

## CAUTION

Turn off the main power at the circuit breaker before installing the fixture in order to prevent possible shock. If you are unfamiliar with proper electrical wiring connections, obtain the services of a qualified electrician.

## GENERAL

Read all instructions carefully for safe operation and installation.

All electrical connections must be in accordance with local and national electrical code (N.E.C.) standards.

Remove the fixture and mounting package from the box. Make sure no parts are missing by referencing the illustrations on these Installation Instructions. Please contact Blackjack Lighting at 847-941-0588 if any parts are missing or damaged.

This product is suitable for DAMP locations.

## ASSEMBLY AND INSTALLATION

### PREPARATION

1. Locate the Duo System Exploded view diagram (Figure 4) and familiarize oneself with the fixture's components.
2. Remove the fixture from its box. Carefully unpack the bundled wire packages. Be careful not to bend or kink the wires when unpacking them. NOTE: The pendants (19) will already be installed into the canopy faceplate (9).
3. Remove the ceiling plate (5) from the canopy cover consisting of (8 + 9) by loosening and removing the four decorative nuts (18). (Reference Figure 4 for a detailed illustration)

### MOUNTING

**CAUTION:** Canopies and system must be mounted to rigid ceiling material (sheetrock, fire-rated plywood, or similar) that can support the weight of the system and accept drywall anchors, expandable fasteners, or similar structural fasteners.

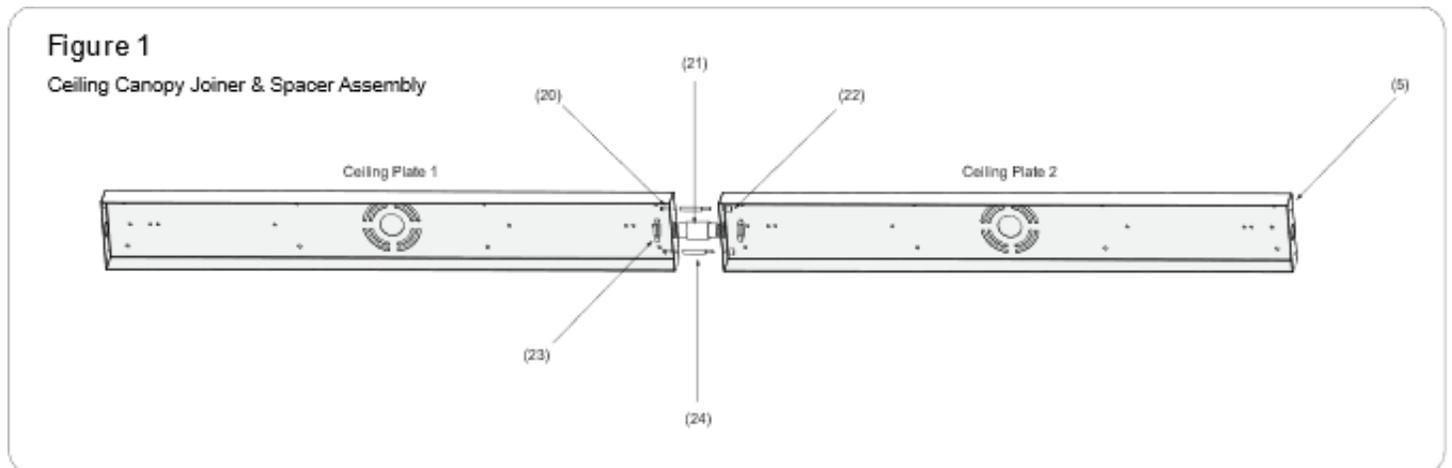
Before final installation, align all the yellow and black orientation arrow decals located inside each fixture, to face the same direction.

4. Place the ceiling plate (5) over the outlet box (10) and mark where to drill for the four support holes.
5. Drill the four support holes using the appropriately sized drill bit. Insert the provided ceiling anchors (6) into the holes. Align the first ceiling plate (5) mounting holes with the support holes/ceiling anchors (6), then screw the anchor screws (7) halfway into the ceiling anchors (6).
6. Attach the ceiling plate (5) to the outlet box (10) using the two mounting screws (4). When the ceiling plate (5) is properly aligned in the installation, fully tighten all the anchor screws (7).
7. Pull the Power supply wires (11 + 12) and the house ground wire (13) out of the outlet box (10) and thread them through the large center hole in the ceiling plate (5). If this fixture will be attached to a 0-10V dimmer (optional) also pull the two 0-10V dimming wires (2 + 3) through the large center hole.

**CHECK-UP:** At this point, there should be one ceiling plate mounted to a rigid surface utilizing the four ceiling anchors and mounting screws. The center of the ceiling plate should line up with the hole for the outlet box and be attached utilizing the two mounting screws.

## INSTALL SPACERS AND JOINERS (for runs of 2 or more canopies)

- For runs that will use fixture spacers (24) and joiners (21), install the female side of the spacers by attaching it to the joining side of the mounted ceiling plate (5). Insert the two male screws (20) from inside the mounted ceiling plate (5) and into the spacer (24). Tighten securely. (Reference Figure 1).
- Push out the large center knock-out from the first ceiling plate (5) mating side. Remove the knurled ring nut (23) from the joiner (21) and insert the end of the joiner (21) into the knock-out opening. Re-tighten the knurled ring (23) onto the side of the joiner (21) which is now inserted into the mounted ceiling plate (5.) (Reference Figure 1).



- Push out the large center knock-out from the second ceiling plate (5). Install the second ceiling plate into the side with the fixture spacers (24) and the joiner (21). Push in the second ceiling plate until it is securely aligned by the threaded rods of fixture spacers.
- Once again mark the hole locations for the four mounting holes. Drill the four support holes using the appropriately sized drill bit. Insert the provided ceiling anchors (6) into the holes. First, screw the anchor screws (7) halfway into the ceiling anchors (6); when properly aligned with the adjacent ceiling plate (5), fully tighten all anchor screws (7). Place the knurled ring nut (23) over the end of the joiner (21). Place the spacer hex nuts (22) over the exposed threads on the fixture spacers (24). Tighten the ring nut and the hex nuts.

## ELECTRICAL CONNECTIONS

**NOTE:** locate the driver (26) attached to the lower Face Plate (9) and Internal Mount Plate (8). If the Yellow Luminaire Disconnects are already attached to the driver's wire's unattached the female end that does not currently house wires.

- Attach the female side of the 3-port Yellow Luminaire Disconnect (14) to the Black and White Voltage wires (11,12) hanging from the ceiling to their corresponding colors on the disconnect. (Match up the black wire to black port, white wire to the white port)
- Attach the green wire to the last open spot on the 3-port Yellow Luminaire Disconnect (14). The green wire will then be attached to the canopy to ground the fixture.



**FINAL ASSEMBLY**

**10.** Determine the appropriate length of each suspension cable (if in doubt about the exact length needed, leave a little extra cable until the final installation of the canopy cover (faceplate (9) + integral mount plate (8)). Push the excess cable up into the canopy by pressing the small barrel of the gripper (18) upward. This will release the cable tension and allow the suspended cable to be pulled through the gripper (18). Roll the excess cable into a small loop inside the canopy. Wrap the supplied Velcro strap around the loop to keep the excess cable from falling outside of the canopy.

**11.** Locate the Canopy Cover that houses the Driver and identify the yellow and black decal sticker located within. This decal distinguishes the orientation of the fixture's wiring. All arrows displayed inside each canopy cover should be pointing in the same direction upon final assembly.

**12.** Temporarily suspend the canopy cover (faceplate (9) + integral mount plate (8)) from the ceiling plate (5) by attaching the loop located on the Aircraft cable assemblies (17) to the mating hooks mounted within the canopy ceiling plate (5). NOTE: The two aircraft cable assemblies help secure the fixture to the mounted ceiling plate while the internal wiring is being done.

**13.** Connect the Yellow three-conductor female connector (14) attached from to the ceiling plate (9) to the three conductor male connector attached to the driver (26). (optional) Connect the two conductor female dimming connector (29) attached to the ceiling plate (9) to the two-conductor male connector (30) attached to the driver (24). (See Figure 3)

**14.** To assemble the light guides simply screw the Frosted Globe diffusers (18) into the light guide socket (17).

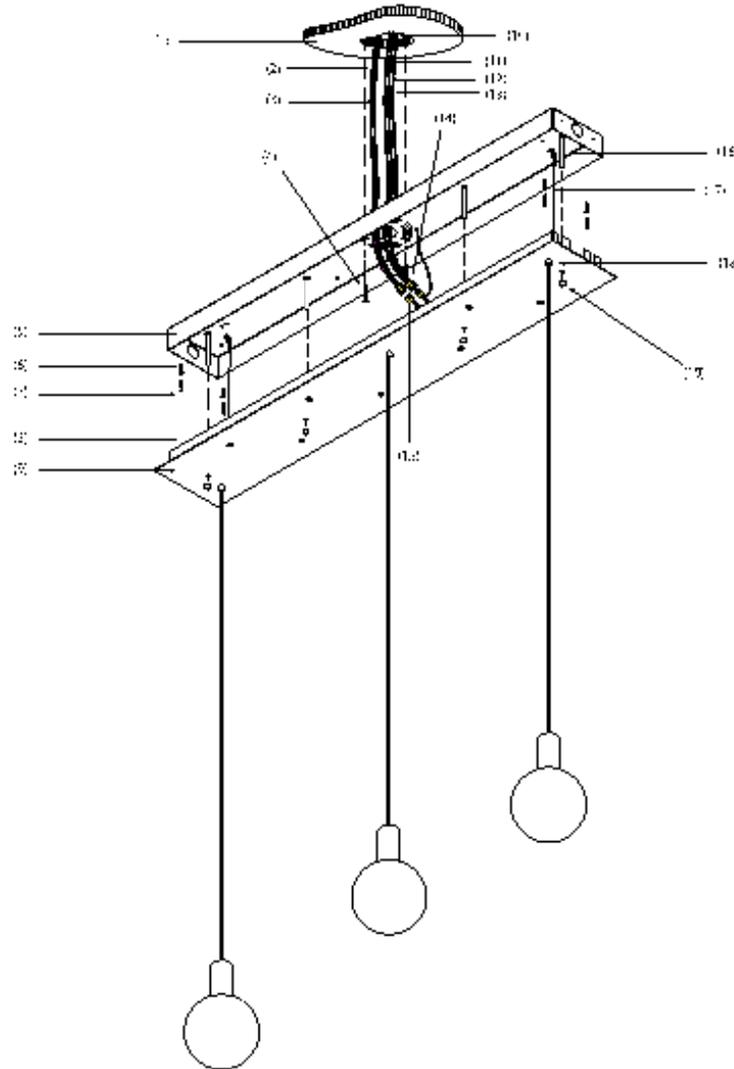
**15.** Make sure all the cables are carefully placed inside canopy cover (10). To secure the canopy cover (10) to the ceiling plate (9) align the holes in the cover (10) over the outward screws (7) then tighten the four decorative nuts (11) over the outward screws (7) .

**16.** Once the canopy is in place, use the gripper (16) to fine tune the wire lengths until each light guide (17 & 18) is adjusted to its preferred length.

**17.** Once the length of each cable has been established, any remaining bends or kinks in the wire can be straightened by bending out the kinks by hand while heating the cord up with the warm air from a hair dryer or heat gun. Or contact BlackJack Lighting for a handheld wire straightener.

**Figure 4**

Fixture Exploded View



**Fixture Part Key:**

- |                               |  |                             |
|-------------------------------|--|-----------------------------|
| 1: Rigid Mounting Surface     | 10: Outlet Box (Provided by other)         | 27: Pendant                 |
| 2: Purple, 0-10V Dimming Wire | 11: Black Line Voltage Wire                | 28: Male Spacer Screw       |
| 3: Grey, 0-10V Dimming Wire   | 12: White Line Voltage Wire                | 29: Liner                   |
| 4: Mounting Screws            | 13: Green Grounding Wire                   | 23: Spacer Hex Nut          |
| 5: Ceiling Plate              | 14: Yellow Luminaire Disconnect (3-Part)   | 23: Knurled Ring Nut        |
| 6: Ceiling Anchor             | 15: Yellow Luminaire Disconnect (2-Part)   | 24: Spacer                  |
| 7: Anchor Screw               | 16: Standoff Screws                        | 25: Braided Main Disconnect |
| 8: Internal Mount Plate       | 17: Aircraft Cable Assembly (Hook & Cable) | 20: Driver                  |
| 9: Face Plate                 | 18: Cord                                   |                             |
|                               | 19: Crimper                                |                             |