

## Important Safety Instructions

Lighting systems from Translite Sonoma are supplied as complete systems. Use only factory-supplied parts to preserve the validity of the UL listing and the manufacturer's warranty.

These instructions pertain to the safe installation of this Lighting System to reduce the risk of Fire or Electric Shock.

1. Read all instructions.
2. Do not install any fixture closer than six inches from any curtain or similar combustible material. Do not install this system in a damp or wet location.
3. To reduce the risk of fire and burns, do not install this lighting system where the exposed bare conductors can be shorted or contact any conductive materials. Do not conceal or extend exposed conductors through a building wall.
4. All installations must meet National Electric Code requirements. Local Codes may vary. Use minimum AWG#10 for 25 amp load on secondary side of power supply.
5. No part of the secondary circuit should be grounded.
6. NOTE: All connections on the secondary side of the power supply (the low voltage side) must be tight. Check particularly:

- a. The connections at the power supply
- b. The power feed from the power supply that connects to the lighting system

Most problems with low voltage lighting systems are due to poor or loose connections at the two points described above. Bad connections can cause overheating and a potential fire risk.

7. Turn off electrical power before modifying the lighting system in any way.

## Save These Instructions

**Translite Sonoma**      **[www.translitesonoma.com](http://www.translitesonoma.com)**

22678 Broadway, Suite One : Sonoma, California 95476

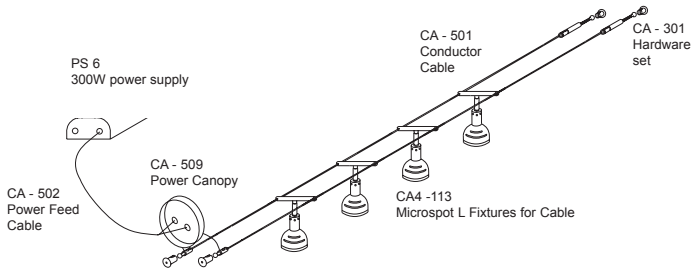
Toll free 888.999.4540 : Fax 707.996.6926

We reserve the right to change details of design, materials and finish.

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**Translite Sonoma system hardware is intended for installation in accordance with the National Electric Code and local regulations. To ensure full compliance with local codes and regulations, check with your local electrical inspector before installation.**

# Cable System Installations



1. Match all items shipped to the packing slip.  
Call Translite Sonoma (888) 999-4540 with any questions or to report any discrepancies.

2. **Install the power supply(ies).** Refer to the separate booklet: Power Supply Installation Guide to correctly install and set-up power supplies for proper functioning.

3. **Install Power Feed Device.** There are several options that may have been chosen by the lighting designer or client. For Wall to Wall installations - Options include:

<b>CA - 507</b> Power Bolts	<b>CA - 508</b> Power Plate	<b>CA - 509</b> Power Canopy
<b>CA - 510</b> Double Power Canopy	<b>CA - 511</b> Isolator Pair	<b>CA - 309</b> Conductive Inline Turnbuckle Pair

For Ceiling Mounted installations - Options include:

<b>CA - 507</b> Power Bolts	<b>CA - 509</b> Power Canopy	<b>CA - 510</b> Double Power Canopy
<b>CA - 319</b> Power Ceiling Anchor	<b>CA - 523</b> Heavy Duty Ceiling Bracket	

Refer to the Hardware pages to find specific installation instructions for each power feed.

4. **Install the Hardware anchors.** Refer to the Hardware pages to find specific installation instructions for each anchor. For Wall to Wall installations - Options include:

<b>CA - 301</b> Hardware set	<b>CA - 305</b> Power Hardware set	<b>CA - 308</b> Power Anchor Pair
<b>CA - 306</b> Double Turnbuckle Hardware set		

For Ceiling Mounted installations - Options include:

<b>CA - 314</b> Ceiling Hardware set	<b>CA - 315</b> Ceiling Power Hardware set
<b>CA - 316</b> Ceiling Turnbuckle Hardware set	

5. **Attach and tighten conductor cables.** See Notes on Cable System page for specifics.

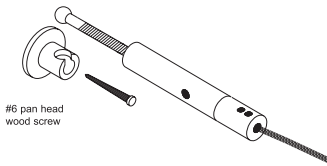
6. Securely fasten the power feeds to the cable.

7. Securely attach the lighting fixtures to the cable.

**IMPORTANT – ENSURE ALL ELECTRICAL CONNECTIONS ARE VERY TIGHT**

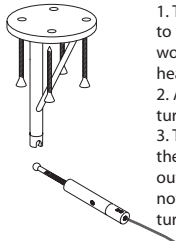
## Cable System – Hardware

### CA - 302 Cable Turnbuckle Assembly



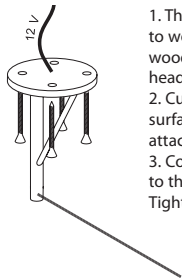
The Wall Anchor must be mounted to wood. Soft materials must have a wood backing. Use a single #6 Pan Head wood screw to mount the anchor to the wall. Use the 1" Lexan Plate to isolate the 12v live system anchors from a metal mounting surface. Drop the extended ball screw/turnbuckle assembly (fully extended) into the ball socket. Tighten the turnbuckle by rotating the inner barrel. Hold the short outer barrel and cable stationary. Do not twist the cable to tighten the turnbuckle.

### CA - 317 Ceiling Anchor w/ Turnbuckle



1. The Ceiling Anchor must be mounted to wood. Soft materials must have a wood backing. Mount with four flat head wood screws.
2. Attach the turnbuckle last with the turnbuckle fully extended.
3. Tighten the turnbuckle by rotating the inner barrel. Hold the short outer barrel and cable stationary. Do not twist the cable to tighten the turnbuckle.

### CA - 319 Ceiling Power Anchor



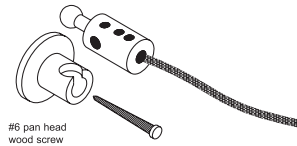
1. The Ceiling Anchor must be mounted to wood. Soft materials must have a wood backing. Mount with four #8 flat head wood screws.
2. Cut an oversize hole in the mounting surface for the Power Feed Cable to attach to the Ceiling Anchor.
3. Connect the Ceiling Anchor lead to the 12v from the Power Supply. Tighten.

### CA - 812 3.5" Isolating Plates



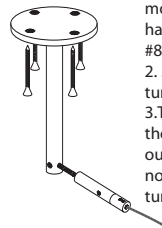
Use this 3.5" diameter isolating disk with Ceiling Anchors when there is metal in the mounting surface. Mount disk to mounting surface with screws. Mount Ceiling Anchors to Isolating Plate with machine screws provided.

### Stud End Anchor Assembly



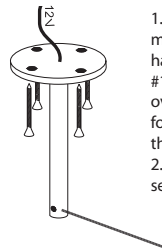
The wall anchor must be mounted to wood. Soft materials must have a wood backing. Use the 1" Lexan Plate to isolate the 12v live system anchors from a metal mounting surface. Install this anchor before installing the opposing turnbuckle anchor. Insert the conductor cable as displayed. Tighten both set screws onto the cable. Drop the stud end ball into the wall mount ball socket.

### CA - 523 Heavy Duty Ceiling Bracket w/ Turnbuckle



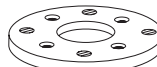
1. The Ceiling Bracket must be mounted to wood. Soft materials must have a wood backing. Mount with four #8 flat head wood screws.
2. Attach the turnbuckle last with the turnbuckle fully extended.
3. Tighten the turnbuckle by rotating the inner barrel. Hold the short outer barrel and cable stationary. Do not twist the cable to tighten the turnbuckle.

### CA - 523 Heavy Duty Ceiling Bracket w/ Power Feed



1. The Ceiling Bracket must be mounted to wood. Soft materials must have a wood backing. Mount with four #10 flat head wood screws. Cut an oversize hole in the mounting surface for the Power Feed Cable to attach to the Ceiling Bracket.
2. Ensure that set screw is tightened securely onto the Power Feed Cable.

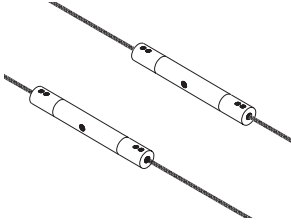
### CA - 814 4" Isolating Plates



Use this 4.0" diameter isolating disk with Heavy Duty Ceiling Anchors when there is metal in the mounting surface. Mount disk to mounting surface with screws. Mount ceiling anchors to Isolating Plate with machine screws provided.

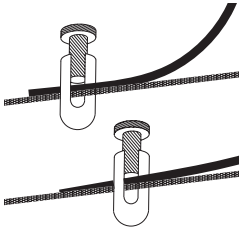
## Cable System – Hardware

### CA - 310 Inline Turnbuckles (pair)



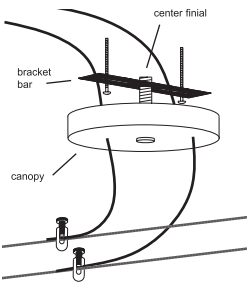
1. Tensions Conductor Cable from the center of a span.
2. Install Inline Turnbuckle while cable is not tensioned.

### CA - 507 Power Bolt (pair)



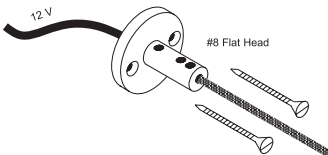
Connects 12V power feed from Power Supply to Conductor Cables. Insure that this connection is very tight.

### CA - 509 Power Canopy



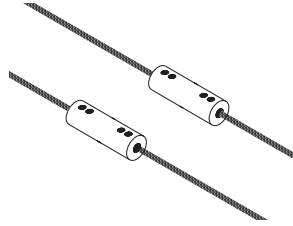
1. Mount bracket bar to a 4" octagonal junction box using 2 supplied machine screws.
2. Connect Power Canopy power cable to 12V feed from transformer.
3. Insert center finial through canopy and thread into the installed bracket bar.
4. Secure the Power Bolts to the Conductor Cable.

### CA - 308 Power Anchor Assembly



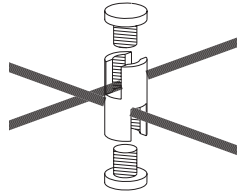
The wall anchor must be mounted to wood. Soft materials must have a wood backing. Use 1.5" Lexan Plate to isolate the 12v live system anchors from a metal mounting surface. Install this anchor before installing the opposing turnbuckle anchor. Feed the 12V power cable into the back of the anchor. Tighten the set screws. Mount the power anchor using two #8 flat head wood screws.

### CA - 511 Cable Isolators (pair)



Electrically isolates sections of the Conductor Cable

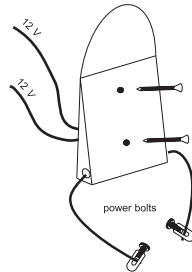
### CA - 537 Cross Jumpers (pair) CA - 538 Cross Isolators (pair)



Cross Jumpers electrically connect crossing conductor cables.

Cross Isolators electrically isolate crossing conductor cables

### CA - 508 Power Plate

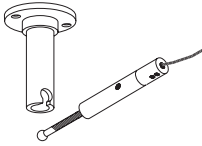


Power Plate is covers a standard single gang box.

1. Connect rear leads to 12V power feed wires from Power Supply
2. Mount Power Plate to single gang box using 8-32 machine screws included.
3. Attach Power Bolts to Conductor Cables. Tighten.

## Cable System – Hardware

### Mini Ceiling Anchor w/ Turnbuckle



1. The Mini Ceiling Anchor must be mounted to wood. Soft materials must have a wood backing. Mount with two #8 flat head wood screws.
2. Attach the turnbuckle last with the turnbuckle fully extended.

3. Tighten the turnbuckle by rotating the inner barrel. Hold the short outer barrel and cable stationary. Do not twist the cable to tighten the turnbuckle.

Not for use with fixtures that protrude above cable.

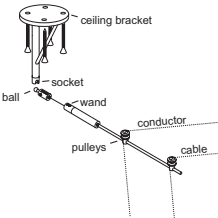
**CA - 334** Mini Ceiling Hardware set  
(complete set of four)

**CA - 337** Mini Ceiling Anchor - Turnbuckle pair

**CA - 339** Mini Ceiling Anchor - Stud End pair

**CA - 816** Isolator Plates (complete set of four)

### CA - 350 Directional Wand w/ Ceiling Bracket



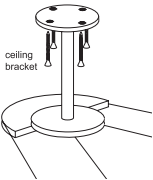
The Ceiling Bracket must be mounted to wood. Soft materials must have a wood backing.

Mount the Ceiling Bracket using four #8 wood screws. Adjust the grooved pulleys to the desired distance apart. Secure by tightening the set screw. Insert wand ball into Ceiling Bracket ball

socket and hold tension until Conductor Cable can be lifted up to the wand and routed around the pulleys.

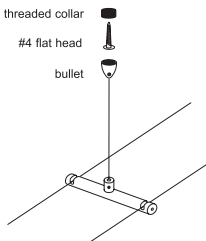
Use the Turnbuckle to provide additional tension to the system.

### CA - 354 Deluxe Directional Ceiling Bracket



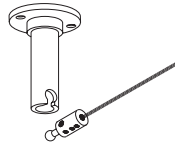
1. The ceiling bracket must be mounted to wood. Soft materials must have a wood backing.
2. Mount the ceiling bracket using four #10 wood screws.
3. Route one Conductor Cable through the groove in the acrylic semi-circle and the other through the groove in the metal screw top.

### CA - 360 Support Bar



1. Remove threaded collar from the bullet.
2. Screw the threaded collar to the ceiling using a #4 flat head wood screw.
3. Screw the bullet assembly onto the installed threaded collar.

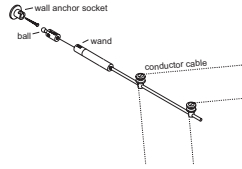
### Mini Ceiling Anchor w/ Stud End



1. The Ceiling Anchor must be mounted to wood. Soft materials must have a wood backing. Mount with two #8 flat head wood screws.
2. Connect the stud end before attaching the opposing turnbuckle.

Not for use with fixtures that protrude above cable.

### CA - 346 Directional Wand w/ Wall Anchor



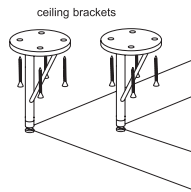
The wall anchor must be mounted to wood. Soft materials must have a wood backing. Mount the wall anchor using one #6 wood screw. Adjust the grooved pulleys to the desired distance apart.

Secure by tightening the set screw.

Insert wand ball into wall anchor ball socket and hold tension until conductor cable can be lifted up to the wand and routed around the pulleys.

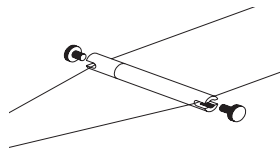
Use the Turnbuckle to provide additional tension to the system.

### CA - 340 Directional Ceiling Bracket (pair)



1. The ceiling brackets must be mounted to wood. Soft materials must have a wood backing.
2. Position the anchors at the correct separation to retain the proper cable separation (in both directions).
3. Mount the ceiling brackets using four # 8 wood screws.

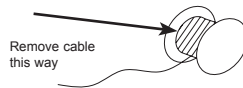
### CA - 362 Spacer Bar



Allows Conductor Cable to retain the proper spacing when mounting hardware must be positioned closer together.

## Notes on Cable System

1. Translite Sonoma supplies Conductor Cable (CA - 505) rated for a maximum load of 500W (42 amps @ 12V). Do not overload the Conductor Cable beyond this.
2. Ensure that you have received enough cable to span twice the installation desired distance. The cable system is constructed of two parallel cables. Fixtures attach to both cables.
3. To remove the Conductor Cable from the spool: roll the spool on the floor towards the opposing anchor. Do not wind the cable off the spool that is placed on end.



4. Cut the cable cleanly with proper cable cutters. Ensure that a good clean end is inserted into the anchors at both ends of the span. Tighten all the 1/4 -28 set screws down on to the cable - AS TIGHT AS POSSIBLE.
5. Install the turnbuckle end last with turnbuckle fully extended. Cable should be as tight as you can make it. The turn buckle can then be tightened to make the line taut.
6. Conductor cable can span 40' without the aid of a center ceiling support. Center supports can be ordered by your distributor from Translite Sonoma (part # CA4 -360 for 4" cable separation and CA6 -360 for 6" separation). If a center support is not an option for your installation Translite Sonoma also supplies hardware to increase the tension on the cable.
7. \* Most problems with 12V installations are due to the electrical connections not being tight.

## Troubleshooting

**Problem:** Lights do not come on.

**Step 1:** Turn power off and check for a tripped breaker on the Power Supply or breaker panel. If a breaker at either location has been tripped, reset the breaker and try turning the system on again.

**Step 2:** Using a volt meter, check for 120 volts input to the Power Supply. If there are 120 volts of input to the Power Supply, proceed to Step 3.

**Step 3:** Disconnect the 12v feed from the Power Supply to the lighting system. Using a volt meter, confirm that the Power Supply is operating at 12 volts.

- a. If the Power Supply is operating correctly, proceed to Step 4.
- b. If the Power Supply is not working, contact Translite Sonoma Tech Support at 800-999-4540.

**Step 4:** One common cause of a short is mounting hardware that is mounted to metal (without proper isolation) or hardware mounting screws that sink through and touch a common metal structure. Visually inspect the track mounting hardware and mounting surface for insufficient isolation. If the track appears to be mounted correctly, proceed to Step 5.

**Step 5:** Conduct a continuity test on the track system.

1. Disconnect the 12v feed from the Power Supply to the lighting system, if not already done.
2. Remove the lamps from all the fixtures (do not remove the fixtures, yet)
3. Test for continuity between the busbars of the 12v lighting system (positive continuity confirms a short in the system)
4. If there is a short, remove one fixture from the system and re-test for continuity.
5. Continue removing one fixture at a time and retesting until continuity is broken. If continuity is not broken, proceed to Step 6.
6. The last fixture removed is possibly damaged or was installed incorrectly. Many Translite Sonoma fixtures are designed to conduct 12v throughout the entire body of the fixture. If the fixture was installed incorrectly, twisted, or stressed in some way, it is possible that it was creating a temporary short.
7. Try reinstalling the fixture again.
8. If the fixture (without a lamp installed) continues to short the system please return it for replacement or repair. Call the factory for a Return Goods Authorization.

**Step 6:**

1. If the Power Supply is disconnected from the system;
2. If all the fixtures have been removed in the course of the continuity test;
3. And if the continuity test still shows positive continuity:

Then this indicates that the mounting hardware or system conductors are shorting. The screws used to install the hardware to the surface are touching a common metal structure under the surface, or the track connectors are forming a poor connection. Check to make sure that all mounting hardware is suitably mounted and that all track connectors are properly installed and tightened.

Special attention for Liana and Basis Track – If the track has been cut in the field, it is possible that the cutting action could create a short across the two conductor halves of the track. Check that metal dust or rough edges are not creating the short at the point of a field cut.

## Troubleshooting *(continued)*

**Problem:** Lights were installed and operational with no problems. A few (days, weeks) pass and system has now started to shut itself off. Lights usually go off after a few hours of operation and the problem is increasing in frequency.

**Actions:** This situation is indicative of a bad 12 volt connection between the Power Supply and the track. The connection is heating up, oxidizing and will eventually destroy itself. Check all 12v connections between the Power Supply and the track. Inspect the Power Cable for discoloration or deterioration. If damage is found, rewire with a new fresh end.

Note: All 12 volt connections must be tight due to the associated high current.

**Problem:** Lamps are burning out frequently.

**Actions:** Short lamp life may be due to over voltage. Check voltage using a meter to ensure proper voltage. A lamp rated for 12v operates optimally from 11.5v to 12 volts. Lamp life falls dramatically over 12 volts. (An MR16 lamp can burn out in a few minutes if receiving 15 volts.)

There are several ways to correct for Over Voltage.

1. The most efficient and accurate way is to install a Translite Sonoma Power Supply. This will ensure that the proper voltage is consistently delivered to the lighting system.
2. Replace the light switch with a dimmer switch. This typically cuts 5% of the output voltage when turned fully on.
3. Insure that the lighting is on a dedicated 120v line at the panel. If the lighting shares the line with a large appliance there may be voltage spikes as the appliance shuts off.

Note: If the lighting system and fixtures are very high up or inaccessible you may elect to run them at a slightly lower voltage than 12 volts. This will be slightly dimmer but will greatly increase the bulb life.

**Problem:** The breaker at the main panel trips when turning on the lights.

**Actions:** The breakers used on the lighting circuits should be rated for inductive loads. The use of breakers not rated for inductive loads may result in nuisance tripping.