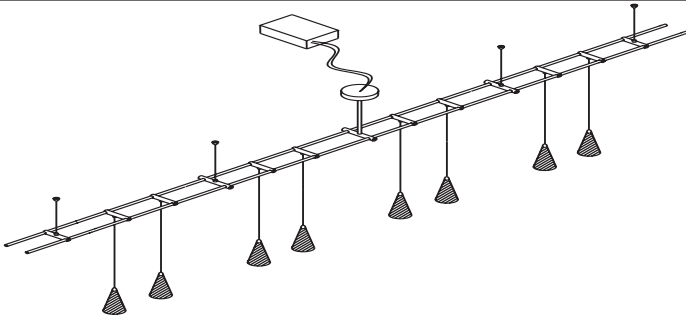


Twin Rail Installation Guide



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**

22678 Broadway, Suite One : Sonoma, California 95476

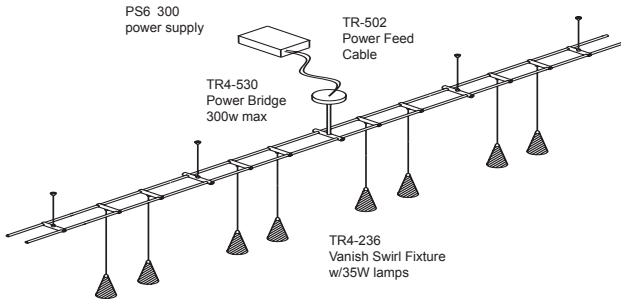
Toll free 888.999.4540 : Fax 707.996.6926

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

© 2005 Genlyte Group LLC

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.

Twin Rail 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. **Review your application plan.** A successful installation starts with a detailed application plan. An application plan details the layout of the track on the ceiling and the location of the power supply, the mounting hardware and the fixtures.
3. **Install the Transformer.** Every Translite Sonoma transformer is provided with complete instructions. Refer to these instructions for installing a transformer.
4. **Install Power Feed Device.** There are several options that may have been chosen by the lighting designer or client.

Options include:

TR-514 Power Anchors

TR-523 Power Brackets

TR-530 Power Bridge

TR-509 Power Canopy

TR-510 Double Power Canopy

TR-507 Power Bolts

Refer to the [Hardware](#) pages to find specific installation instructions for each power feed.

5. **Assemble the track with track couplers** - as per plans.

Refer to the [Hardware](#) pages to find specific installation instructions for each coupler.

6. Refer to the [Notes on the Twin Rail System](#) page to aid in positioning the ceiling anchors.

7. **Install the ceiling anchors.** There are two options that may have been chosen by the lighting designer or client.

Options include:

TR-310 Ceiling Anchor - Cable

TR-309 Ceiling Anchor: Stem

Supports must be placed at a maximum of every 42 inches. Circles, ovals and custom shapes may need extra supports.

Refer to the [Hardware](#) pages to find specific installation instructions for each support.

8. Lift the track up to the supports and fasten securely with support connector set screws. Multiple sections of the track may be installed simultaneously if the entire track is lifted by several people. If this is not possible, secure the track to the ceiling anchors piece by piece.

9. Properly seat and securely fasten the power feeds to the track.

10. SECURELY attach the lighting fixtures to the rail with the power off.

IMPORTANT – ENSURE ALL ELECTRICAL CONNECTIONS ARE VERY TIGHT

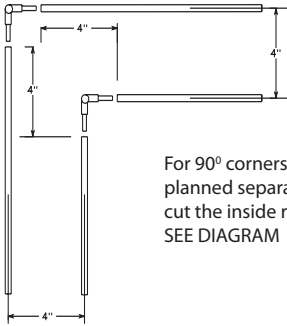
Notes on the Twin Rail System

Cutting the Twin Rail:

Twin Rail is plated brass. It can easily be cut with a hack saw. File the end flush with a fine flat file and file the interior of the end hole with a small round file. Remove all burrs.

Factory Bending:

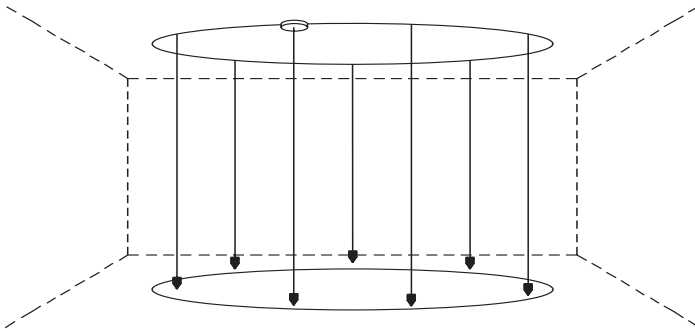
Translite Sonoma recommends factory bending for all applications and particularly for complicated architectural shapes. Factory bending will ensure that the track is bent exactly to specification. For factory bends with more than one radius, all order or requests for quotations must be accompanied by a full size template or electronic drawing that details both the radius and arc length of all curves. Twin Rail track can only be bent at the factory.



For 90° corners cut the inside track shorter by the same distance as the planned separation of the two tracks. Example: For 4" separation of Twin Rail, cut the inside rail 4" shorter than the outside rail.
SEE DIAGRAM

Follow the steps below to aid in locating where to install the ceiling mounts.

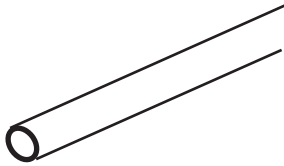
1. Install the Power Supply and Power Feed Canopy.
2. Assemble Twin Rail on the floor directly below the planned installation position on the ceiling.
3. Hang a Plum Bob from the installed power feed canopy and fine tune the position of the Twin Rail on the floor to be directly beneath the canopy.
4. Decide where the ceiling mounts will attach to the Twin Rail and mark the locations.
5. Use the Plum Bob to reflect the locations on the Twin Rail back up to the ceiling.



IMPORTANT – ENSURE ALL ELECTRICAL CONNECTIONS ARE VERY TIGHT

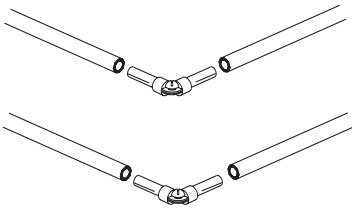
Twin Rail – Hardware

TR-505 Twin Rail



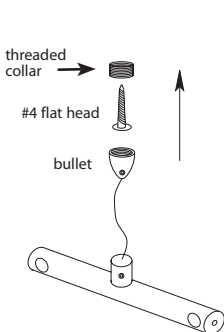
Twin Rail is plated brass. It can easily be cut with a hack saw. File the end flush with a fine flat file and file the interior of the end hole with a small round file or wet/dry paper. Remove all burrs.

TR-513 Adjustable Coupler (pair)



Mechanically and electrically connects sections of Twin Rail. Allows for 180° adjustment. Tighten the screw at the coupler's fulcrum to lock the track at the desired angle. If the angle of the track is re-adjusted – make sure to retighten the screws. If the connection seems loose, spread the connector's insertion points slightly and push the bracket in place for a tighter fit.

TR-310 Ceiling Mount – Cable Drop

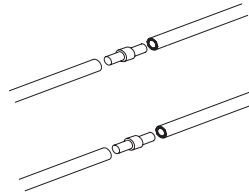


Supports Twin Rail Track with aircraft cable.

To Install:

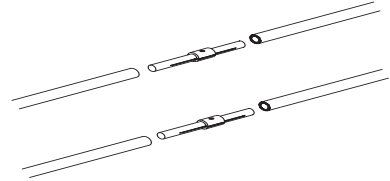
1. Remove threaded collar from the bullet.
2. Screw the threaded collar to the ceiling using a #4 flat head wood screw.
3. Screw the bullet assembly onto the installed threaded collar.

TR-511 Twin Rail Isolators (pair)



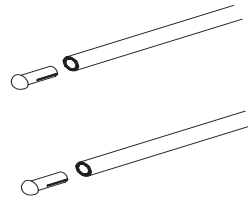
Electrically isolates sections of the Twin Rail. Isolators are machined to connect sections with a pressure fit.

TR-512 Twin Rail Couplers (pair)



Electrically and mechanically connects sections of Twin Rail track. Insert Coupler then tighten set screw for expansion fit.

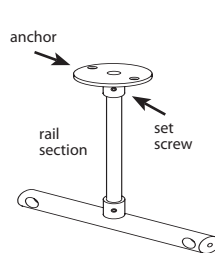
TR-808 Twin Rail End Caps (pair)



Decorative rail caps.

Tap End Caps onto rail with rubber mallet for pressure fit.

TR-309 Ceiling Mount – Rod Drop

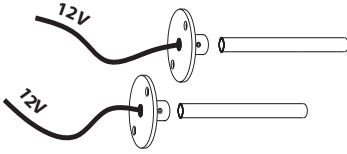


Supports Twin Rail with a short rail section.

1. Release the anchor from the rail section by loosening the set screw.
2. Mount the anchor to the ceiling using two #8 flat head wood screws.
3. Reattach the anchor and rail section and retighten the set screw.

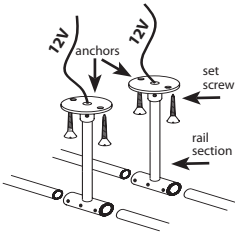
Twin Rail – Hardware

TR-514 Twin Rail Power Anchor (pair)



Power Anchors allow for invisible power feed to the rails. Securely attach Power Cable through rear of anchor and TIGHTEN set screw. Mount to wall with flat head wood screws. When mounting to a metal surface, use an isolating plate.

TR-523 Twin Rail Power Bracket (pair)

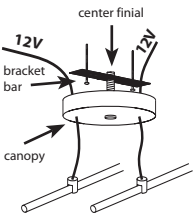


300W max

To Install:

1. Release the anchors from the rail section by loosening the set screw
2. Attach Power Cable to rear of anchors.
3. Mount the anchors to the ceiling using two flat head wood screws. When mounting to a metal surface, use an isolating plate.
4. Reattach the anchor and rail section and retighten the set screw.

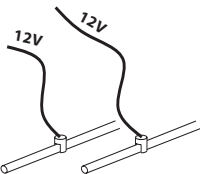
TR-509 Twin Rail Power Canopy



To Install:

1. Mount Bracket bar to 4" octagon junction box using machine screws included.
2. Connect the Power Cable to the 12V power feed wires from the Power Supply. TIGHTEN.
3. Insert center finial through canopy and thread into bracket bar. Tighten the collar.

TR-507 Twin Rail Power Bolt (pair)

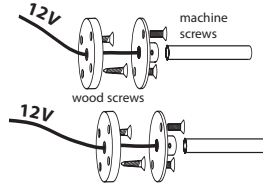


Connects 12V feed from Power Supply to Twin Rail.

Insure that BOTH connections

1. 12 feed wire to Power Bolt and
2. Power Bolt to rail are tight and secure.

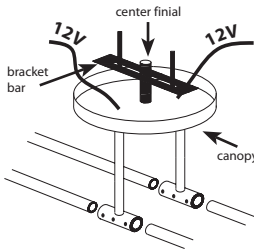
TR-811 1.5" Ø Isolator Plate (pair)



1. Bring power feed cable through isolator plate.
2. Screw plate to wall with flat head wood screws.
3. Attach power feed wire to rear of anchor and TIGHTEN.
4. Screw anchor to isolator plate with enclosed machine screws.

1.5" Ø Isolator Plates electrically isolate the anchors from the mounting surface.

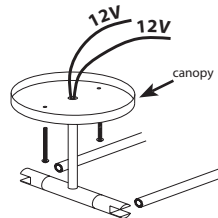
TR-525 Twin Rail Power Bracket (canopy)



To Install:

1. Mount Bracket bar to 4-0 Box using 8-32 machine screws included.
2. Connect the power bracket wires to the 12V power feed wires from the power supply. TIGHTEN.
3. Insert center finial through canopy and thread into bracket bar. Tighten the collar.

TR-530 Twin Rail Power Bridge



To Install:

1. Connect the Power Bridge wires to the 12V power feed wires from the Power Supply. TIGHTEN.
2. Mount the canopy to a 4" junction box using screws included.

300W max

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.

(continued on next page)

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.