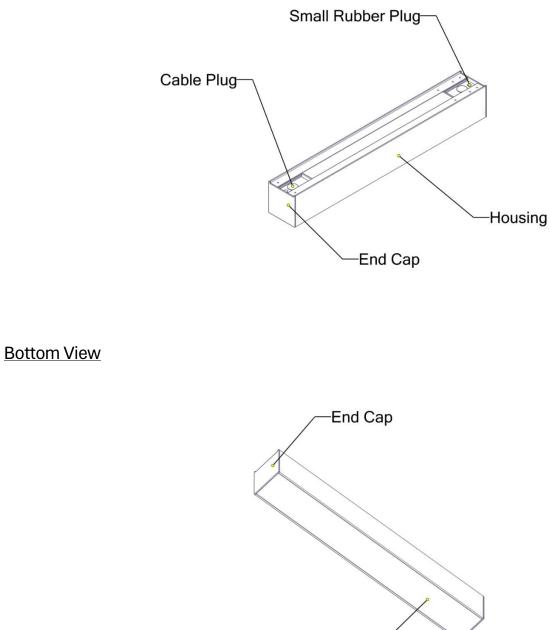


Figure 2



Assembly Diagrams

Top View



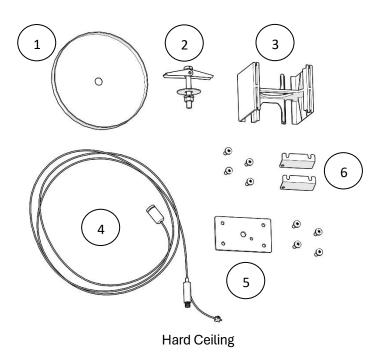
Bottom Diffuser

Accessory Diagrams

Hang Kits

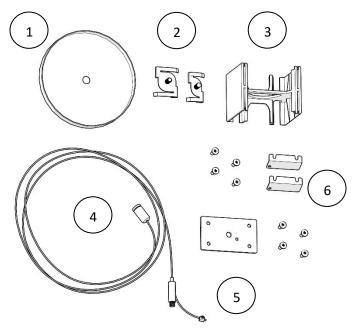
Hard Ceiling Joiner

1	Canopy B	1
2	Toggle Bolt Assembly	1
3	Plastic Joiner	1
4	Mounting Cable	1
5	Small Joiner Bracket	1
6	Center Support Bracket	1



Drop Ceiling Joiner

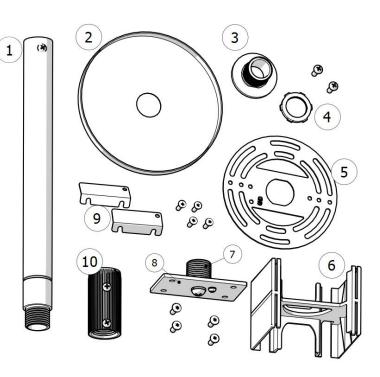
1	Canopy B	1
2	Hangar Clips	
3	Plastic Joiner	1
4	4 Mounting Cable (with ¼" lock nut)	
5	Small Joiner Bracket	1
6	Center Support Bracket	2



Drop Ceiling

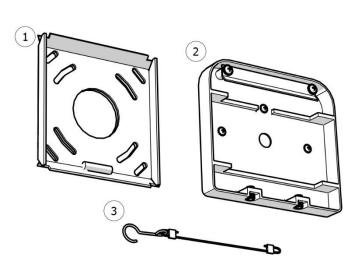
Stem Joiner

1	1ft or 2ft Stem	1
2	Canopy C	1
3	Stem Holder	1
4	1/2" NPT Lock Nut	1
5	Mounting Bracket	1
6	Plastic Joiner	1
7	Stem Adaptor	1
8	Small Joiner Bracket	1
9	Center Support Bracket	2
10	Adjustable Threaded Adaptor	1



Wall

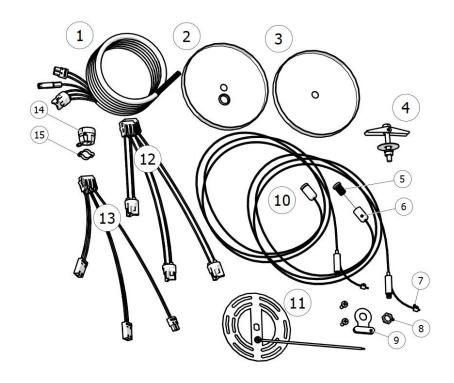
1	Quick Mount Bracket	1
2	Wall Mount	1
3	Safety Cable	1



Feed Kits

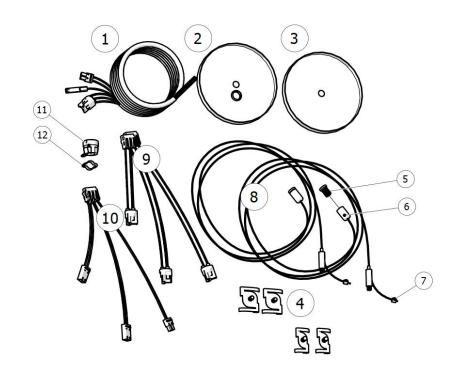
Hard Ceiling

Power Cable	1
Canopy A	1
Canopy B	1
Toggle Bolt Assembly	1
Threaded Insert	2
Threaded Base	2
Cable Crimp	1
Hex Nut	1
Aircraft Cable Clamp	1
Mounting Cables (with ¼" lock nuts)	2
Mounting Bracket	1
Starter Harness (Power)	1
Starter Harness (Dimming)	1
Strain Relief Bushing	1
Cable Clamp	1
	Canopy A Canopy B Toggle Bolt Assembly Threaded Insert Threaded Base Cable Crimp Hex Nut Aircraft Cable Clamp Mounting Cables (with ¼" lock nuts) Mounting Bracket Starter Harness (Power) Starter Harness (Dimming) Strain Relief Bushing



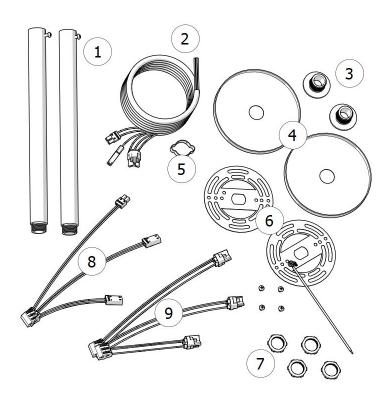
Drop Ceiling

1	Power Cable	1
2	Canopy A	1
3	Canopy B	1
4	Hangar Clips (15/16" and 9/16")	4
5	Threaded Insert	2
6	Threaded Base	2
7	Cable Crimp	1
8	Mounting Cables (with ¼" lock nuts)	2
9	Starter Harness (Power)	1
10	Starter Harness (Dimming)	1
11	Strain Relief Bushing	1
12	Cable Clamp	1



Stem

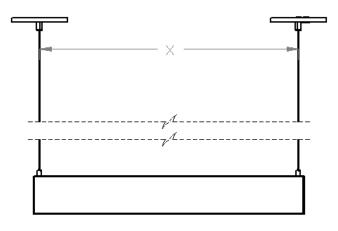
1ft or 2ft Stem	2
Power Cable	1
Stem Holder	2
Canopy C	2
Cable Clamp	1
Mounting Bracket	2
1/2" NPT Lock Nut	4
Starter Harness (Dimming)	1
Starter Harness (Power)	1
	Power Cable Stem Holder Canopy C Cable Clamp Mounting Bracket 1/2" NPT Lock Nut Starter Harness (Dimming)



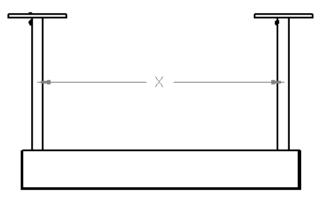
Mount Spacing Diagrams

Single

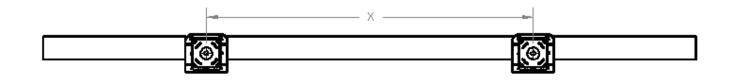
Cable



Stem Mount

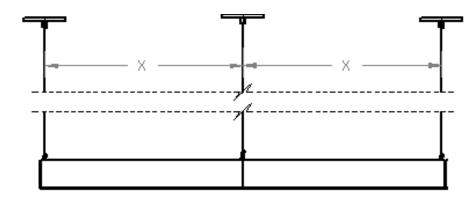


Wall Mount (> 4ft)

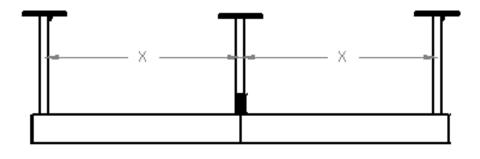


Continuous

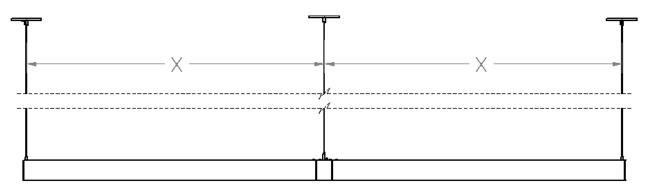
Linear Cable Mount



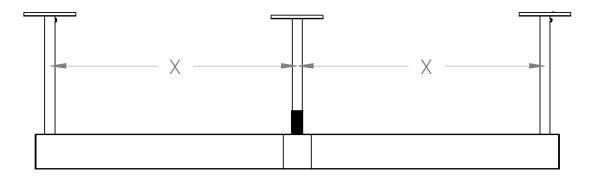
Linear Stem Mount

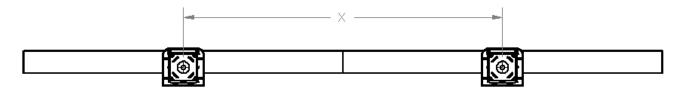


Linear Cable (with Control Box)

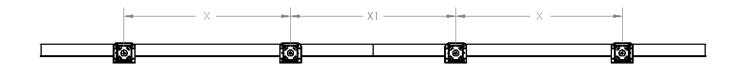


Linear Stem (with Control Box)





Linear Wall Mount (> 4ft)



X dimension (inches)							
NOTE Tolerance for all dimensions is ±0.0625" (1/16")		Nominal Fixture Length					
		2 ft	3 ft	4 ft	5 ft	6 ft	8 ft
	Cable Mount	23.1	35.2	47.2	59.2	71.2	95.2
Single	Stem Mount	21.4	33.3	45.4	57.4	69.4	93.4
	Wall Mount				30.1	36.1	48.1
	Cable Mount	23.6*	35.6*	47.6*	59.6*	71.6*	95.6*
	Stem Mount	22.7*	34.6*	46.7*	58.7*	70.7*	94.7*
Continuous	Wall Mount	24.0**	36.0**	48.0**	30.1	36.1	48.1
	X1 dimension (inches) for Wall Mounting 5ft, 6ft, and 8ft				29.9**	35.9**	47.9**
If installing a Control Box in a continuous run: * Add 1.375" (1-3/8") or ** Add 2.75" (2-3/4")							

Adjustments

Cable Mount

- 1. Depress the small button on the Mounting Cable, this will release the aircraft cable. [Figure A1]
- 2. Adjust the cable to the desired length. [Figure A1]
- 3. Cut the cable and use a **Cable Crimp** to secure the Mounting Cable. [Figure A2]

