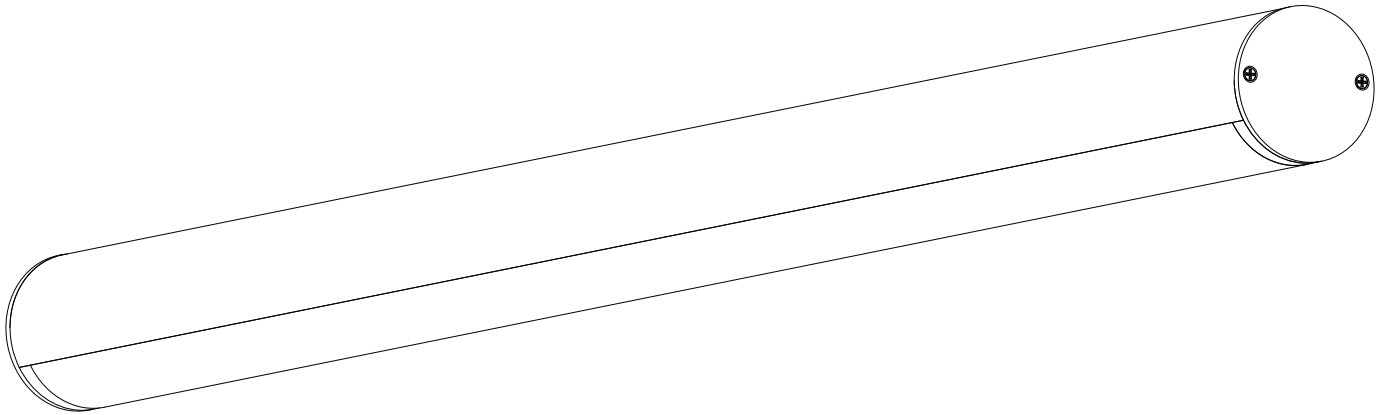


QUANTUM 2 CIRCLE 16

Installation Instructions

#CH-C-16-KIT
#CH-C-16-2FT
#CH-C-16-4FT
#CH-C-16-6FT
#CH-C-16-8FT
Custom #CH-C-16



Sections:

- Pg. 2 Fixture Kit Channel Preparation
- Pg. 6 Suspension Installation

Version 3



QUANTUM 2 CIRCLE 16

Fixture Kit Channel Preparation

Cutting Instructions

Please note: If you've purchased either a Standard Fixture or Custom Fixture, please skip to page 6 for non-linear suspension installation instructions, or page 10 for linear suspension installation instructions.

Tools Needed

- Miter Saw/Chop Saw
- Saw blade rated for aluminum (96-tooth-blade or higher recommended)
- Painters or Masking Tape
- Drill Bit: $\frac{1}{4}$ "
- Tape Measure (or long ruler)
- Marker/Pen/Pencil
- Safety Glasses
- Recommended: Work Apron/Long Sleeve shirt
- Canned Air/Air Compressor
- Fine Tip (#1) Phillips Screwdriver or Bit
- Optional: Fine File (#2 or #4 recommended) or De-Burring Tool
- Optional Drill Bit: $\frac{5}{16}$ "

Parts Needed

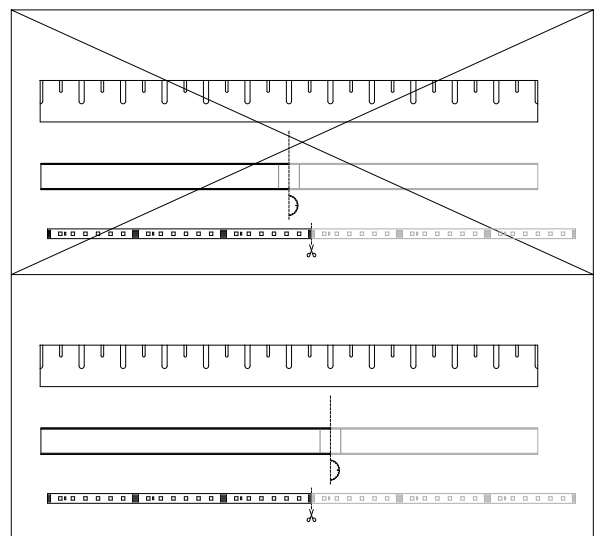
- #CH-C-16-KIT
- CH-C-16 Aluminum Channel
- Diffuser Lens
- Tape Light
- End Caps
- Grommet (optional)

Important!

- Wear safety glasses while cutting Quantum Channel!
- Have a question? Give us a call at 832-717-2710 or e-mail us at designs@ledinspirations.com.

1 Determine Length to Cut

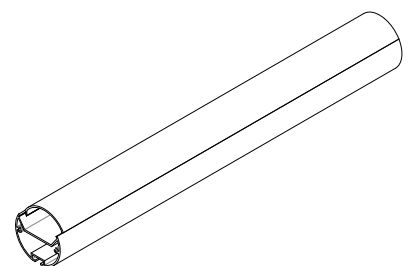
The LED tape light that comes with the CH-C-16-KIT has a cut length of $3-\frac{9}{32}$ ". To ensure that there are no dark spots or shadows at the ends, the channel cut length should be in increments of $3-\frac{9}{32}$ ", plus about $\frac{3}{8}$ " to account for the wire exit. See the Cut Chart on page 5 for cut increments.



2 Prepare Lens for Cutting

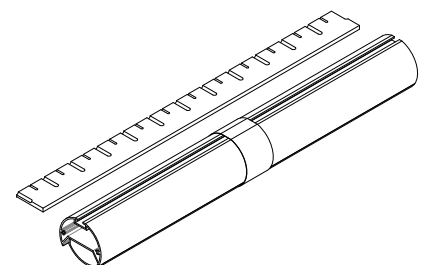
Insert and snap the plastic lens into the channel $\frac{7}{16}$ " from the end of the channel. The End Caps for the CH-C-16 each have a tab that extends $\frac{7}{32}$ " into the channel and must be accounted for on both ends of the channel.

Pro Tip! When butting two pieces together, cut the lens flush on the joining ends. You only need to account for the $\frac{7}{32}$ " tab on the ends receiving End Caps.



3 Measure, Tape, and Mark

Measure out the length you want to cut. Wrap both the channel and lens with masking/painters tape to hold them firmly together and protect them from scratching from the saw blade. Mark on top of the tape where you want to make your cut.

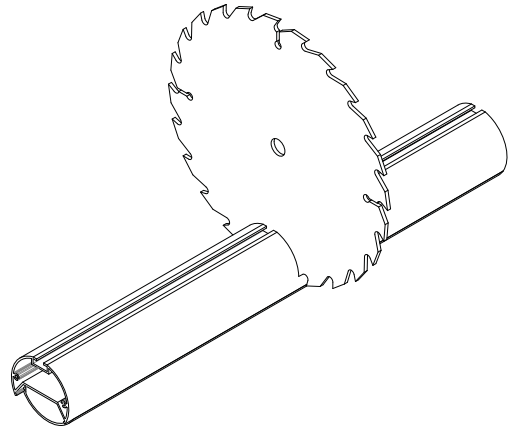


QUANTUM 2 CIRCLE 16

Fixture Kit Channel Preparation Cont.

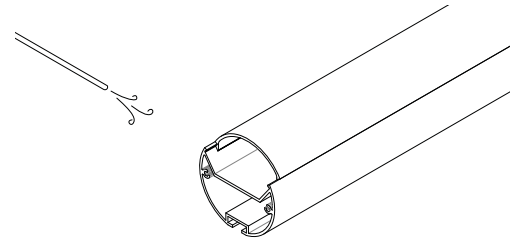
4 Cutting

Use a saw blade rated for aluminum, 96-tooth or higher recommended. Cut to the OUTSIDE of the mark. This will ensure the width of the sawblade does not subtract from the desired length. Cut slowly and evenly to ensure a clean cut. You may need to de-bur some edges with a file or de-burring tool.



5 Clean-Up

Use canned air or an air compressor to clear away the aluminum shavings from inside the channel.



6 Drill hole for Wire

The low voltage wire may exit through either the End Cap or back of channel. Drill a 1/4" hole in the End Cap OR back of channel for the low voltage wire to exit.

NOTE: IF RUNNING YOUR LOW VOLTAGE WIRE OUT THE BACK OF THE CHANNEL, DRILL COMPLETELY THROUGH THE CHANNEL.

OPTIONAL: For a more professional installation, a grommet may be used in place of the heat shrink tubing to protect the wire exiting the channel.

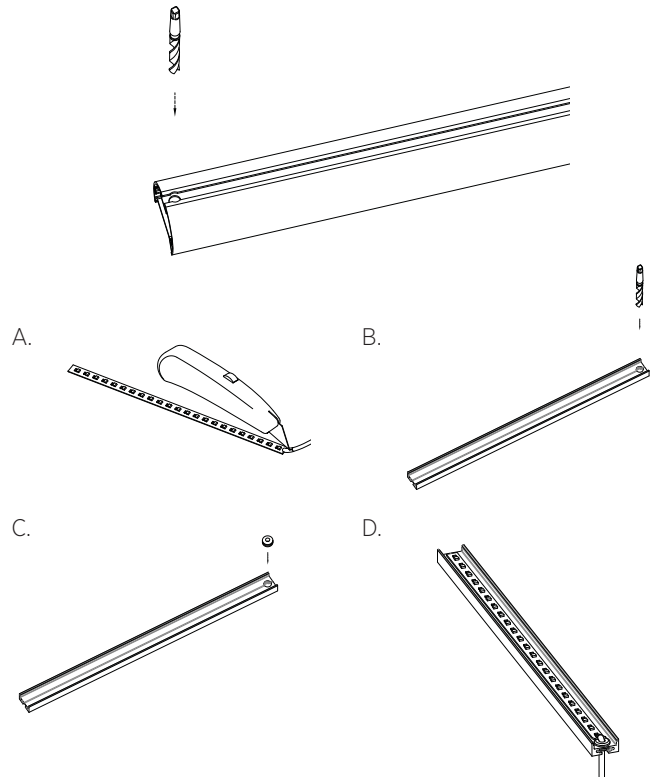
A. Using a utility knife, carefully remove heat shrink tubing where wire is soldered to tape light.

B. Drill a 5/16" hole centered 1/4"-5/16" from edge of channel completely through the back and inside of the channel.

C. Insert grommets into both holes.

D. Lay tape light over grommet and feed wire through grommets. Tape light should sit up on the grommet slightly.

CAUTION! THE SOLDER POINTS SHOULD NOT MAKE CONTACT WITH THE ALUMINUM OF THE QUANTUM CHANNEL.

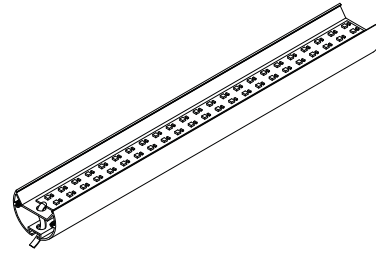


QUANTUM 2 CIRCLE 16

Fixture Kit Channel Preparation

7 Install Quantum High Density LED Tape Light

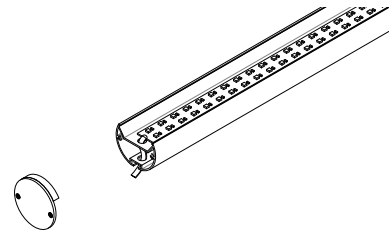
Feed the crystal clear wire on the LED tape light through the ¼" hole. Peel off the adhesive on the back of the LED tape light and stick it down inside the channel, centering the tape light with the channel.



8 Install End Caps

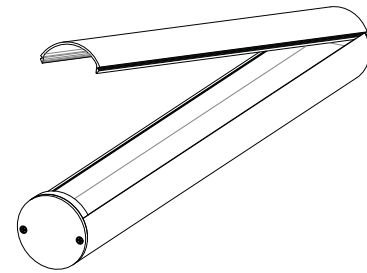
Using the End Cap screws, install the End Caps on each end of the channel.

Pro Tip! Use a fine-tip (#1) phillips screwdriver or bit to avoid stripping the small screws used with the end caps.



9 Install Diffuser Lens

Press and snap in the diffuser lens.

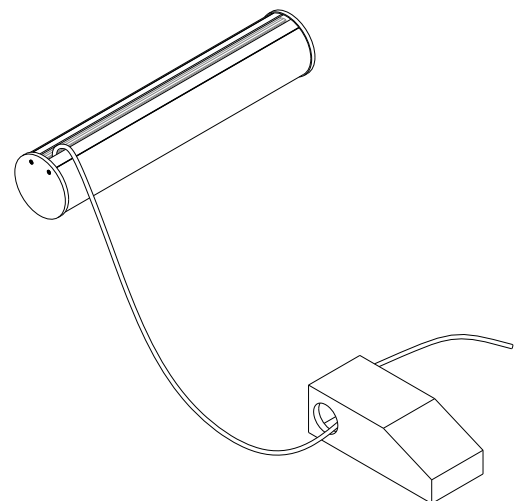


10 Run Low Voltage Wire to 24v DC Driver

- If the 24v DC driver is within 9-10 feet of the channel: The Quantum High Density Tape Light comes with 10 feet of crystal clear wire. Wire the crystal clear wire into the 24v DC driver.
- If the 24v DC driver is 10-30 feet from the channel: Use at least 18 AWG low voltage wire to extend the 10 foot crystal clear wire.
- If the 24v DC driver is more than 30 feet away, please contact our Design Department at 832-717-2710 or designs@ledinspirations.com so we may recommend the correct wire size to use.

Wire the low voltage wire from the channel into the 24v DC driver.

PRO TIP! The positive (hot) wire is marked with a white line on the crystal clear wire.



QUANTUM 2 CIRCLE 16

Cut Chart

The chart below shows optimized cut lengths that will allow the tape light to completely fill the channel and ensure no dark spots or shadows.

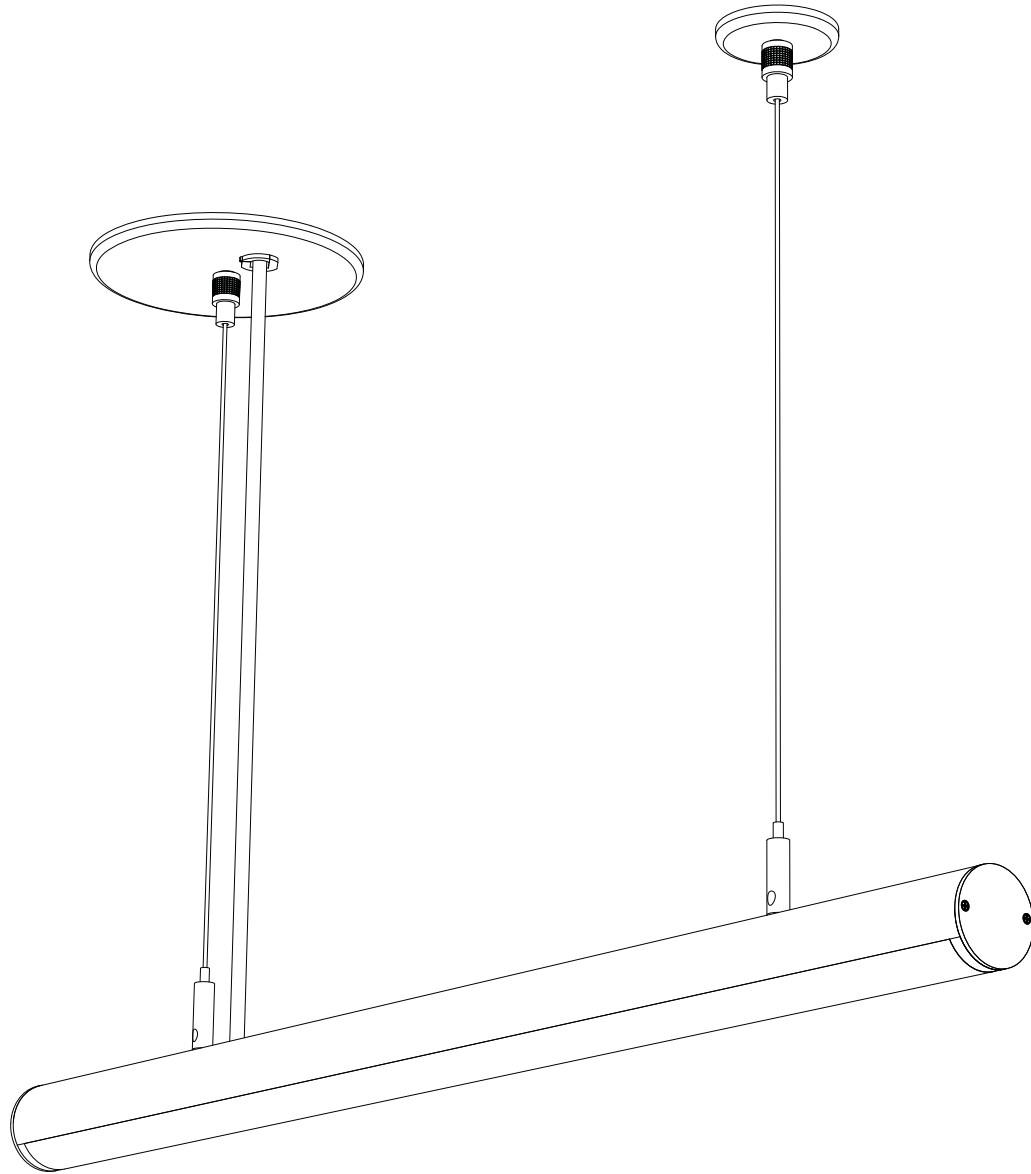
Overall Length	Cut Aluminum Length	Cut Lens Length	Cut LED Tape Light Length
0' 3-13/16"	0' 3-21/32"	0' 3-3/16"	0' 3-9/32"
0' 7-3/32"	0' 6-15/16"	0' 6-15/32"	0' 6-9/16"
0' 10-3/8"	0' 10-7/32"	0' 9-3/4"	0' 9-27/32"
1' 1-21/32"	1' 1-1/2"	1' 1-1/32"	1' 1-1/8"
1' 4-15/16"	1' 4-25/32"	1' 4-5/16"	1' 4-13/32"
1' 8-7/32"	1' 8-1/16"	1' 7-19/32"	1' 7-11/16"
1' 11-1/2"	1' 11-5/16"	1' 10-7/8"	1' 10-15/16"
2' 2-25/32"	2' 2-19/32"	2' 2-1/8"	2' 2-7/32"
2' 6-1/16"	2' 5-7/8"	2' 5-13/32"	2' 5-1/2"
2' 9-5/16"	2' 9-5/32"	2' 8-11/16"	2' 8-25/32"
3' 0-19/32"	3' 0-7/16"	2' 11-31/32"	3' 0-1/16"
3' 3-7/8"	3' 3-23/32"	3' 3-1/4"	3' 3-11/32"
3' 7-5/32"	3' 7"	3' 6-17/32"	3' 6-5/8"
3' 10-7/16"	3' 10-9/32"	3' 9-13/16"	3' 9-29/32"
4' 1-23/32"	4' 1-9/16"	4' 1-3/32"	4' 1-3/16"
4' 5"	4' 4-27/32"	4' 4-3/8"	4' 4-15/32"
4' 8-9/32"	4' 8-1/8"	4' 7-21/32"	4' 7-3/4"
4' 11-9/16"	4' 11-13/32"	4' 10-15/16"	4' 11-1/32"
5' 2-27/32"	5' 2-21/32"	5' 2-7/32"	5' 2-9/32"
5' 6-1/8"	5' 5-15/16"	5' 5-15/32"	5' 5-9/16"
5' 9-13/32"	5' 9-7/32"	5' 8-3/4"	5' 8-27/32"
6' 0-21/32"	6' 0-1/2"	6' 0-1/32"	6' 0-1/8"
6' 3-15/16"	6' 3-25/32"	6' 3-5/16"	6' 3-13/32"
6' 7-7/32"	6' 7-1/16"	6' 6-19/32"	6' 6-11/16"
6' 10-1/2"	6' 10-11/32"	6' 9-7/8"	6' 9-31/32"
7' 1-25/32"	7' 1-5/8"	7' 1-5/32"	7' 1-1/4"
7' 5-1/16"	7' 4-29/32"	7' 4-7/16"	7' 4-17/32"
7' 8-11/32"	7' 8-3/16"	7' 7-23/32"	7' 7-13/16"
7' 11-5/8"	7' 11-15/32"	7' 11"	7' 11-3/32"



Magenta = Channel
 Cyan = End Caps
 Green = Tape Light
 Yellow = Lens
 Red = Low Voltage Wire

QUANTUM 2 CIRCLE 16

Suspension Installation



Sections:

- Pg. 7 Canopy Junction Box Installation
- Pg. 8 Canopy-Drywall Ceiling Installation
- Pg. 9 Canopy-T-Bar/Drop Ceiling Installation
- Pg. 10 Cable/Gripper Spacing

QUANTUM 2 CIRCLE 16

Suspension Installation Cont.

Canopy-Junction Box

Used with either Drywall or T-Bar/Drop Ceilings, this anchors the first end of the channel to a standard junction box and provides for electrical connections.

1 Install Cable

Insert the $\frac{1}{16}$ " cable into the Cable Coupler and pull completely through.

2 Attach Crossbar

Screw the $\frac{1}{4}$ " bolt completely into the crossbar and attach the crossbar to the junction box with the bolt sticking down.

3 Connect Wires

Run the low voltage wires from the channel up through the $\frac{5}{8}$ " hole and connect to the low voltage wires from the driver. For RGB tape light, connect the low voltage wires to the RGB controller or DMX component.

4 Attach Canopy

Position the center hole of the canopy onto the $\frac{1}{4}$ " bolt and screw the cable coupler (with $\frac{1}{16}$ " cable installed) onto the $\frac{1}{4}$ " bolt.

5 Install Exit Gripper

Loosen the screw in the bottom of the Exit Gripper and slide into the slot in the rear of the Quantum channel.

NOTE: SCREWS FOR THE EXIT GRIPPERS ARE PRE-INSTALLED INTO THE REAR SLOTS OF CUSTOM CHANNELS. REMOVE THE SCREWS THAT COME INSTALLED IN THE EXIT GRIPPERS AND SCREW THE EXIT GRIPPERS INTO THE PRE-INSTALLED SCREWS.

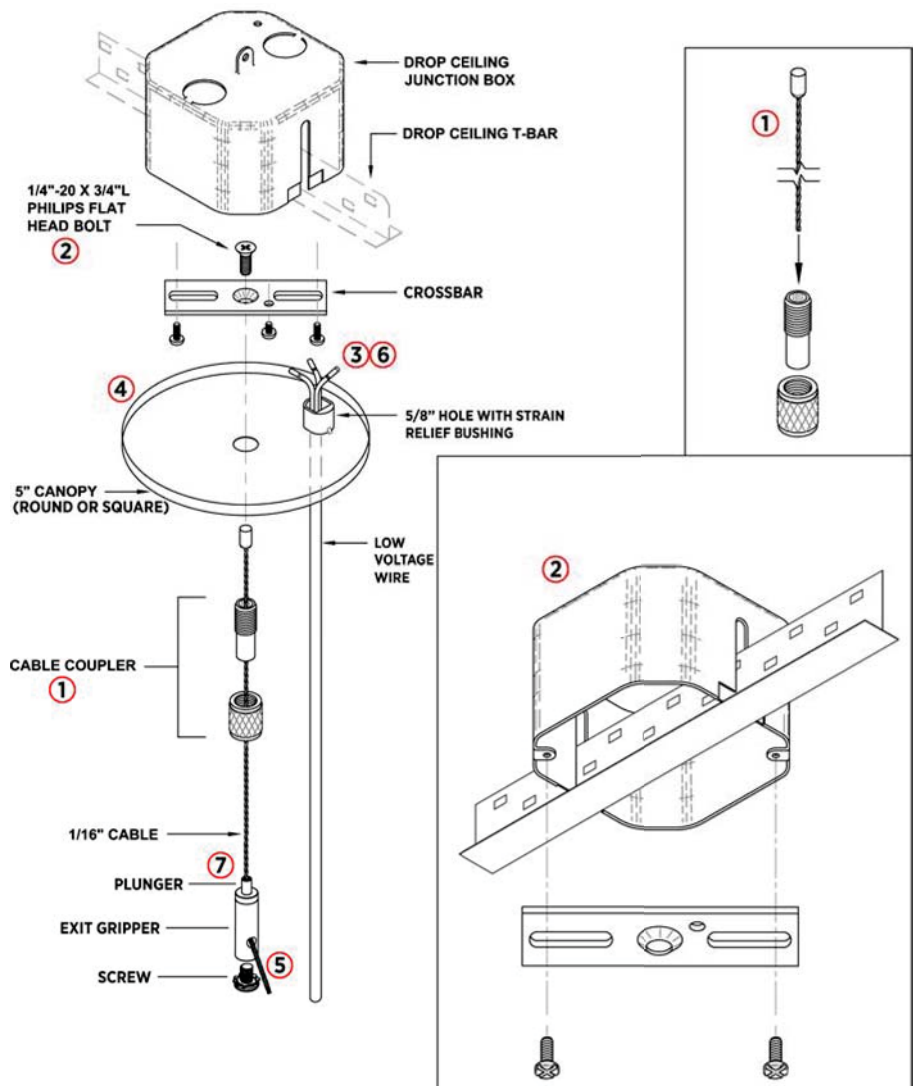
6 Install Strain Relief Bushing

Push most of the wire slack up into the junction box. Clip the Strain Relief Bushing onto the wire and push up into the $\frac{5}{8}$ " hole to secure.

7 Insert and Trim Cable

Push down on the top "plunger" of the Exit Gripper to release the locking mechanism, and slide the cable down and out through the side exit hole.

Once the fixture is leveled, trim away excess cable.



QUANTUM 2 CIRCLE 16

Suspension Installation Cont.

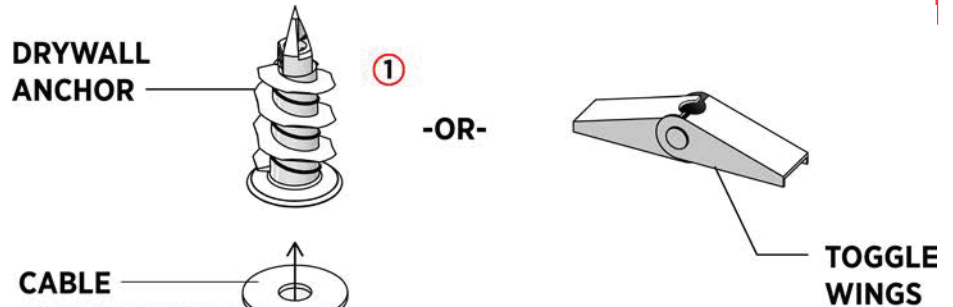
Canopy-Drywall Ceiling

Used with the Canopy-Junction Box on Page 7 to anchor the second end of the Quantum channel to a drywall ceiling.

1 Install Anchor

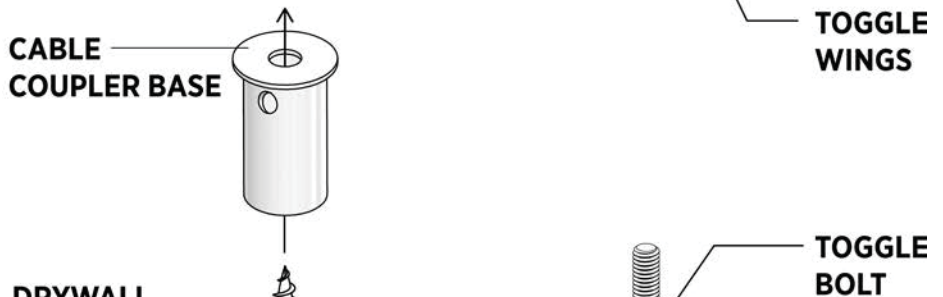
Screw Drywall Anchor into ceiling.

NOTE: FOR APPLICATIONS WHERE A DRYWALL ANCHOR IS NOT SUITABLE, THE TOGGLE BOLT/WINGS MAY BE USED.



2 Install Cable Coupler Base

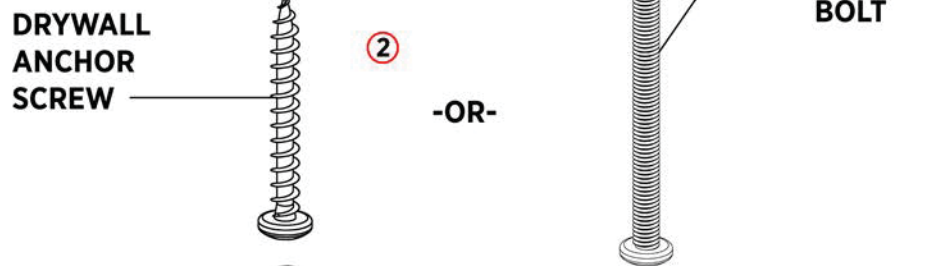
Insert the Drywall Anchor Screw into the Cable Coupler Base and screw into the Drywall Anchor.



3 Install Cable

Insert the 1/16" cable into the Cable Coupler Cap and pull completely through.

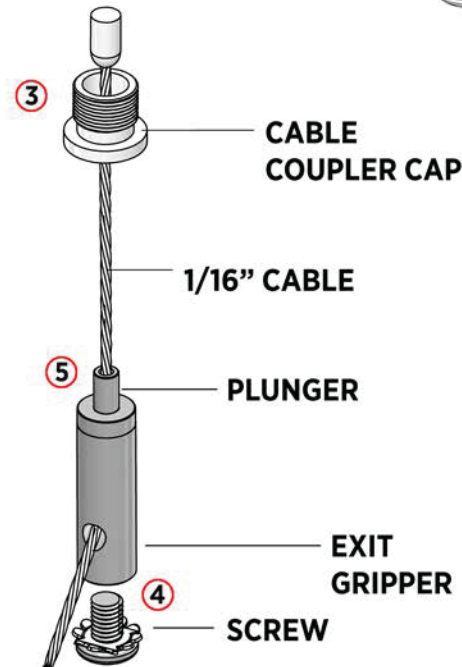
Screw the Cable Coupler Cap into the Cable Coupler Base.



4 Install Exit Gripper

Loosen the screw in the bottom of the Exit Gripper and slide into the slot in the rear of the Quantum channel.

NOTE: SCREWS FOR THE EXIT GRIPPERS ARE PRE-INSTALLED INTO THE REAR SLOTS OF CUSTOM CHANNELS. REMOVE THE SCREWS THAT COME INSTALLED IN THE EXIT GRIPPERS AND SCREW THE EXIT GRIPPERS INTO THE PRE-INSTALLED SCREWS.



5 Insert and Trim Cable

Push down on the top "plunger" of the Exit Gripper to release the locking mechanism, and slide the cable down and out through the side exit hole.

Once the fixture is leveled, trim away excess cable.

QUANTUM 2 CIRCLE 16

Suspension Installation Cont.

Canopy-T-Bar/Drop Ceiling

Used with the Canopy-Junction Box on Page 7 to anchor the second end of the Quantum channel to a T-Bar/Drop ceiling.

1 Install Clip

Attach IDS clip onto T-Bar by snapping the two pieces together.

NOTE: THE 1/4" BOLT SHOULD BE PRE-INSTALLED INTO THE IDS CLIP. IF NOT, SCREW THE 1/4" BOLT INTO THE IDS CLIP BEFORE ATTACHING TO T-BAR.

2 Install Cable

Insert the 1/16" cable into the Cable Coupler and pull completely through.

3 Attach Canopy

Position the hole of the canopy onto the 1/4" bolt and screw the cable coupler (with 1/16" cable installed) onto the 1/4" bolt.

4 Install Exit Gripper

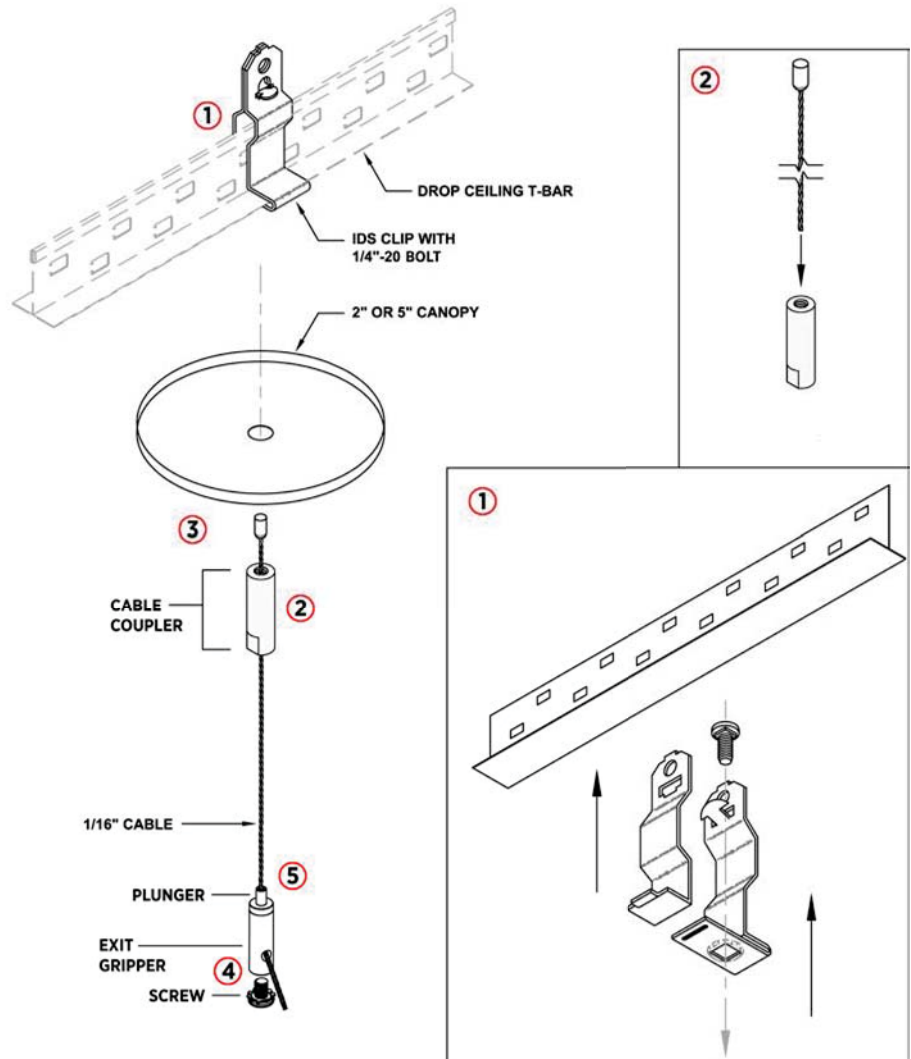
Loosen the screw in the bottom of the Exit Gripper and slide into the slot in the rear of the Quantum channel.

NOTE: SCREWS FOR THE EXIT GRIPPERS ARE PRE-INSTALLED INTO THE REAR SLOTS OF CUSTOM CHANNELS. REMOVE THE SCREWS THAT COME INSTALLED IN THE EXIT GRIPPERS AND SCREW THE EXIT GRIPPERS INTO THE PRE-INSTALLED SCREWS.

5 Insert and Trim Cable

Push down on the top "plunger" of the Exit Gripper to release the locking mechanism, and slide the cable down and out through the side exit hole.

Once the fixture is leveled, trim away excess cable.



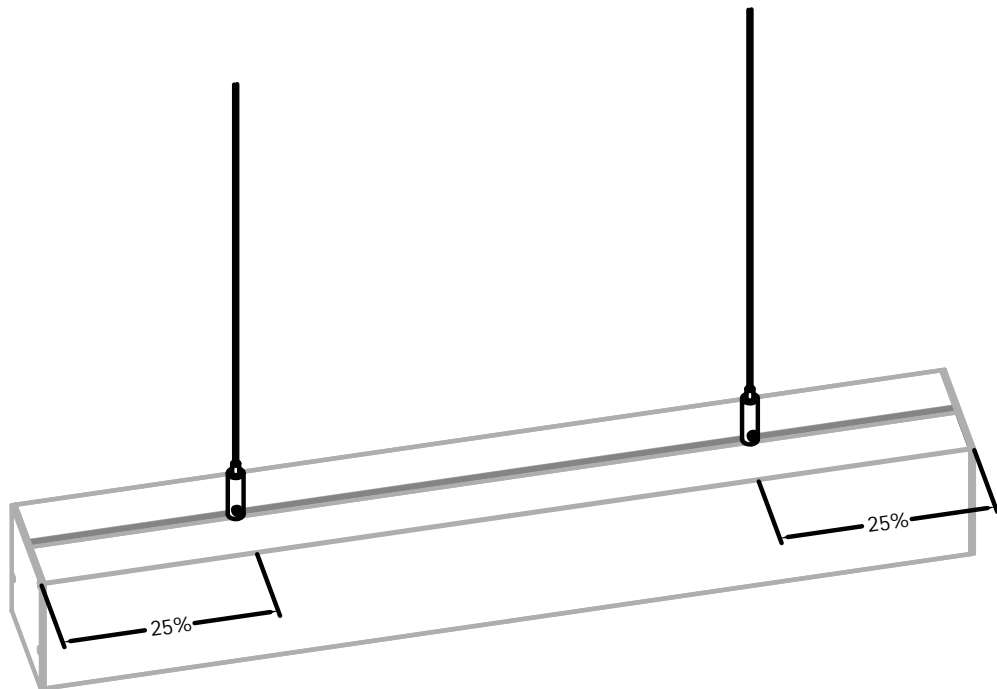
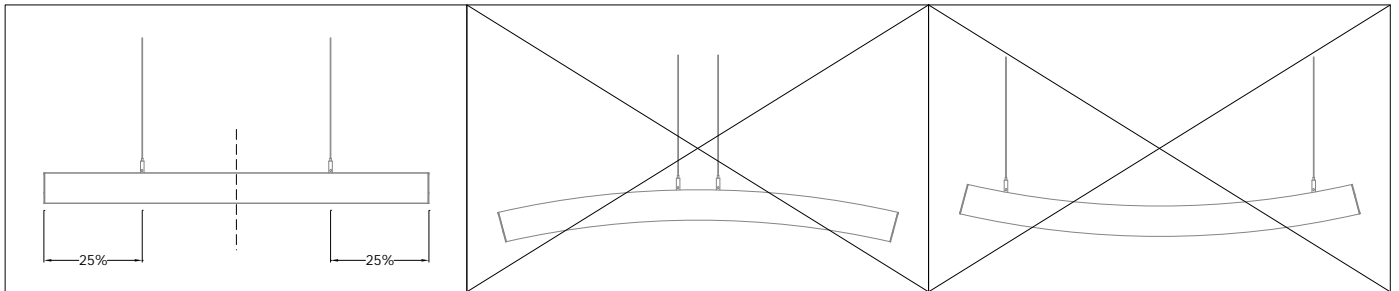
QUANTUM 2 CIRCLE 16

Suspension Installation Cont.

Cable/Gripper Spacing

* Cable/Gripper Spacing

Make sure the Exit Grippers are secured to the channel spaced 25% from each end. This will ensure that the channel will not sag or bow.



NOTES

NOTES