

# INSTALLATION INSTRUCTIONS

## VENTRIX - Surface Mounted Channel

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



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

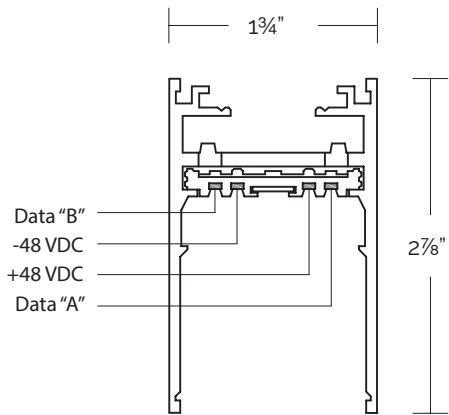
- Read all instructions before installing.
- System is intended for installation by a licensed electrician in accordance with the National Electrical Code (NEC) and local regulations.
- Retain installation instructions for future reference.
- VENTRIX fixtures and channels feature separate data and power 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.

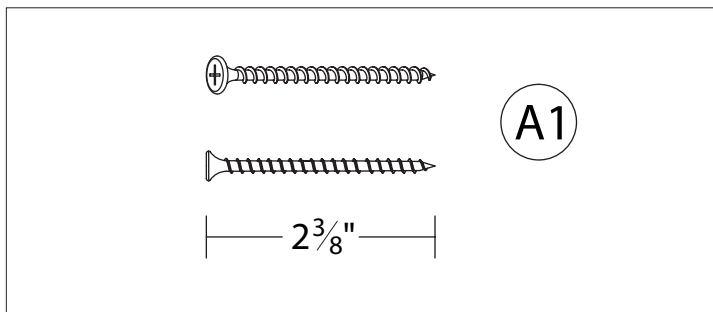
- Lisez toutes les instructions avant l'installation.
- Le système doit être installé par un électricien licencié conformément au code national de l'électricité (NEC), et également aux règlements locaux.
- Lors de la manipulation du luminaire, n'appuyez pas sur les LED. Tenez-le uniquement par la base.

**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, Drywall Ceiling and Wall.
*Do not install concealed or extended through building walls.	



Included Hardware
Mounting Screw
3 pcs (1 ft channel)
3 pcs (1.5 ft channel)
4 pcs (4 ft channel)
6pcs (6ft channel)
8 pcs (8 ft channel)
12 pcs (12ft channel)

# INSTALLATION INSTRUCTIONS

## VENTRIX - Surface Mounted Channel

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



### VENTRIX SURFACE MOUNTED CHANNEL SAMPLE LAYOUT

#### CHOOSE YOUR CHANNELS AND CONNECTORS

- Power feed from end with S2CS-FE or S2CS-FEB, or feed from the TRIG with S2CPS-FTRIG to energize your run.
- Support with screws into support or joist. Minimum two supports per 4ft or less section. Minimum three supports per 6ft, 8ft and 12ft section.
- For patterns, use the TRIG or L,T,X connectors. The TRIG connector can accept as few as two and as many as six connectors. 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 or between channels using below bus bar connector S2C-IB-BK. For patterns and custom length channels, consult factory.

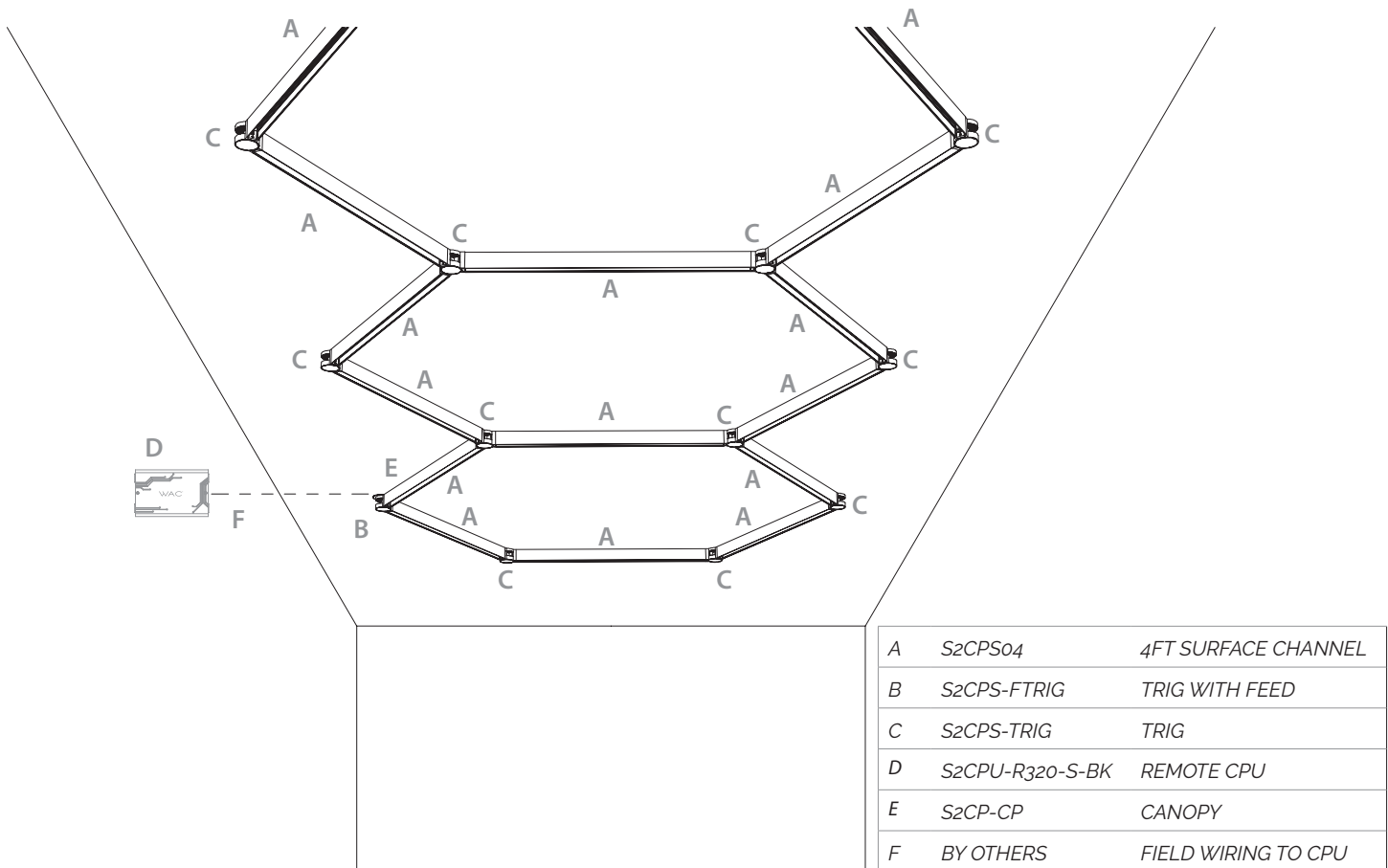
#### CHOOSE YOUR ELEMENTS

- 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 mount (using side knock out provisions) 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.



wacighting.com

Phone (800) 526.2588

Fax (800) 526.2585

Headquarters, East Manufacturing Facility

44 Harbor Park Drive

Port Washington, NY 11050

South East Manufacturing Facility

1600 Distribution Ct

Lithia Springs, GA 30122

Central Manufacturing Facility

1700 South J Elmer Freeway, Ste 100

Cedar Hill, TX 75104

West Manufacturing Facility

1750 S Archibald Ave

Ontario, CA 91761

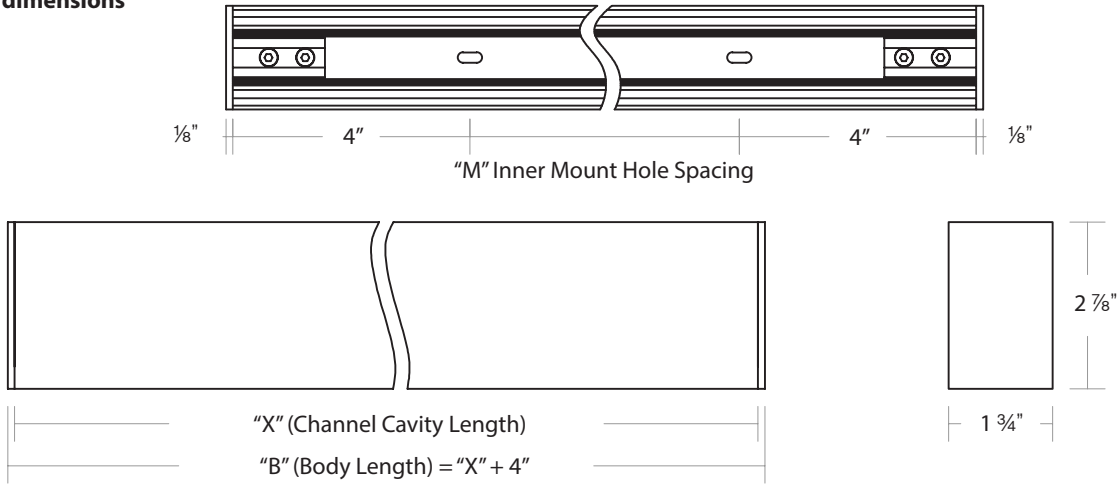
# INSTALLATION INSTRUCTIONS

## VENTRIX - Surface Mounted Channel

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



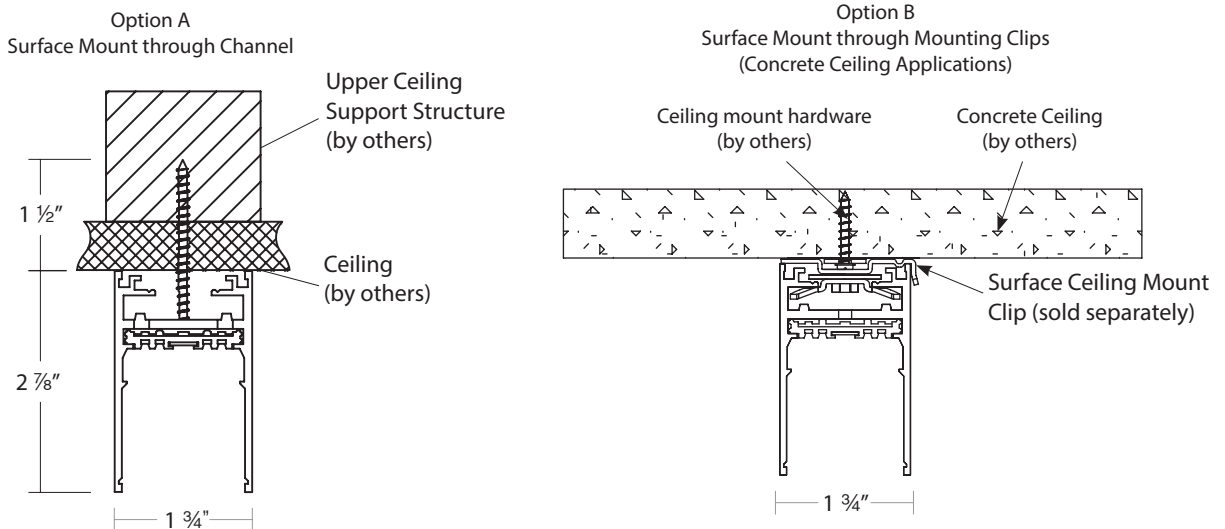
**FIG. 1 Overall dimensions**



Individual Dimensions			
Model	"X" Channel Cavity Length	"B" Body Length	"M" Inner Mount Hole Spacing
S2CPS01	12"	12 4"	4"
S2CPS01.5	18"	18 4"	10"
S2CPS04	48"	48 4"	8"
S2CPS06	72"	72 4"	8"
S2CPS08	96"	96 4"	8"
S2CPS12	144"	144 4"	8"

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

**FIG. 2 Surface Channel Mounting Option Overview**



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

VENTRIX Surface Channels to be installed to ceilings via support structure (See FIG. 2). Installer to confirm appropriate installation means to meet project requirements.

wacighting.com

Phone (800) 526.2588

Fax (800) 526.2585

Headquarters, East Manufacturing Facility

44 Harbor Park Drive

Port Washington, NY 11050

South East Manufacturing Facility

1600 Distribution Ct

Lithia Springs, GA 30122

Central Manufacturing Facility

1700 South J Elmer Freeway, Ste 100

Cedar Hill, TX 75104

West Manufacturing Facility

1750 S Archibald Ave

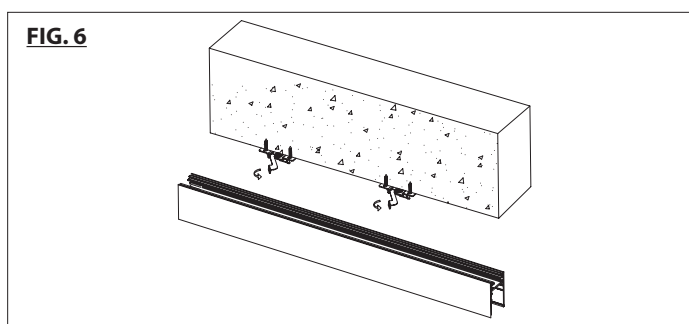
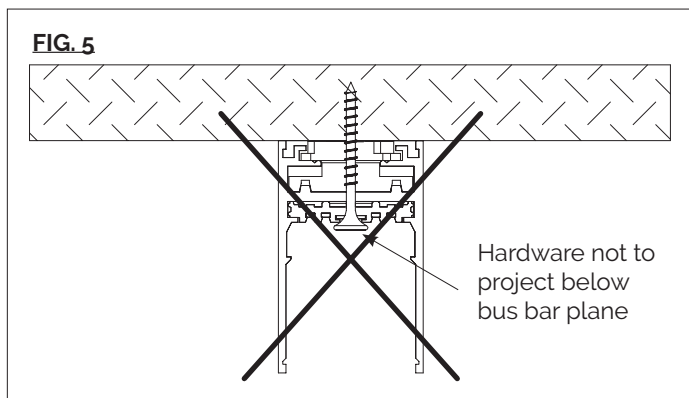
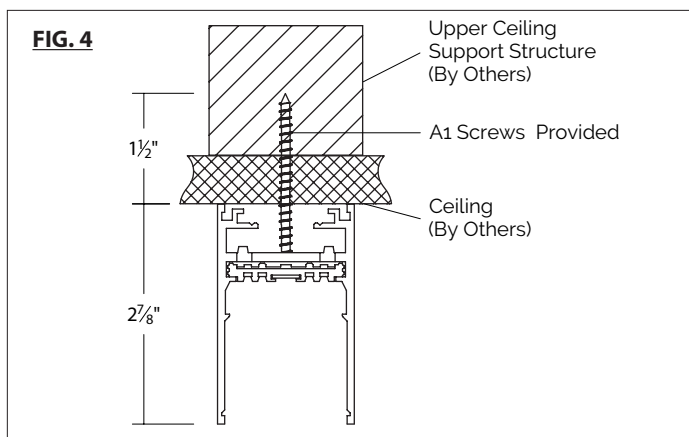
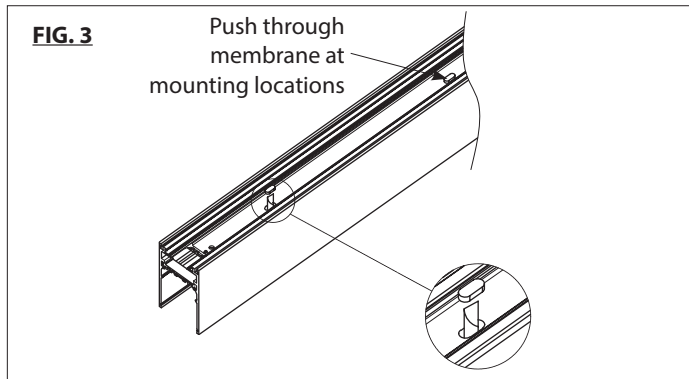
Ontario, CA 91761

# INSTALLATION INSTRUCTIONS

## VENTRIX - Surface Mounted Channel

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

**VENTRIX**  
BY WAC



### Screw Mounting to Structure Installation

1. Prepare channel at mounting locations by piercing hole membrane using a screwdriver. Take care to protect channel integrity and finish (See **FIG. 3**).
2. Secure channel to upper ceiling structure using screws provided (See **FIG. 4**).

**CAUTION:** Channels hardware mounting slots accommodate hardware of specific size. Use only provided hardware or hardware of equivalent head size. Do not use hardware which protrudes below the channel bus bar or system operation could be affected (See **FIG. 5**).

### Mounting to Concrete Installation

1. Surface Ceiling Mount Clip (p/n S2CS-CLIP) can be used with hardware (by others). Install clips in a straight line on ceiling surface using appropriate hardware. With clips handles in open position, raise VENTRIX channel to clips. Once in position, rotate clip handle to lock position, with handle parallel to channel. Confirm all is secure after installation (See **FIG. 6**).

wacighting.com

Phone (800) 526.2588

Fax (800) 526.2585

Headquarters, East Manufacturing Facility

44 Harbor Park Drive

Port Washington, NY 11050

South East Manufacturing Facility

1600 Distribution Ct

Lithia Springs, GA 30122

Central Manufacturing Facility

1700 South J Elmer Freeway, Ste 100

Cedar Hill, TX 75104

West Manufacturing Facility

1750 S Archibald Ave

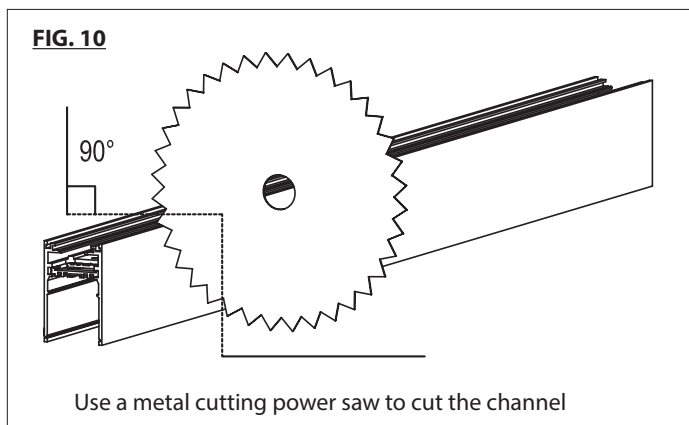
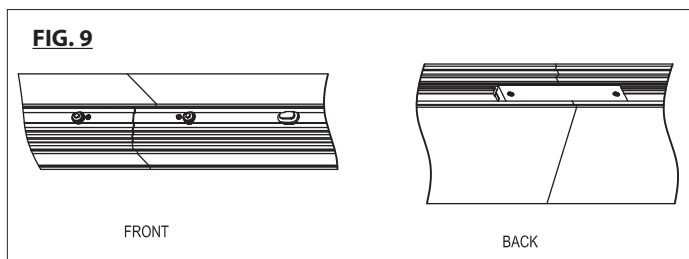
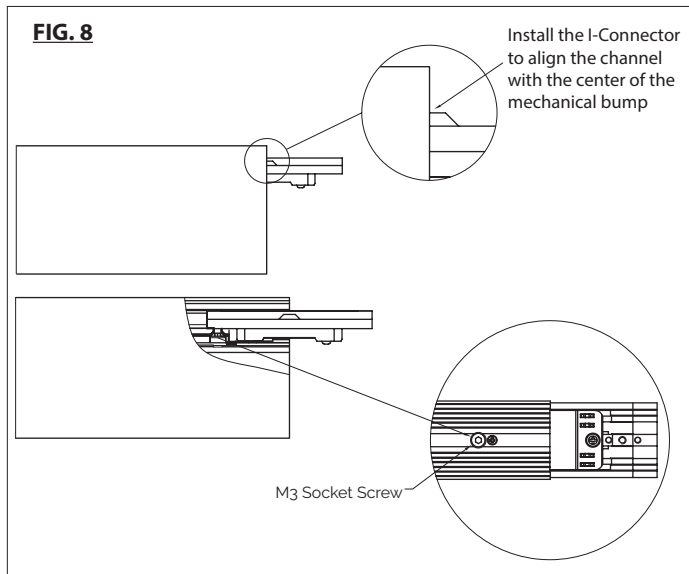
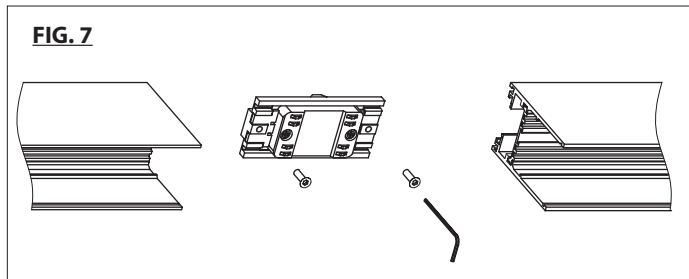
Ontario, CA 91761

# INSTALLATION INSTRUCTIONS

## VENTRIX - Surface Mounted Channel

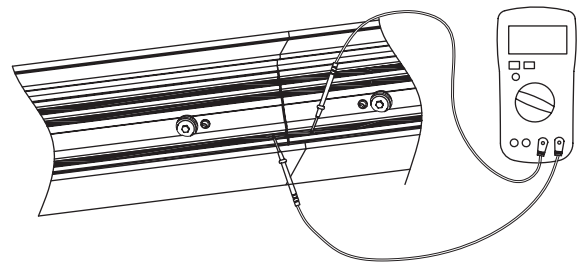
S2CPS01, S2CPS01.5, S2CPS04, S2CPS06, S2CPS08, S2CPS12

**VENTRIX**  
BY WAC



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

1. Join channel sections mechanically and electrically with I connector (See **FIG. 7**).
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. 8**).



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

3. Repeat for other side. Lock I connector with screws from bottom of channel. **Note:** Use of power tools not recommended (See **FIG. 9**).

### 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. 10**).

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

wacighting.com

Phone (800) 526.2588

Fax (800) 526.2585

Headquarters, East Manufacturing Facility

44 Harbor Park Drive

Port Washington, NY 11050

South East Manufacturing Facility

1600 Distribution Ct

Lithia Springs, GA 30122

Central Manufacturing Facility

1700 South J Elmer Freeway, Ste 100

Cedar Hill, TX 75104

West Manufacturing Facility

1750 S Archibald Ave

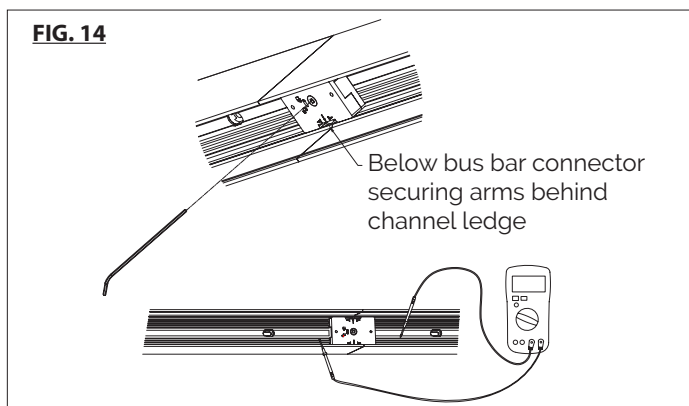
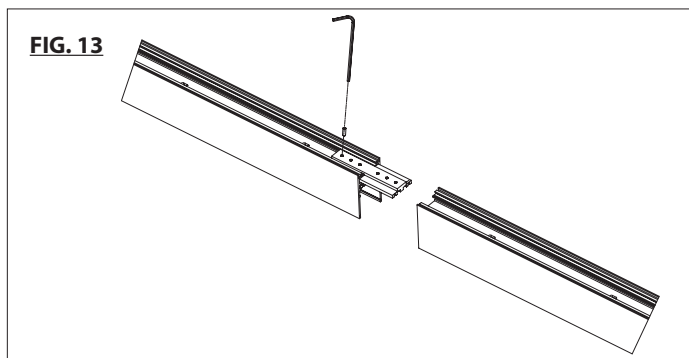
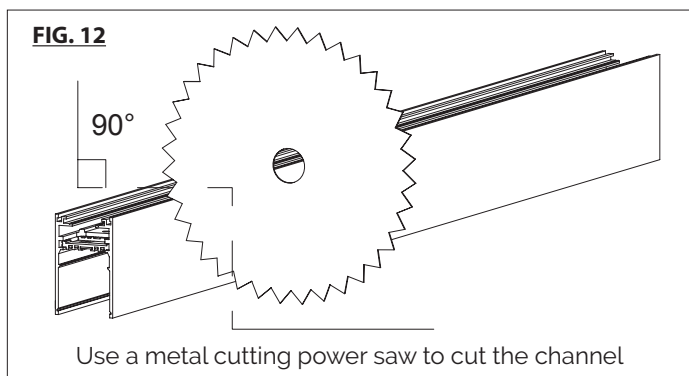
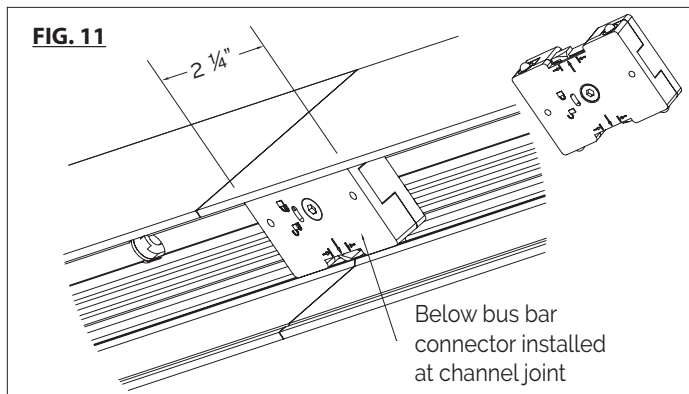
Ontario, CA 91761

# INSTALLATION INSTRUCTIONS

## VENTRIX - Surface Mounted Channel

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

VENTRIX  
BY WAC



### 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. 11**).

**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. 12**).

3. Insert top connector (S2C-ID) into top side of channel. Position connector centered between channels and tighten all set screws. (See **FIG. 13**).

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. 14**)

wacighting.com

Phone (800) 526.2588

Fax (800) 526.2585

Headquarters, East Manufacturing Facility

44 Harbor Park Drive

Port Washington, NY 11050

South East Manufacturing Facility

1600 Distribution Ct

Lithia Springs, GA 30122

Central Manufacturing Facility

1700 South J Elmer Freeway, Ste 100

Cedar Hill, TX 75104

West Manufacturing Facility

1750 S Archibald Ave

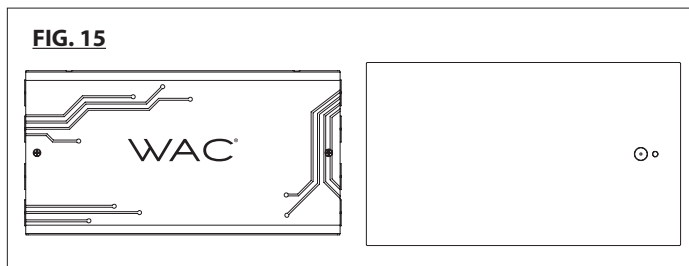
Ontario, CA 91761

# INSTALLATION INSTRUCTIONS

## VENTRIX - Surface Mounted Channel

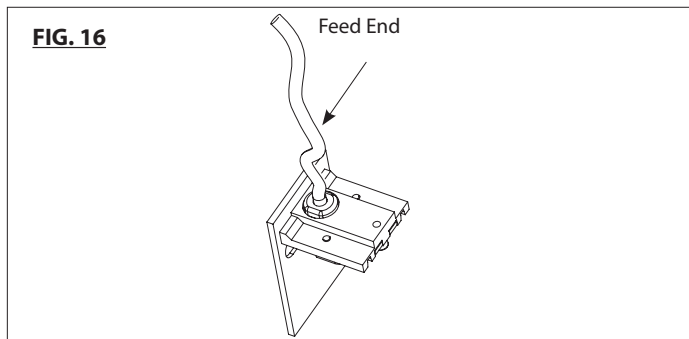
S2CPS01, S2CPS01.5, S2CPS04, S2CPS06, S2CPS08, S2CPS12

**VENTRIX**  
BY WAC



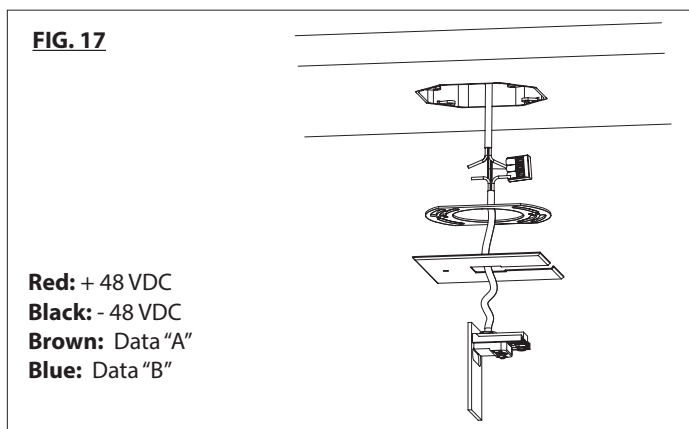
### Channel Feed

Surface 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. 15**)

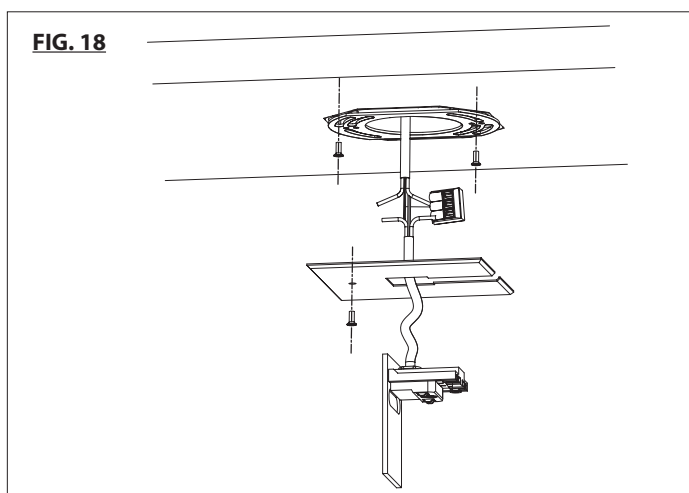


### OPTION A: Surface Mount with Feed End Cap

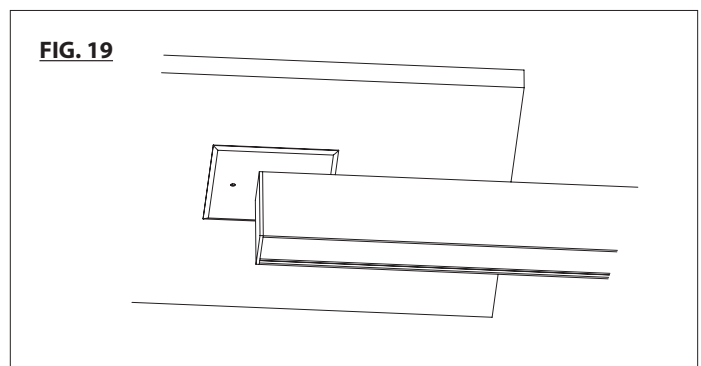
A1. Chose feed type (See **FIG. 16**).



A2. Insert feed cable through canopy cover and canopy mounting plate. Make wire connections between CPU and feed canopy. (See **FIG. 17**).



A3. Install canopy mounting plate onto to junction box. Install canopy cover. (See **FIG. 18 & FIG. 19**)



wacighting.com

Phone (800) 526.2588

Fax (800) 526.2585

Headquarters, East Manufacturing Facility

44 Harbor Park Drive

Port Washington, NY 11050

South East Manufacturing Facility

1600 Distribution Ct

Lithia Springs, GA 30122

Central Manufacturing Facility

1700 South J Elmer Freeway, Ste 100

Cedar Hill, TX 75104

West Manufacturing Facility

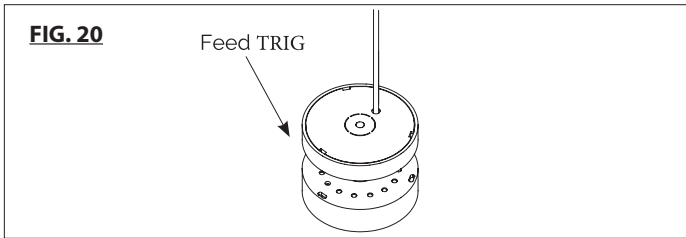
1750 S Archibald Ave

Ontario, CA 91761

# INSTALLATION INSTRUCTIONS

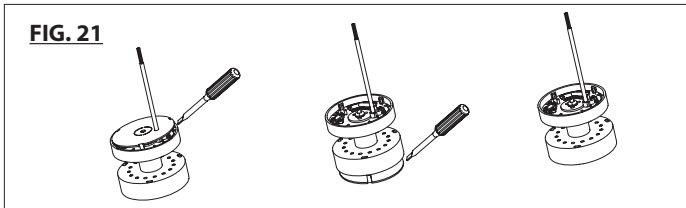
## VENTRIX - Surface Mounted Channel

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

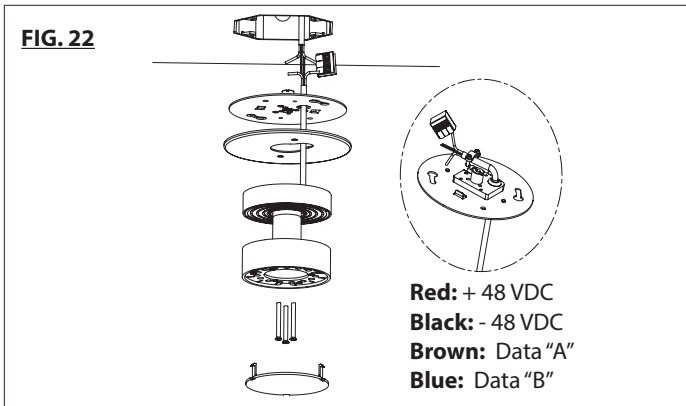


### OPTION B: Surface Mount with Feed TRIG

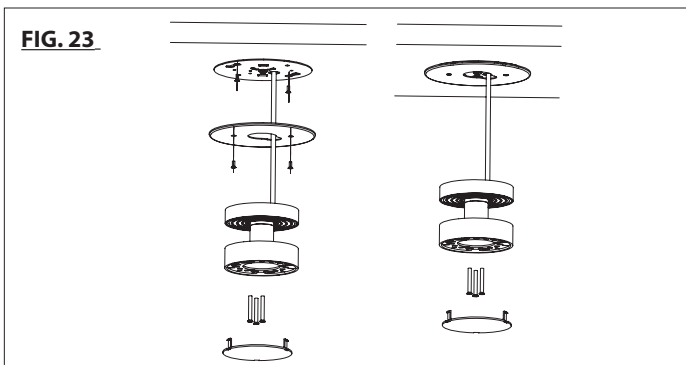
B1. Chose feed type (See FIG. 20).



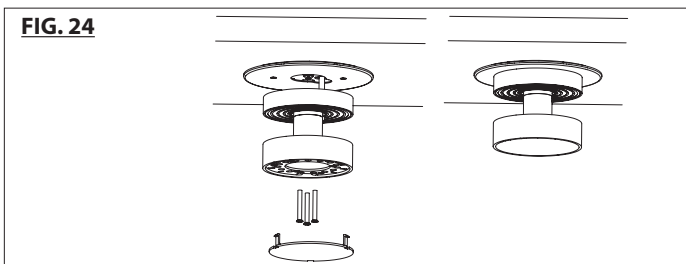
B2. Remove the bottom and top covers of TRIG (See Fig. 21)



B3. Insert feed cable through canopy cover and canopy mounting plate. Make wire connections between CPU and feed canopy. (See FIG. 22).



B4. Install canopy mounting plate onto to junction box. Install canopy cover. (See FIG. 23)



B5. Install TRIG onto to junction box with screws then Install canopy cover. (See FIG. 24)

wacighting.com

Phone (800) 526.2588

Fax (800) 526.2585

Headquarters, East Manufacturing Facility

44 Harbor Park Drive

Port Washington, NY 11050

South East Manufacturing Facility

1600 Distribution Ct

Lithia Springs, GA 30122

Central Manufacturing Facility

1700 South J Elmer Freeway, Ste 100

Cedar Hill, TX 75104

West Manufacturing Facility

1750 S Archibald Ave

Ontario, CA 91761

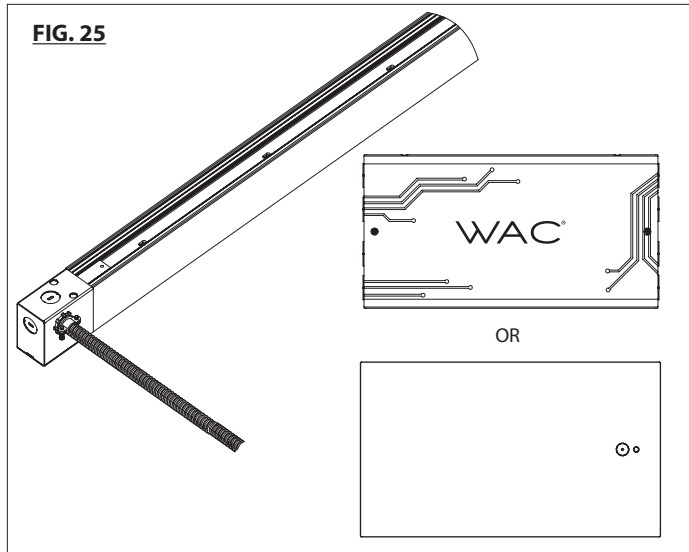


# INSTALLATION INSTRUCTIONS

## VENTRIX - Surface Mounted Channel

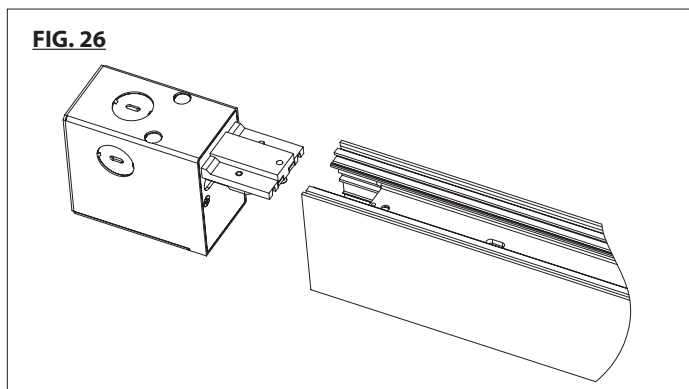
S2CPS01, S2CPS01.5, S2CPS04, S2CPS06, S2CPS08, S2CPS12

**VENTRIX**  
BY WAC

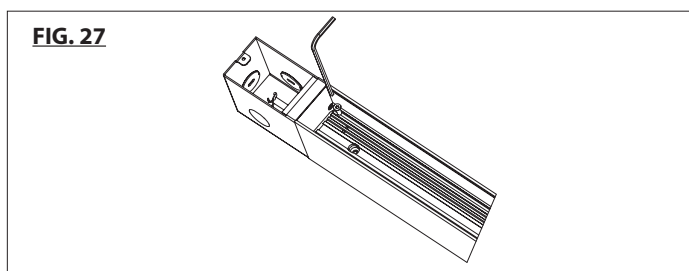


### OPTION C: Surface Mount with Junction Box Feed End

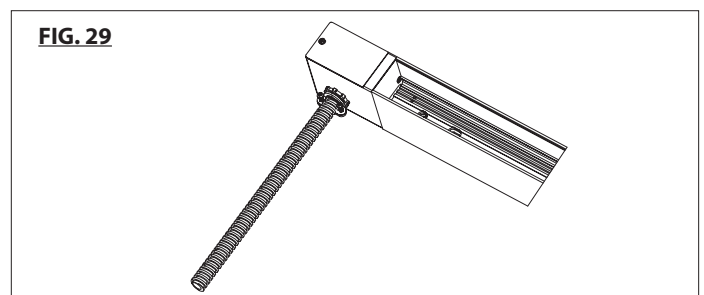
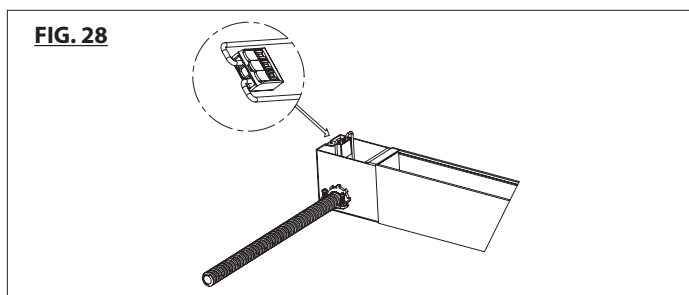
C1. Surface channel can be powered with Remote or Surface Mount VENTRIX CPU. Choose which is best to meet project requirements and follow CPU instruction details. (See **FIG 25**)



C2. Insert junction box feed end into channel. Be sure 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. 26 & FIG 27**).



C3. Insert feed cable through appropriate knockout. Make wire connections between CPU and feed end. Replace cover (See **FIG. 28 & FIG. 29**).



wacighting.com

Phone (800) 526.2588

Fax (800) 526.2585

Headquarters, East Manufacturing Facility

44 Harbor Park Drive

Port Washington, NY 11050

South East Manufacturing Facility

1600 Distribution Ct

Lithia Springs, GA 30122

Central Manufacturing Facility

1700 South J Elmer Freeway, Ste 100

Cedar Hill, TX 75104

West Manufacturing Facility

1750 S Archibald Ave

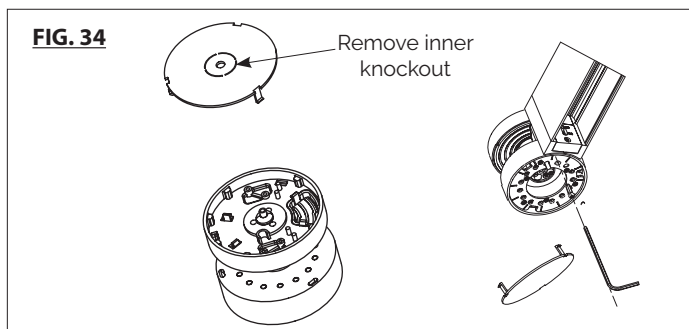
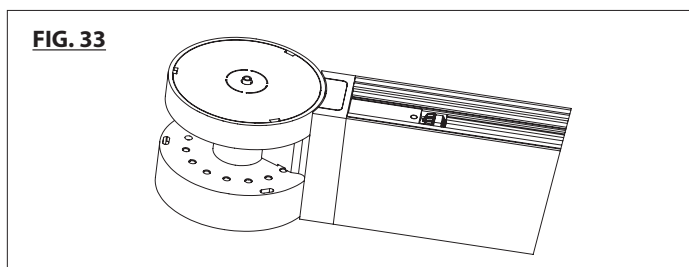
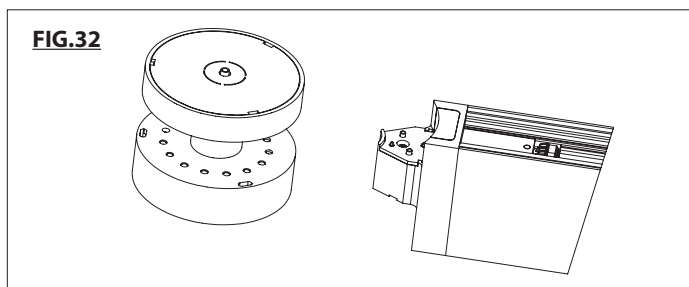
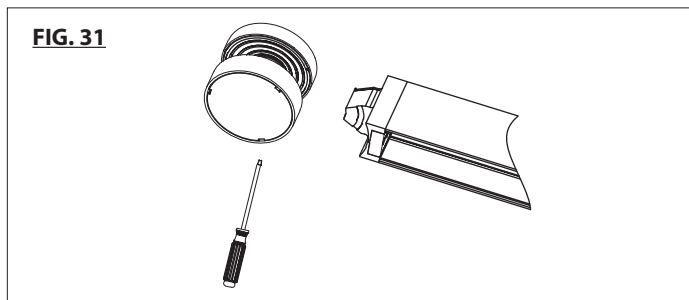
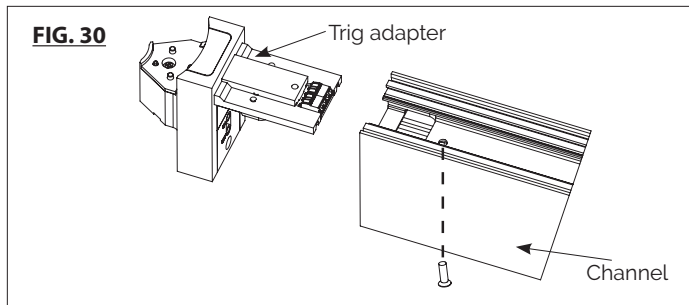
Ontario, CA 91761

# INSTALLATION INSTRUCTIONS

## VENTRIX - Surface Mounted Channel

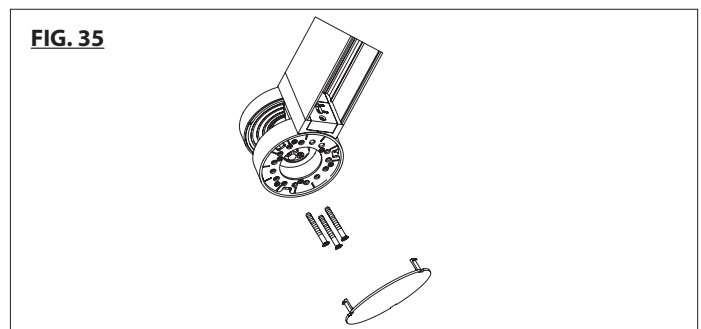
S2CPS01, S2CPS01.5, S2CPS04, S2CPS06, S2CPS08, S2CPS12

**VENTRIX**  
BY WAC



### 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. 30**).
2. Open the Trig bottom cover (See **FIG. 31**).
3. Insert trig adapter and channel assembly into the trig. Slide in and be sure electrical contacts align inside trig. (See **FIG 32 & FIG 33**)
4. Position assembly at desired angle orientation and then tighten screws to lock adapter securely. Remove top cover of Trig and gently remove inner knock out in cover to allow for ceiling mounting screws. Secure Trig to ceiling using appropriate screws. Reinstall trig bottom cover (See **FIG. 34 & FIG. 35**)



wacighting.com

Phone (800) 526.2588

Fax (800) 526.2585

Headquarters, East Manufacturing Facility

44 Harbor Park Drive

Port Washington, NY 11050

South East Manufacturing Facility

1600 Distribution Ct

Lithia Springs, GA 30122

Central Manufacturing Facility

1700 South J Elmer Freeway, Ste 100

Cedar Hill, TX 75104

West Manufacturing Facility

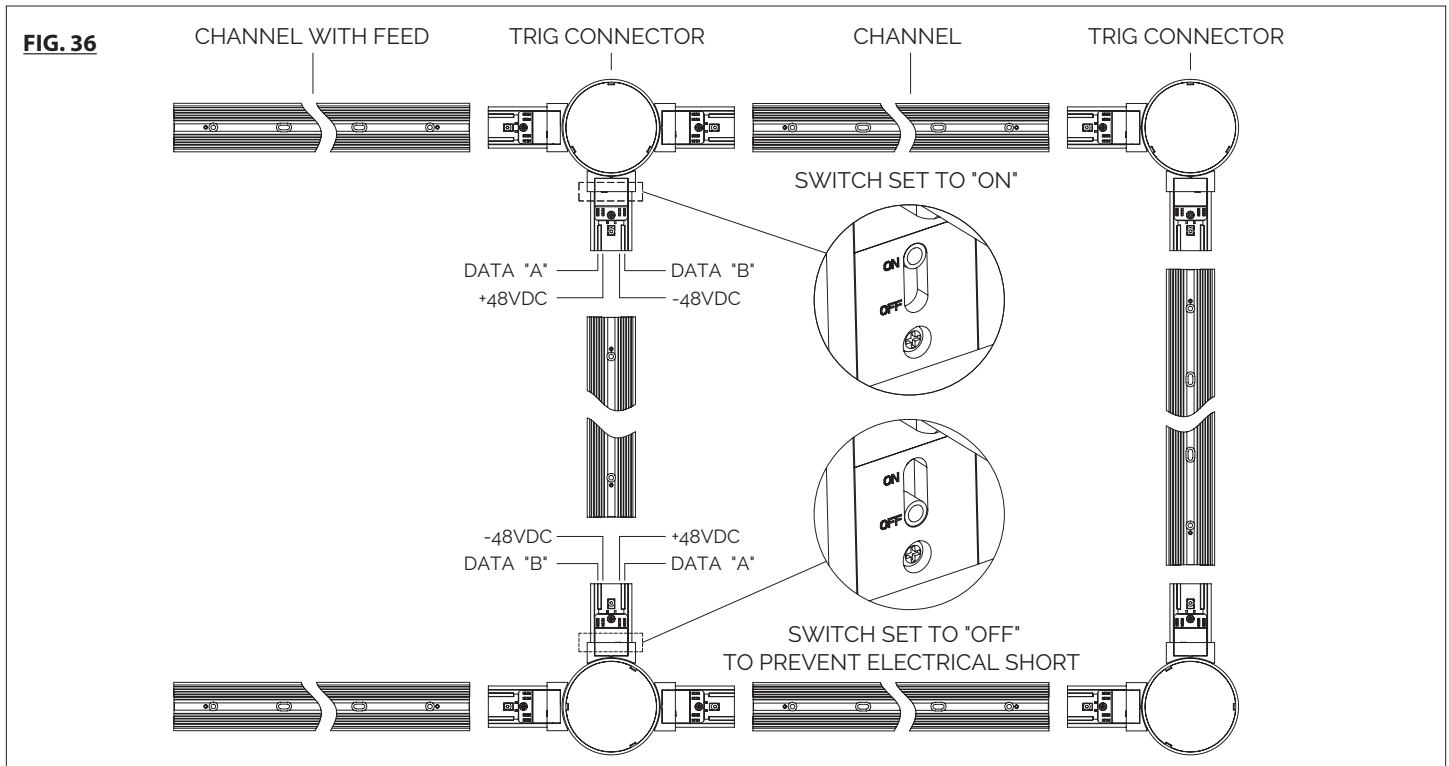
1750 S Archibald Ave

Ontario, CA 91761

# INSTALLATION INSTRUCTIONS

## VENTRIX - Surface Mounted Channel

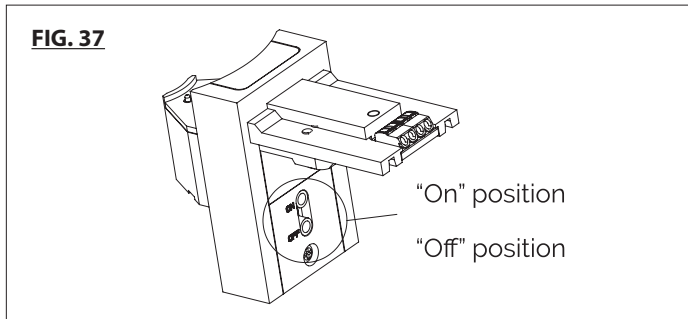
S2CPS01, S2CPS01.5, S2CPS04, S2CPS06, S2CPS08, S2CPS12



### 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. 36**)

**Note:** **FIG. 36** represents a pattern using Trig connectors. Similar applies to patterns using L,T,X connectors.

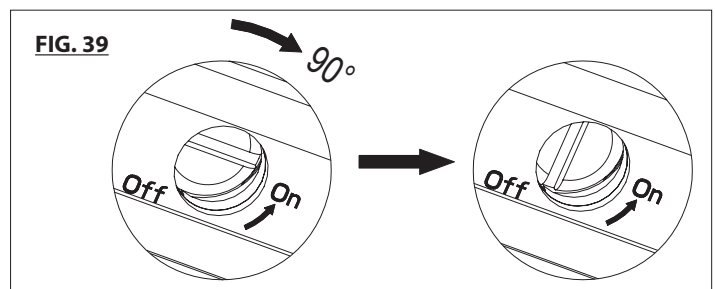
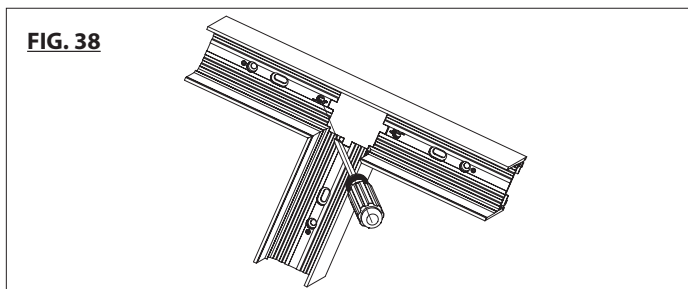


2. To avoid circuit short, there is a continuity switch on channel connectors.

For Trig patterns: Where appropriate, use the a screwdriver to gently slide switch to "off" position (See **FIG. 37**)

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. 38, FIG 39**).

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



wacighting.com

Phone (800) 526.2588

Fax (800) 526.2585

Headquarters, East Manufacturing Facility

44 Harbor Park Drive

Port Washington, NY 11050

South East Manufacturing Facility

1600 Distribution Ct

Lithia Springs, GA 30122

Central Manufacturing Facility

1700 South J Elmer Freeway, Ste 100

Cedar Hill, TX 75104

West Manufacturing Facility

1750 S Archibald Ave

Ontario, CA 91761