

# INSTALLATION INSTRUCTIONS

## VENTRIX - Suspended Channel

S2CPS01, S2CPS01.5, S2CPS04, S2CPS06, S2CPS08, S2CPS12

VENTRIX  
BY WAC

### CAUTION: TO PREVENT ELECTRICAL SHOCK, ENSURE ELECTRICITY HAS BEEN TURNED OFF AT THE CIRCUIT BREAKER BEFORE BEGINNING.

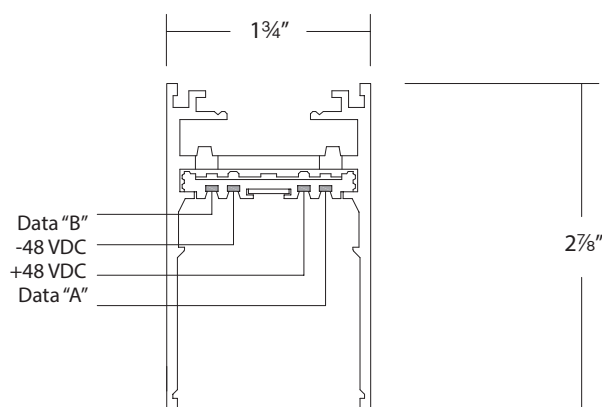
- Read all instructions before installing.
- System is intended for installation by a licensed electrician in accordance with the National Electrical Code (NEC) and local regulations.
- Retain installation instructions for future reference.
- VENTRIX fixtures and channels feature separate data and power conductor systems. During installation and use, do not short the data or power conductors together by any means or damage may occur.

**WARNING:** All parts must be used as indicated in these instructions. This product is designed for use only with the supplied parts and/or accessories designated for use by WAC Lighting. Substitution of parts or accessories not designated for use with this product by WAC Lighting could result in personal injury or property damage, and will void the warranty. Contact an authorized dealer or the manufacturer if any parts are damaged or missing.

### MISE EN GARDE: POUR ÉVITER TOUT CHOC ÉLECTRIQUE, ASSUREZ-VOUS QUE LE DISJONCTEUR SOIT MIS HORS TENSION AVANT DE COMMENCER.

- Lisez toutes les instructions avant l'installation.
- Le système doit être installé par un électricien licencié conformément au code national de l'électricité (NEC), et également aux règlements locaux.
- Lors de la manipulation du luminaire, n'appuyez pas sur les LED. Tenez-le uniquement par la base.

**ATTENTION:** Toutes les pièces doivent être utilisées comme indiqué dans ces instructions. Ce produit est conçu pour être utilisé seulement avec les pièces et/ou accessoires fournis pour être utilisés avec les produits WAC Lighting. Remplacer des pièces ou accessoires non conçus pour ce produit WAC Lighting pourrait causer des dommages corporels ou matériels et pourrait également causer l'annulation de la garantie. Veuillez contacter un revendeur autorisé ou le fabricant si des pièces manquent ou sont endommagées.



VENTRIX Channels are intended for use with WAC Lighting's VENTRIX system. Reference specific VENTRIX components instructions for complete system installation.

| SPECIFICATIONS                                                |                                              |
|---------------------------------------------------------------|----------------------------------------------|
| <b>Input:</b>                                                 | 48 VDC (Maximum 12.5A), Data via VENTRIX CPU |
| <b>Installation:</b>                                          | Dry Location, Ceiling.                       |
| *Do not install concealed or extended through building walls. |                                              |

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### VENTRIX SUSPENDED CHANNEL SAMPLE LAYOUT

#### CHOOSE YOUR CHANNELS AND CONNECTORS

- Power feed from end with S2CP-FE, at the joint of channels with S2CP-FI, or from the TRIG with S2CPS-FTRIG to energize your run.
- Support VENTRIX with cable or stem suspensions. Minimum two supports up to 8ft sections. Minimum three supports per 12ft section. Appropriate ceiling mounting hardware provided by others.
- For patterns, use the TRIG or L,T,X connectors. TRIG connector can accept as few as two and as many as six connections. Order additional TRIG connectors as needed. TRIG and L,T connectors have a switch to maintain pattern polarity.

**Note:** VENTRIX is field cut at end of run. For patterns and custom length channels, consult factory.

#### CHOOSE YOUR ELEMENTS AND/OR INDIRECT LIGHTING ELEMENTS

- Note: Suspended VENTRIX is compatible with indirect lighting by default.
- Refer to element specifications to appropriately select elements
- Total the wattage of the system

#### CHOOSE YOUR CONNECTED POWER UNIT (CPU)

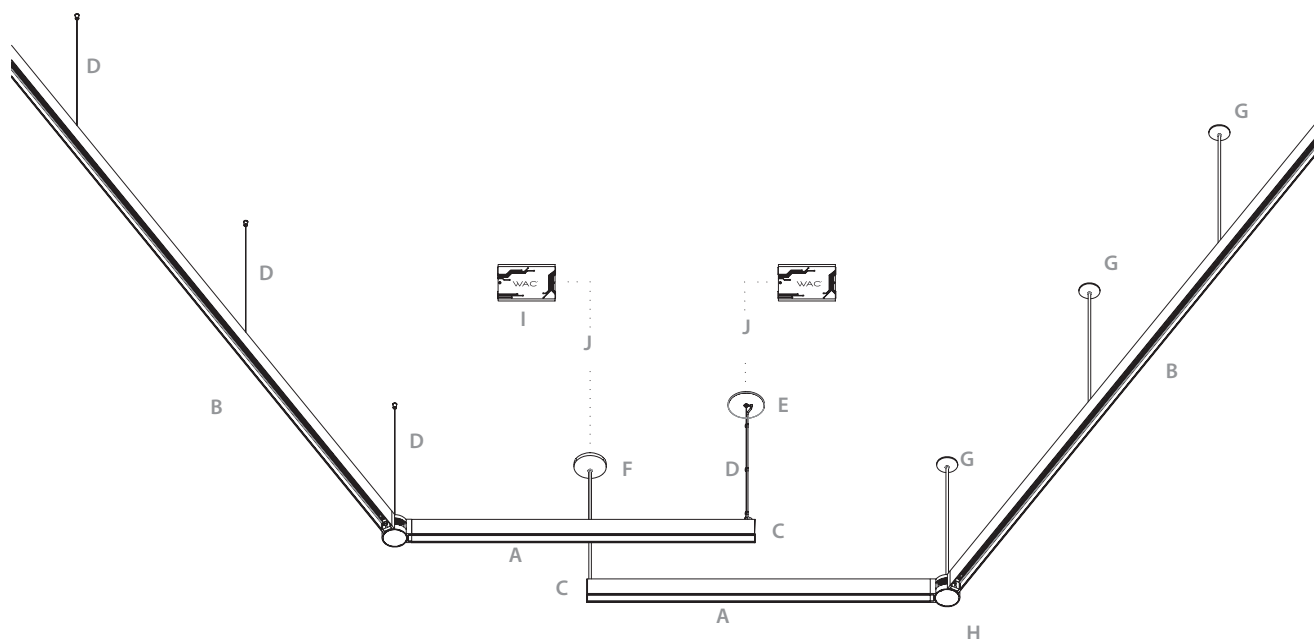
- Select remote mount or surface CPU
- Select appropriate wattage based on total system wattage.

**Note:** recommended sizing up as feasible for increased system capability.

#### ACCESSORIZE

- Add channel covers, lenses, or glare control accessories as desired.

|   |         |                        |   |                 |                      |
|---|---------|------------------------|---|-----------------|----------------------|
| A | S2CPS04 | 4FT SUSPENDED CHANNEL  | F | S2C-FS96        | STEM FEED SUSPENSION |
| B | S2CPS12 | 12FT SUSPENDED CHANNEL | G | S2C-S96         | STEM SUSPENSION      |
| C | S2CP-FE | FEED END               | H | S2CPS-TRIG      | TRIG                 |
| D | S2C-C96 | CABLE SUSPENSION       | I | S2CPU-R320-S-BK | REMOTE CPU           |
| E | S2CP-CP | CABLE CANOPY           | J | BY OTHERS       | FIELD WIRING TO CPU  |



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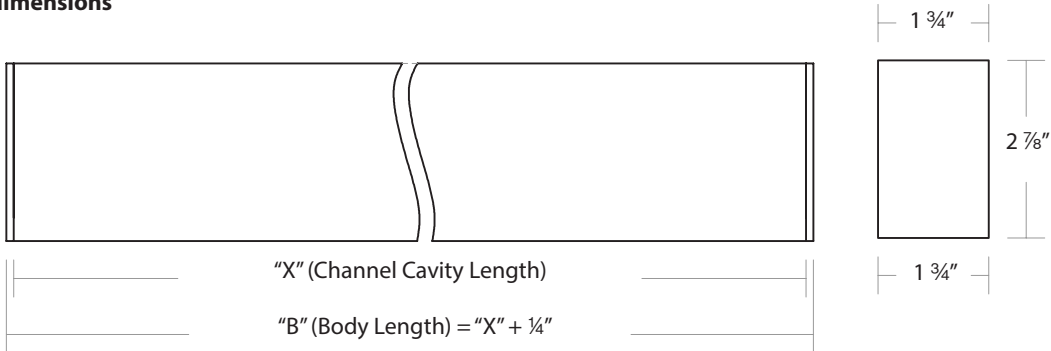
INSTALLATION INSTRUCTIONS

VENTRIX - Suspended Channel

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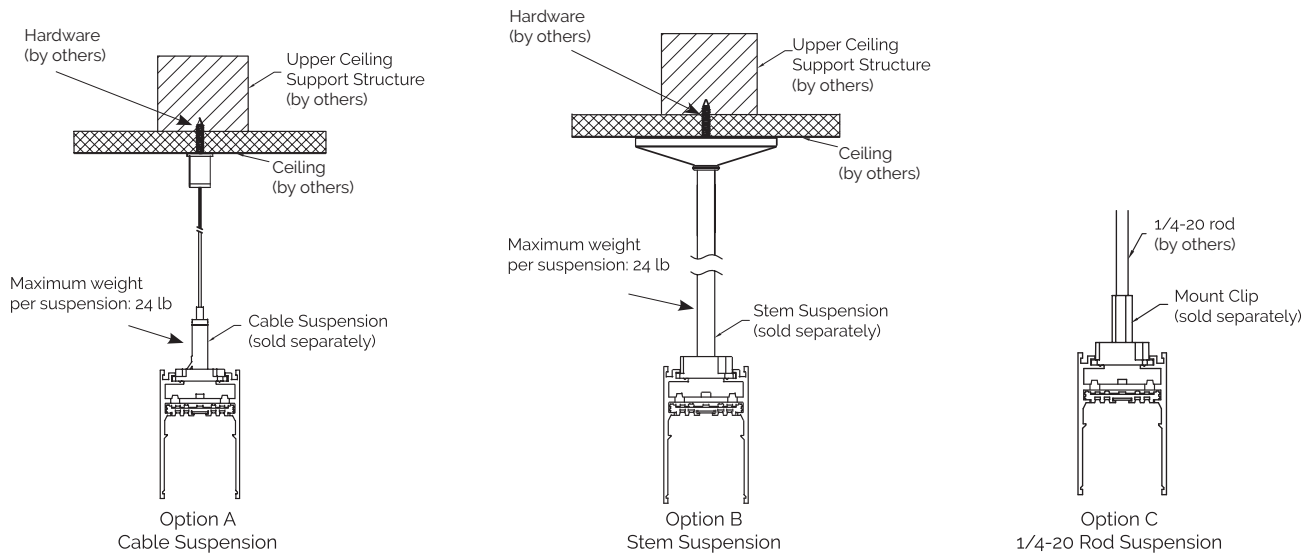
FIG. 1 Overall dimensions



| Individual Dimensions |                              |                    |
|-----------------------|------------------------------|--------------------|
| Model                 | "X"<br>Channel Cavity Length | "B"<br>Body Length |
| S2CPS01               | 12"                          | 12 1/4"            |
| S2CPS01.5             | 18"                          | 18 1/4"            |
| S2CPS04               | 48"                          | 48 1/4"            |
| S2CPS06               | 72"                          | 72 1/4"            |
| S2CPS08               | 96"                          | 96 1/4"            |
| S2CPS12               | 144"                         | 144 1/4"           |

| CONTINUOUS RUN OF CHANNEL DIMENSIONS<br>BODY LENGTH "B" = "X" + 1/4" |                              |                    |
|----------------------------------------------------------------------|------------------------------|--------------------|
| Example<br>8' + 12' RUN                                              | "X"<br>Channel Cavity Length | "B"<br>Body Length |
|                                                                      | 240"                         | 240 1/4"           |

FIG. 2 Suspended Channel Mounting Options Overview



| Minimum recommended number of support points per channel |           |         |         |         |         |
|----------------------------------------------------------|-----------|---------|---------|---------|---------|
| S2CPS01                                                  | S2CPS01.5 | S2CPS04 | S2CPS06 | S2CPS08 | S2CPS12 |
| 2                                                        | 2         | 2       | 2       | 2       | 3       |

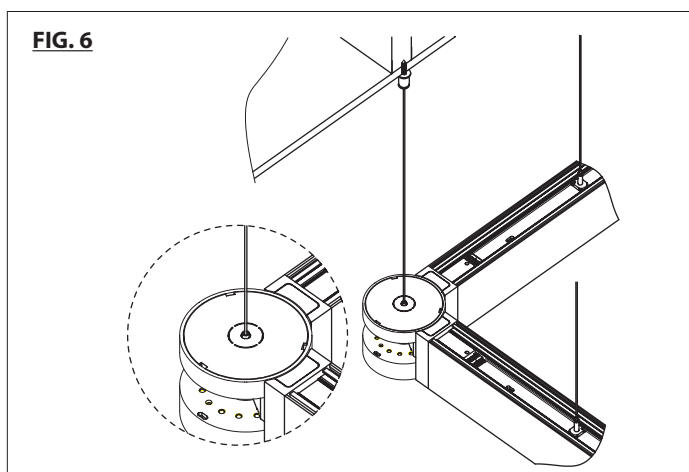
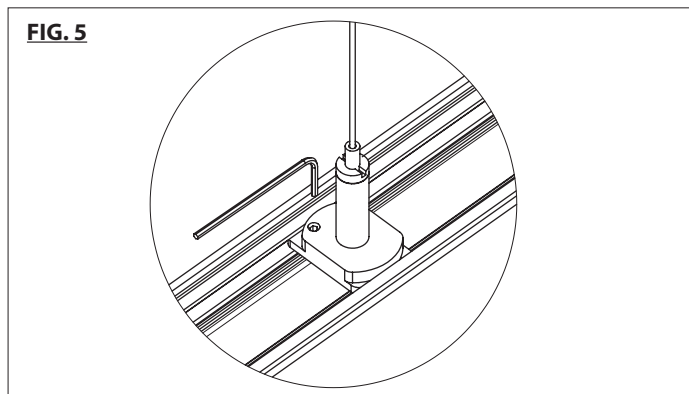
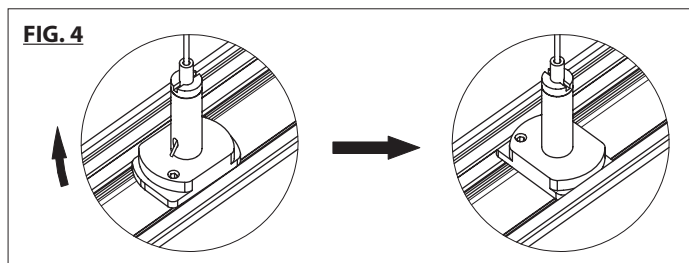
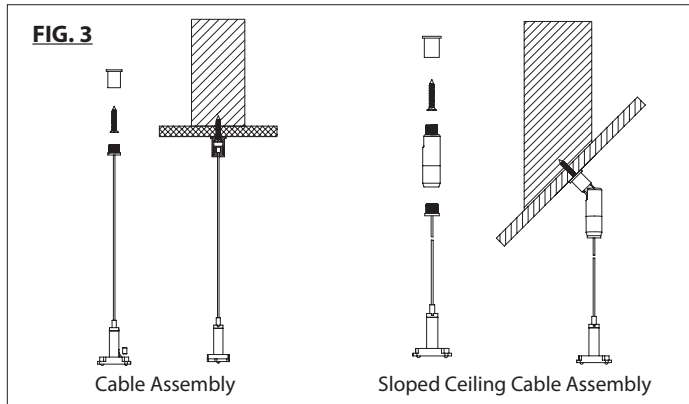
1. VENTRIX Suspended Channel is possible to install in various methods. (See FIG. 2). Installer to select appropriate hardware and confirm appropriate installation means to meet project requirements.

## INSTALLATION INSTRUCTIONS

### VENTRIX - Suspended Channel

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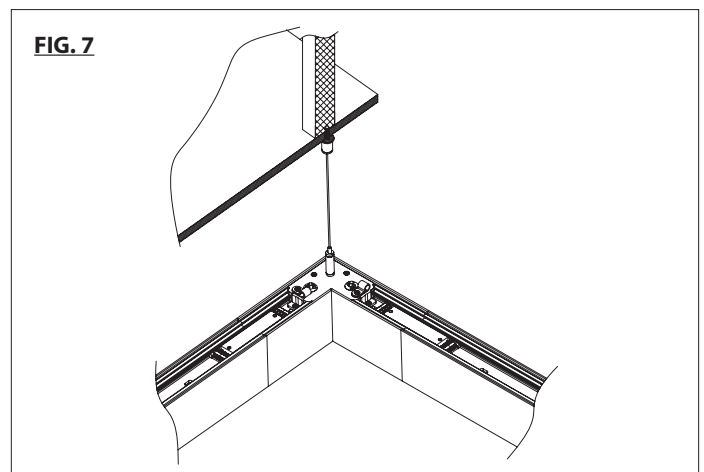
#### Option A: Cable Suspension Installation

A1. Remove top from cable suspension mount and install to upper ceiling support structure. Reinstall cable assembly onto top (See **FIG. 3**).

A2. Install the bottom of suspension cable assembly on the channel then secure it in place with allen key. Adjust cable to appropriate height using cable gripper adjustment (See **FIG. 4 & FIG. 5**).

#### Cable Suspension Installation for TRIG or L, T, X.

A3. Remove top from cable suspension mount and install to upper ceiling support structure. Reinstall cable assembly into TRIG cable adapter or L,T,X treaded base. Adjust cable to appropriate height using cable gripper adjustment (See **FIG. 6 & FIG. 7**).



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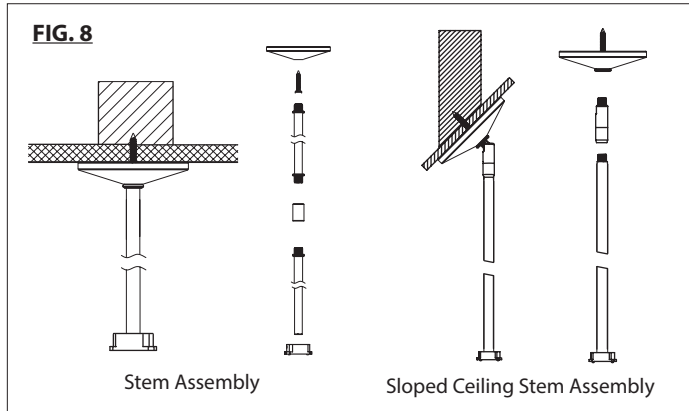
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### VENTRIX - Suspended Channel

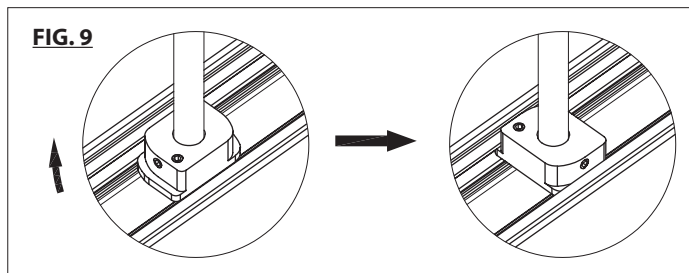
S2CPS01, S2CPS01.5, S2CPS04, S2CPS06, S2CPS08, S2CPS12

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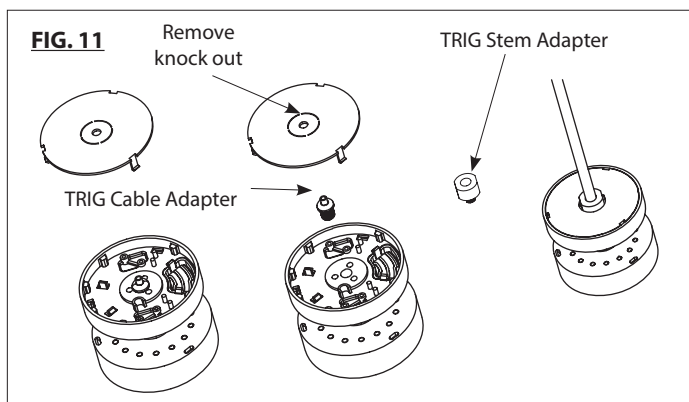
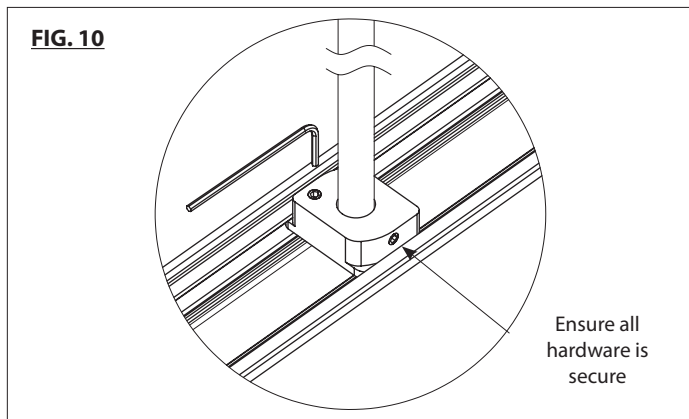


#### Option B: Stem Suspension Installation

B1. Remove top from stem mount and install to upper ceiling support structure. Cut (if necessary) bottom of stem to appropriate height. Reassemble stem assembly. Confirm all connection points are secure (See **FIG. 8**).



B2. Install the bottom of stem assembly on the channel then secure it in place with allen key (See **FIG. 9** & **FIG. 10**).



B3. Using flathead screwdriver, gently remove the TRIG top cover. To use stem mounting, replace the TRIG cable adapter with TRIG stem adapter. Confirm stem adapter is secured. Remove knockout in TRIG cover and then reinstall cover onto TRIG (See **FIG 11**).

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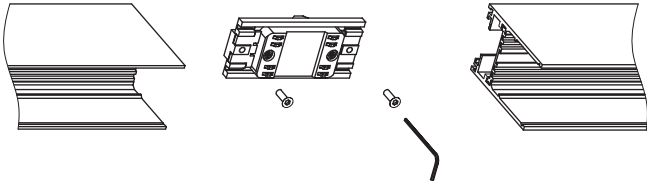
## INSTALLATION INSTRUCTIONS

### VENTRIX - Suspended Channel

S2CPS01, S2CPS01.5, S2CPS04, S2CPS06, S2CPS08, S2CPS12

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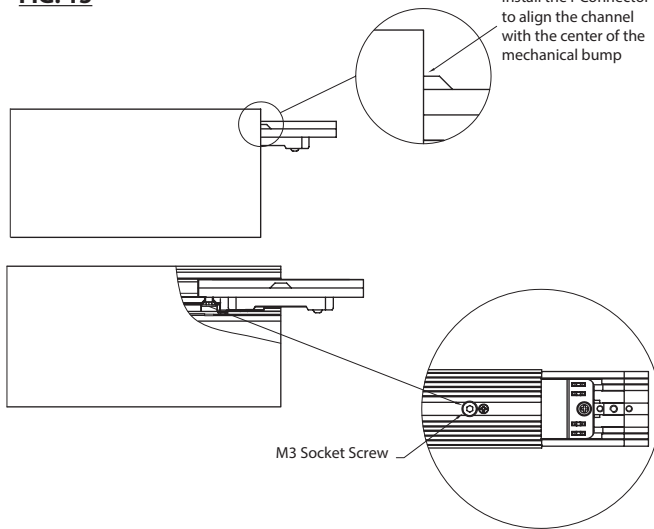
**FIG. 12**



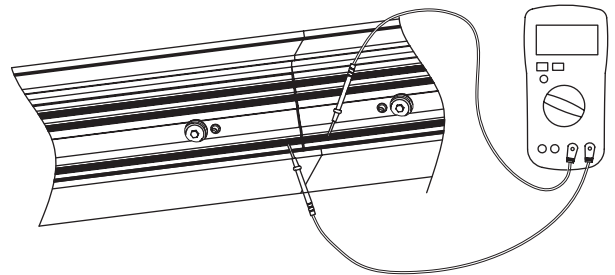
#### Channel to channel connection (Factory channel ends for uninterrupted bus bar)

1. Join channel sections mechanically and electrically with I connector (See **FIG. 12**).

**FIG. 13**

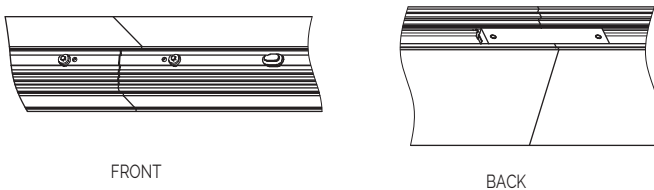


2. Insert I connector into one channel. Be sure I connector is fully inserted with mechanical bump aligned. A gentle tap with a rubber mallet may be necessary. Insert socket screw straight and gently tighten. Take caution not to strip threads. Note: Use of power tools not recommended (See **FIG. 13**).



**Note:** Confirm continuity across each of the 4 bus bars after I connector is secured and prior to completing installation.

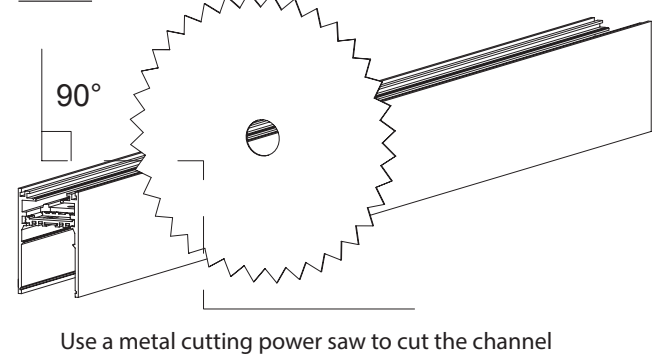
**FIG. 14**



3. Repeat for other side. Lock I connector with screws from bottom of channel.

**Note:** Use of power tools not recommended (See **FIG. 14**).

**FIG. 15**



#### Channel Cutting

1. Last channel in a run can be field cut to terminate the run. Use a chop saw with good condition blade rated for metal cutting. Confirm cut is perpendicular and remove any burrs or filings. Reattach end cap (See **FIG. 15**).

**Note:** Field cuts result in end of run condition and accepts end caps. Cut ends are not compatible with general channel connectors.

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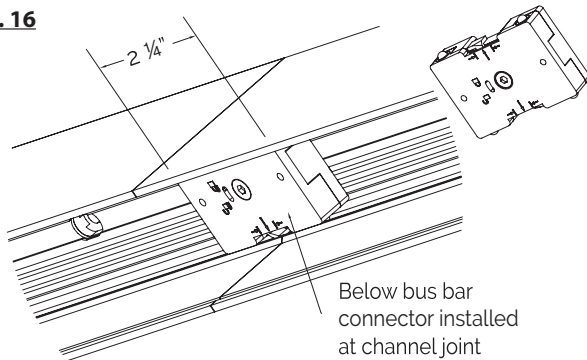
## INSTALLATION INSTRUCTIONS

### VENTRIX - Suspended Channel

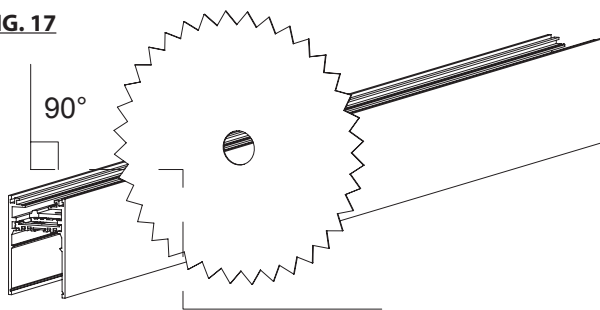
S2CPS01, S2CPS01.5, S2CPS04, S2CPS06, S2CPS08, S2CPS12

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**FIG. 16**

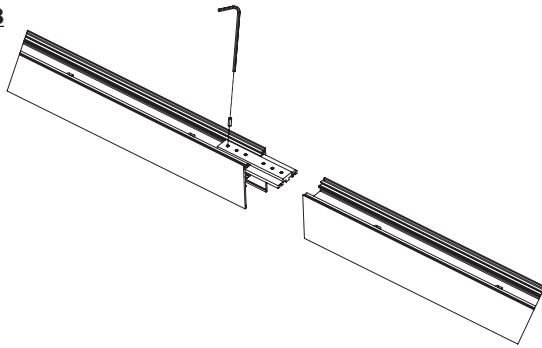


**FIG. 17**

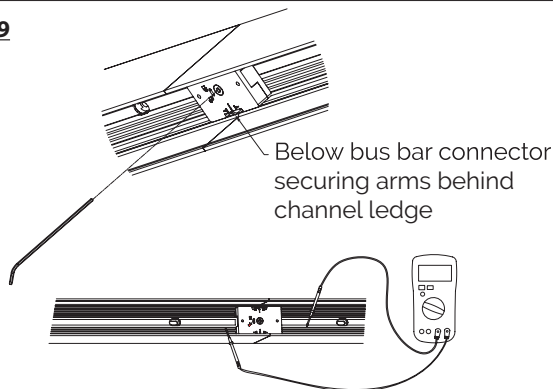


Use a metal cutting power saw to cut the channel

**FIG. 18**



**FIG. 19**



#### Channel to channel connection (Field cut channel end(s) for interrupted bus bar)

1. If necessary to field cut channel at channel to channel connection, it is possible to create joint mechanically and electrically using below bus bar I connector kit S2C-IB-BK. Note: with this setup, a connector will be installed below bus bar plane which may interfere with installation of fixture elements. Confirm this will be acceptable in project prior to proceeding (See **FIG. 16**).

**Note:** Some 2' and 4' VENTRIX fixture elements can span below bus bar connector. Reference line drawings on spec sheets.

2. Field cut appropriate channel. Use a chop saw with good condition blade rated for metal cutting. Confirm cut is perpendicular and remove any burrs or filings. (See **FIG. 17**).

3. Insert top connector (S2C-ID) into top side of channel. Position connector centered between channels and tighten all set screws. (See **FIG. 18**).

4. To make electrical connection, insert below bus bar connector into bus bar at channel joint. Center the connector in the appropriate position (channel joint is between connector arrows) and push in firmly. Securing arms should be behind channel ledge. Then, tighten central screw to lock the connector in position. Confirm connector is mechanically secure and has electrical continuity across. (See **FIG. 19**)

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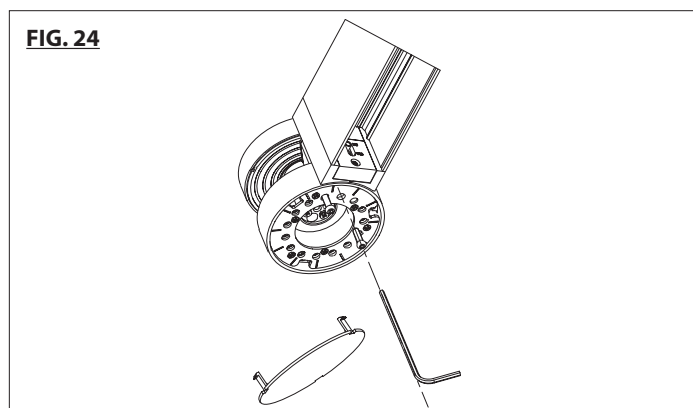
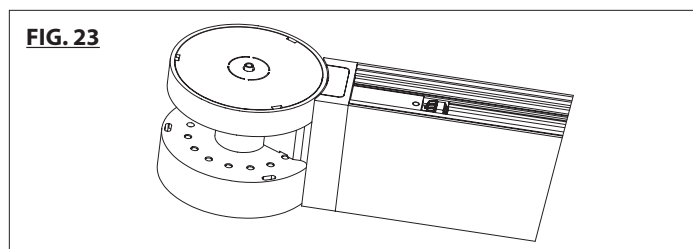
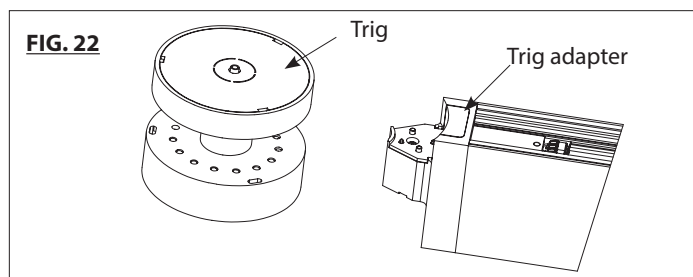
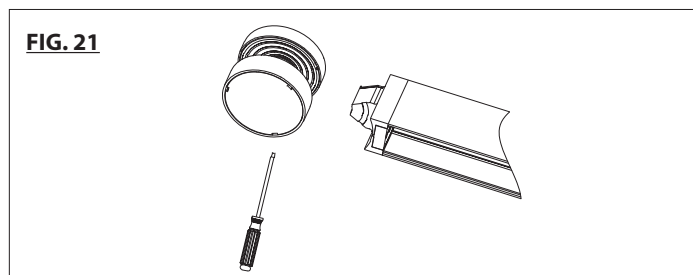
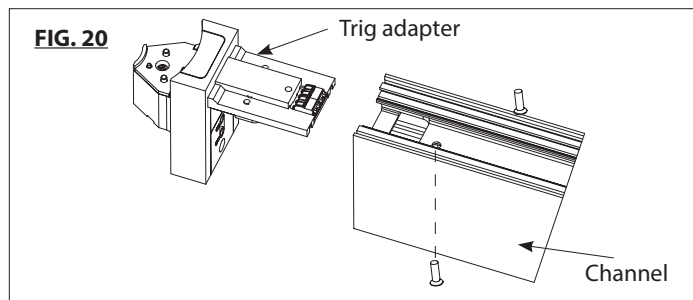
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### VENTRIX - Suspended Channel

S2CPS01, S2CPS01.5, S2CPS04, S2CPS06, S2CPS08, S2CPS12

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#### Trig and Channel connection

1. Join channel sections mechanically and electrically with TRIG connector. Be sure adapter is fully inserted with mechanical bump aligned. A gentle tap with a rubber mallet may be necessary. Insert socket screw straight and gently tighten. Take caution not to strip threads. **Note:** Use of power tools not recommended (See **FIG. 20**).
2. Open the Trig bottom cover (See **FIG. 21**).
3. Insert trig adapter and channel assembly into the trig. Slide in and be sure electrical contacts align inside trig (See **FIG 22 & FIG 23**).
4. Position assembly at desired angle orientation and then tighten screws to lock adapter securely. Reinstall trig bottom cover (see **FIG. 24**).

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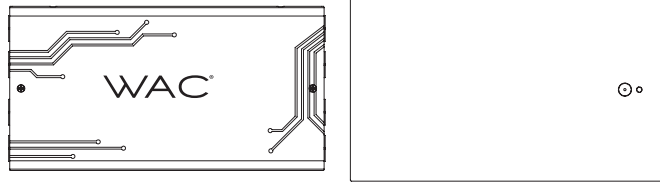
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S2CPS01, S2CPS01.5, S2CPS04, S2CPS06, S2CPS08, S2CPS12

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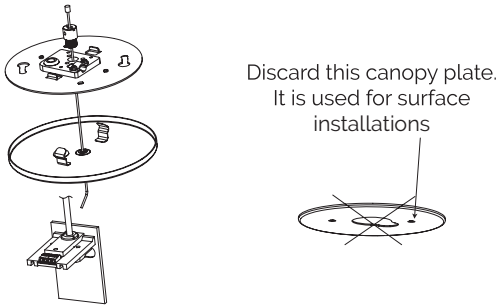
**FIG. 25**



### Channel Feed

Suspended channel can be powered with Remote or Surface Mount VENTRIX CPU. Choose which is best to meet project requirements and follow CPU instruction details (See **FIG. 25**).

**FIG. 26**

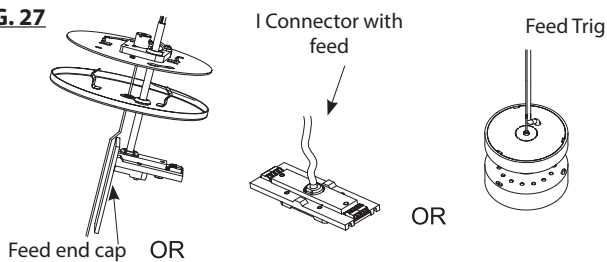


### Option A: Feed with Cable Suspension Installation

A1. Pass air craft suspension cable through canopy base and canopy cover

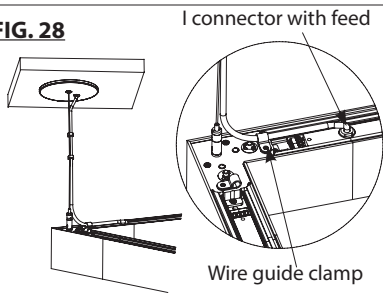
**Note:** S2CP-CP canopy kit comes with one canopy base and two canopy covers. For suspended installation, surface canopy can be discarded. (See **FIG. 26**)

**FIG. 27**

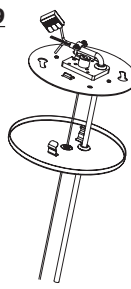


A2. Insert feed cable through canopy cover and canopy base (See **FIG. 27**).

**FIG. 28**



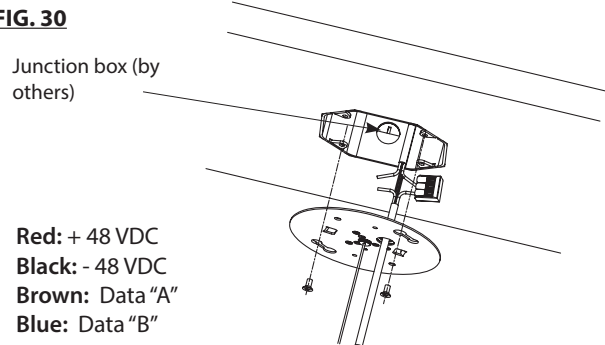
**FIG. 29**



For patterns with feed desired to be located at L,T, or X connector, use I connector with feed. (See **FIG. 28**)

A3. Adjust the cable length for desired height of channel and secure with bracket to canopy base (See **FIG. 29**).

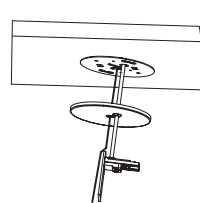
**FIG. 30**



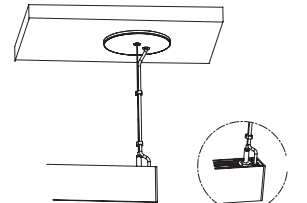
A4. Make wire connections between CPU and feed canopy. Install canopy base to ceiling junction box. Install canopy cover (See **FIG. 30 & FIG. 31**).

A5. As desired, install cable clips to finish installation (See **FIG. 32**).

**FIG. 31**



**FIG. 32**



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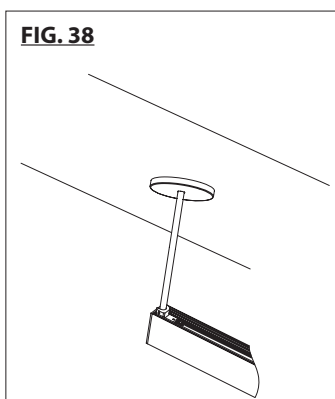
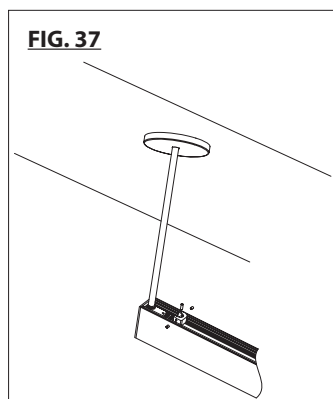
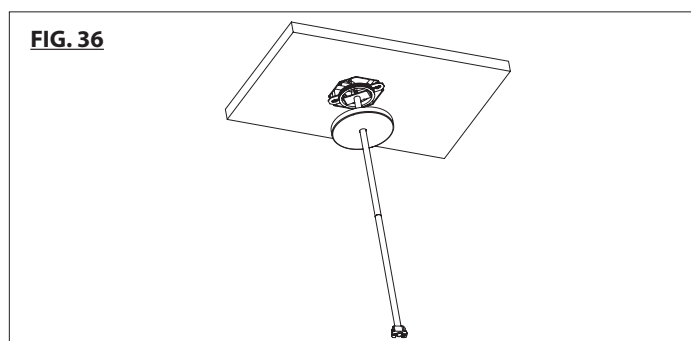
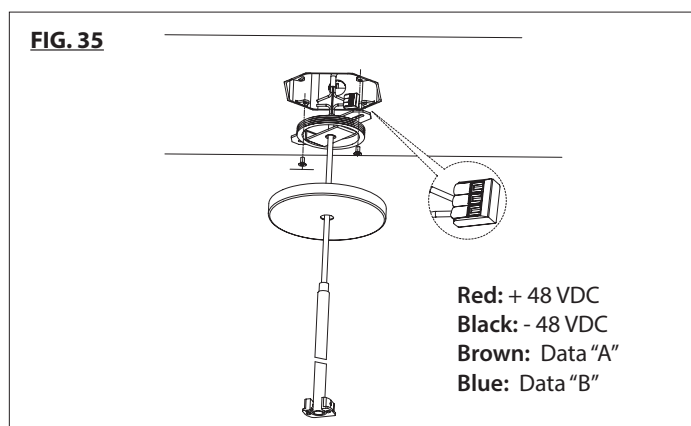
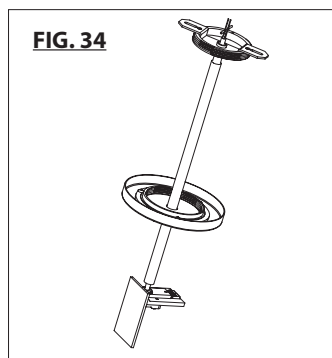
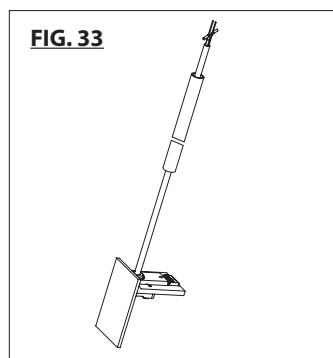
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## INSTALLATION INSTRUCTIONS

### VENTRIX - Suspended Channel

S2CPS01, S2CPS01.5, S2CPS04, S2CPS06, S2CPS08, S2CPS12

**VENTRIX**  
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#### Option B: Feed with Stem Installation

- B1. Pass feed wire through stem feed rod (See **FIG 33**).
- B2. Pass feed wire through canopy cover and mounting plate (See **FIG 31**).
- B3. Make wire connections between CPU and feed canopy. Install mounting plate to junction box (See **FIG 35**).
- B4. Raise the canopy to the mounting plate and rotate clockwise until secure to the ceiling (See **FIG. 36**).
- B5. Secure stem feed assembly to channel using stem mount clip (See **FIG. 37 & 38**).

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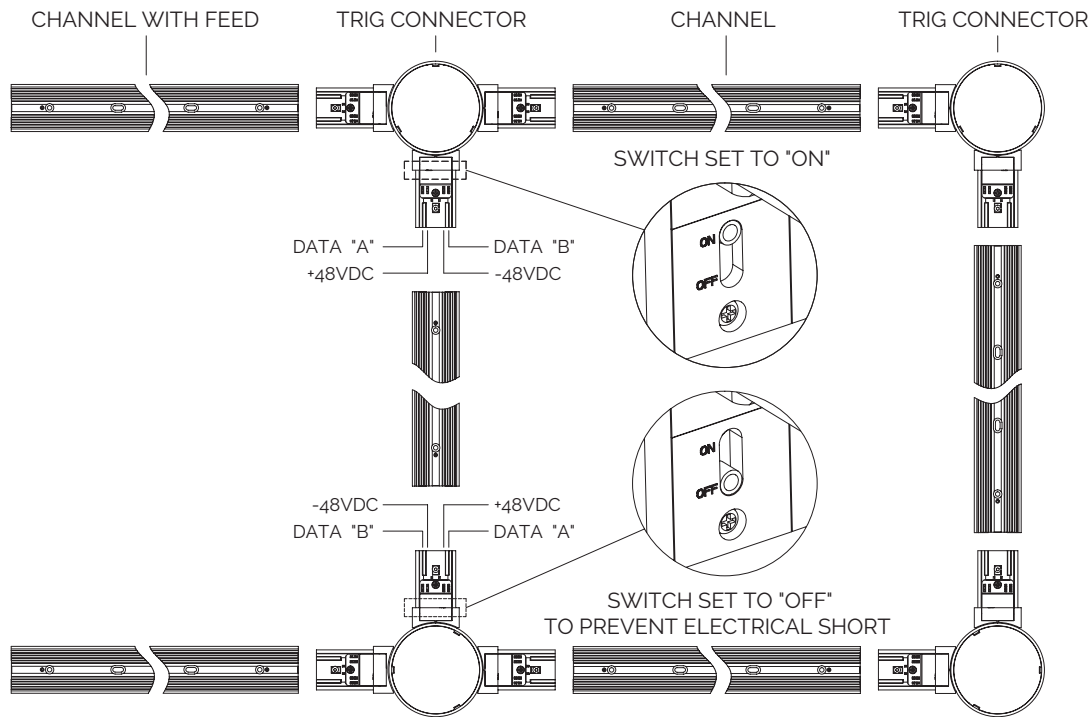
# INSTALLATION INSTRUCTIONS

## VENTRIX - Suspended Channel

S2CPS01, S2CPS01.5, S2CPS04, S2CPS06, S2CPS08, S2CPS12

**VENTRIX**  
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**FIG. 35**

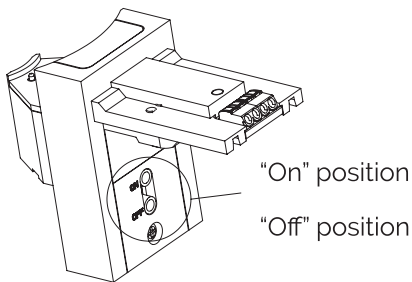


### Channels with Patterns

1. For channels consisting of patterns, it is important to confirm no electric short prior to energizing system. Review pattern and confirm if it is possible for short (See **FIG. 39**).

**Note:** **FIG. 39** represents a pattern using Trig connectors. Similar applies to patterns using L,T,X connectors.

**FIG. 36**



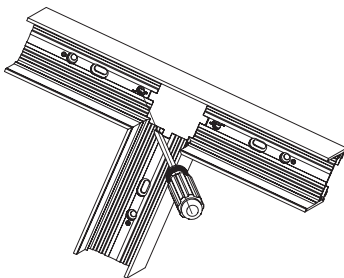
2. To avoid circuit short, there is a continuity switch on channel connectors.

For Trig patterns: Where appropriate, use the a screwdriver to gently slide switch to "off" position (See **FIG. 39**).

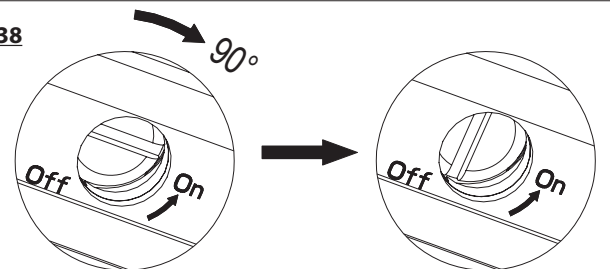
For L,T,X patterns: Where appropriate, use the a flat-blade screwdriver to align the slot with on and as pushing gently upwards turn it 90° clockwise, to turn off and disconnect continuity from that leg (See **FIG. 40**, **FIG 41**).

**Note:** L and T connectors have switching ability. X connectors do not contain switches.

**FIG. 37**



**FIG. 38**



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