

IMPORTANT SAFETY INSTRUCTIONS:

FOR YOUR SAFETY, READ ALL OF THESE INSTALLATION INSTRUCTIONS BEFORE INSTALLING THE TRACK SYSTEM.

SAVE THESE INSTRUCTIONS AND REFER TO THEM WHEN ADDITIONS TO OR CHANGES IN THE TRACK CONFIGURATION ARE MADE.

When installing or using this track system, basic safety precautions should always be followed, including the following:

When installing or using this track system, basic safety precautions should always be followed, including the following:

- **WARNING: TO AVOID FIRE, SHOCK OR DEATH,** turn off power at fuse or circuit breaker box before installation, before doing any maintenance work, or before adding to or changing the configuration of the track.
- Do not install this track system in damp or wet locations. Dry location listed only.
- Do not cut any track sections.
- Product must be mounted in locations and at heights in a manner consistent with its intended use, and in compliance with National Electrical Code and local building codes. Do not install any part of the track system less than 5 feet above the floor.
- Do not install any luminaire assembly closer than 6 inches from any curtain, or similar combustible material.
- Wear rubber soled shoes should and work on a sturdy wooden or non-conductive ladder.
- Product must be grounded to avoid potential electric shock and any other potential hazards.
- Do not attempt to energize anything other than lighting track luminaires on the track. To reduce the risk of fire and electric shock, do not attempt to connect power tools, extension cords, appliances, and the like to the track. Most dwellings built before 1985 have supply wire rated at 60°C. Consult a qualified electrician before installation.
- This track system is to be supplied by a single 120V branch circuit or 120/240V single phase 3-wire circuit with a grounded neutral as applicable. See wiring diagrams below for available single and two circuit track versions. Do not exceed the nominal supply voltage or amperage ratings.
- Do not connect a track to more than one branch circuit unless the track is constructed so that it can be used with more than one branch circuit. Check with a qualified electrician. Although the track lighting system may seem to operate acceptably, a dangerous overload of the neutral may occur and result is a risk of fire.
- The track system is not intended for use with a power supply cord or convenience receptacle adaptor. If attached with Flexible cord, the flexible cord shall be visible over its entire length. It shall not drape below the horizontal plane of the track. It shall not be secured to the building structure and it shall be sufficient length so as not to be providing support for the track.
- Each connector shall be secured with an aircraft cable set or power feed/support assembly as applicable. Each cable is suitable for supporting max 42.5 lb load rating with a max distance of 12 ft between two suspension points. (Note: A single section of Lux Beam with two cable supports is rated for 85lbs)
- Each connector is suitable for splicing maximum of twelve, six-inch-long conductors.
- Make sure all screws are properly tightened.

Call the Technical Support department at ConTech Lighting with any installation questions: 847-559-5500.

Installing contrary to instructions may cause unsafe conditions.

CONTINUED ON PAGE 2

INSTALLATION INSTRUCTIONS:

1. Unpack all components and sort by type. The beams should be sorted by size, track and blank configurations. The connectors/power feeds are in straight, 90°, "T" and "X" configurations. Using the layout drawings and packing list, check to make sure all parts are present. Contact the factory if any parts are missing. Aircraft cables, if specified, and power feeds will be in 10' and 20' lengths.
2. Using the layout drawing, locate the connector/power feed positions. It may be necessary to mount unistrut or other supports in the ceiling to accept the aircraft cables at the correct locations. It is very important that exact centers for the supports are provided. Failure to do so will result in considerable difficulty with the final alignment. The on-center dimensions for standard beam sizes are 2', 4', 6' and 8' accordingly. Additional support materials are not included and must be provided by others.

INSTALLING THE SUSPENSION CABLES:

Hang the suspension cables at the centers as specified in Step 2.

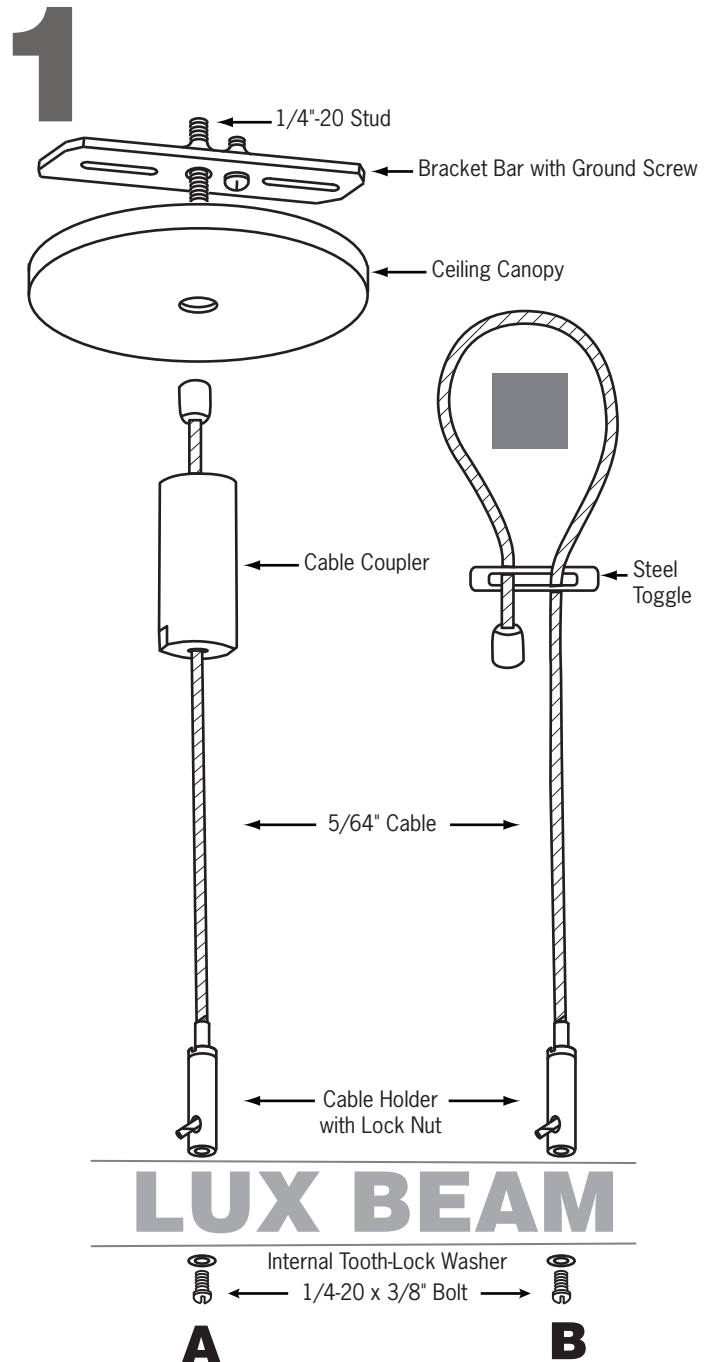
CEILING CANOPY

1. Secure 1/4"-20 stud to ceiling or support structure using included bracket bar or other acceptable hardware.
2. Feed cable length through Cable Coupler so the starter crimp seats within. (SEE FIGURE 1A)
3. Place Canopy (if needed) over 1/4"-20 stud then attach Cable Coupler to 1/4"-20 stud leaving cable length to hang free.

LOOP AROUND STRUCTURE (UNISTRUT)

1. Insert cable through the Steel Toggle. (SEE FIGURE 1B)
2. Loop cable over support structure, then back through hole in Steel Toggle below to create a loop leaving remaining cable length to hang free.

CONTINUED ON PAGE 3

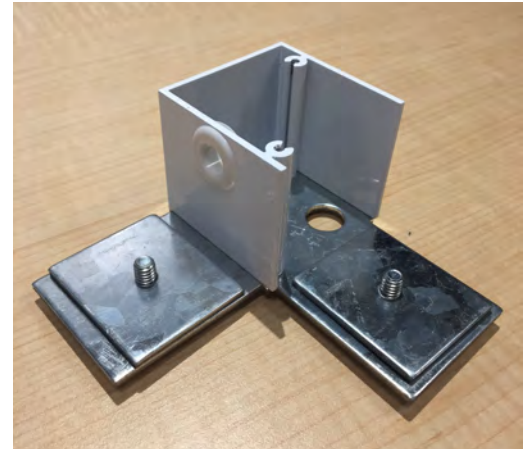


INSTALLING THE CONNECTOR/POWER FEEDS:

1. Prepare the connector/power feeds for installation by removing the (2) Philips head screws and square plates on the bottom of each one. (SEE FIGURE 2) Do not throw away, these will be reinstalled later.
2. When using aircraft cable, install the cable holder (gripper) to the connector/power feed assembly using the internal tooth lock washer and 1/4"-20 screw threaded into the bottom of the cable holder as shown. (SEE FIGURE 3)
3. Using a laser or other measuring device, hang the connector/power feeds at their specified locations and heights. When using aircraft cable, the cable should be inserted in the top of and through the cable holder assembly as shown. Make sure knurled locking nut is fully backed off to ensure full travel for cable insertion. (SEE FIGURE 4)
4. Excess cable should be left alone at this time and should only be trimmed after final height adjustment.

CONTINUED ON PAGE 4

2



3



4

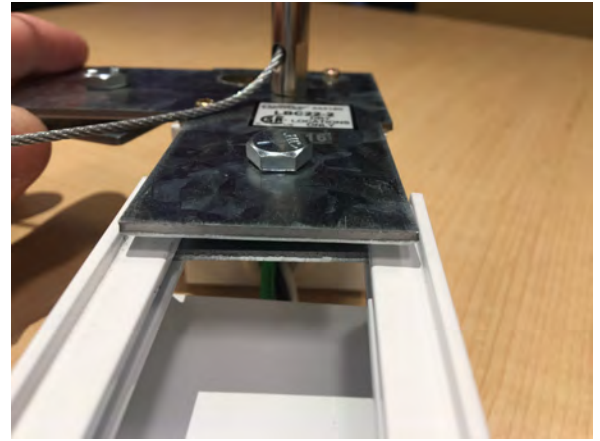


INSTALLING THE BEAMS:

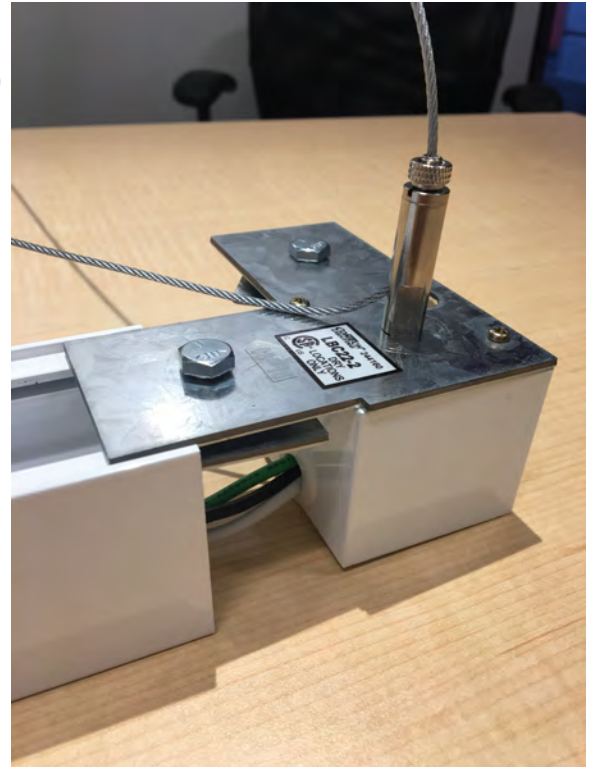
1. Starting at one corner of the pattern, begin installing the beams per the layout drawing. The part of the connector that receives a beam has a 1/4" -20 bolt that holds a square steel pressure plate. The plate should be inserted in the slot at the top of the beam and the top steel plate on the connector rests on top of the beam. (SEE FIGURE 5)
2. The pigtails of the track are to be inserted into the connector through the grommeted hole in the splice compartment. (SEE FIGURE 6)
3. With the steel pressure plate in the slot and the pigtails through the grommeted hole, position the beam tightly against the connector and moderately tighten the 1/4" -20 bolt and pressure plate with 7/16" wrench. (SEE FIGURE 7)
4. Move to the adjacent beam and continue the process throughout the layout pattern, being careful to mount the beams in their correct positions.
5. Once all pieces have been installed, revisit each connector and make any necessary adjustments using a level to ensure that all beam components are properly aligned and level. Push the beams tightly against the connectors and **MAKE SURE ALL MECHANICAL CONNECTIONS ARE SECURE.**
6. After final height adjustments, check that the cables going through the cable holders are secure and trim off excess cable. Leave at least 1" of cable out the side of the gripper.

CONTINUED ON PAGE 5

5



6

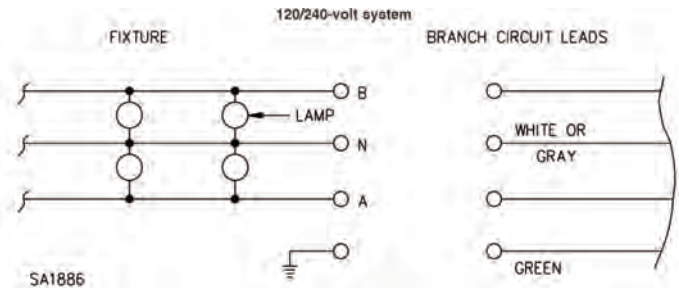
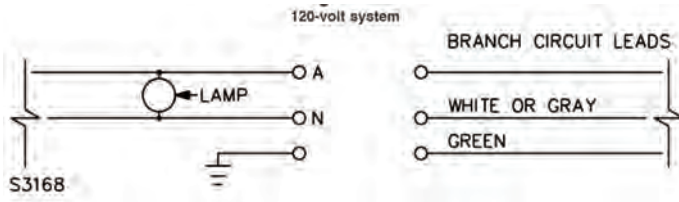


7



WIRING AND COMPLETION OF INSTALL:

1. Confirm that the correct circuit to be used for the power supply has wiring and circuit breakers rated for 20 amps as well as proper grounding as required by all applicable codes. See wiring diagrams below for available single and two circuit track versions.



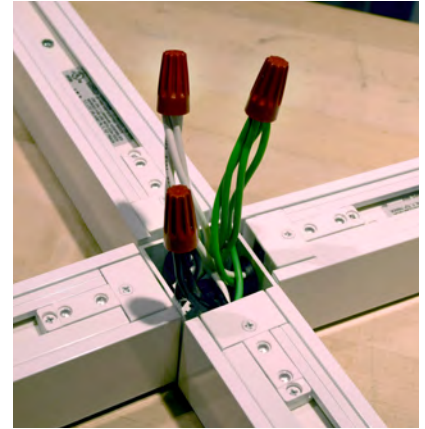
2. Provide power feeds to the appropriate connectors and make the appropriate splices inside the splice compartment referring closely to the layout of the drawing. Wire Black to Black, White to White, and Green to Green (SEE FIGURE 8).
3. When wiring a "T" or "X" connector, appropriate layout is required to ensure the maximum number of wires is not exceeded, and wire with wire nuts can be placed back inside the 2" X 2" wiring compartment. (SEE FIGURE 9a)
4. To Reduce wires in connector, the end of a circuit should have the wire leads removed from the feed or coupling. (SEE FIGURE 9b)
5. Electrically activate the system and check all track sections for proper voltage and circuiting. Make any corrections as needed.
6. Reinstall all the bottom plates. (SEE FIGURE 10)
7. The system is now successfully installed and ready to accept ConTech's full line of track fixtures.

CONTINUED ON PAGE 6

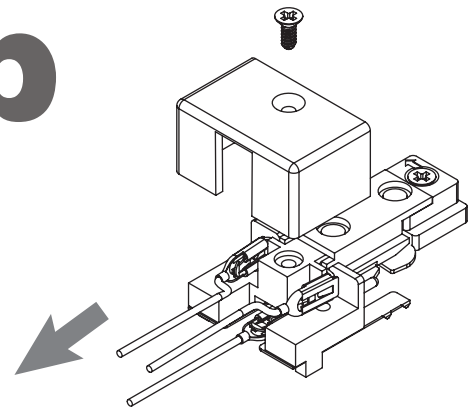
8



9a



9b



10



INSTALLATION AND MAINTENANCE PROCEDURES FOR CONTECH LIGHTING LT SERIES TRACK AND TRACK FIXTURES:

IDENTIFYING SINGLE-CIRCUIT AND TWO-CIRCUIT TRACK

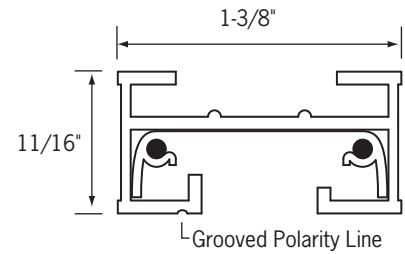
- Check the identification label inside the track. Single-circuit track will be labeled with one of the following part numbers: LT-2, LT-4, LT-6, LT-8 or LT-12. Two-circuit track will be labeled with one of the following part numbers: LT-22, LT-24, LT-26, LT-28 or LT-212.
- If you are unable to see the label, measure the height of the track from top to bottom. Single-circuit track will measure 11/16"; two-circuit track will measure 13/16".
- The track can also be identified by looking inside the channel. Single-circuit track will have two conductors, one on each side of the channel. Two-circuit track will have three conductors, two on top of each other on side of the channel, and one on the opposite side.
- The track is secured to the beam by (2) supports are per 2', 4', and 6' track section, and (3) supports per 8' and 12' track section.

SINGLE- AND TWO-CIRCUIT TRACK PROPER POLARITY ALIGNMENT

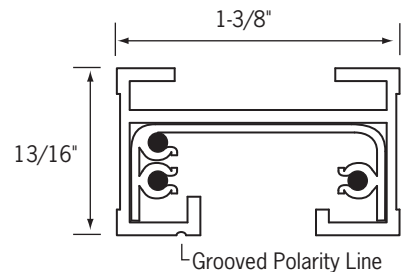
- Track polarity is indicated by a grooved polarity line that runs the entire length of the track. (Figure 11)
- Track must be joined together maintaining polarity of the entire run. When installing a continuous run of track, do not remove internal conductors. Failure to follow this procedure may result in loss of electrical connection and arcing.
- To wire track connector, use 12 AWG copper wire for 20A circuits only. Solid copper wire is recommended.
 - Fasten positive/hot (black) wire to the positive (brass) screw terminal marked P.
 - For two circuit, fasten one positive wire to screw terminal marked P1 and fasten second positive wire to screw terminal marked P2.
 - Fasten neutral (white) wire to the screw terminal marked N.
 - Fasten ground wire to the green ground screw terminal.
 Replace track connector cover and secure with screw.
- When installing track end feeds and couplings, the small arrow on the feed or coupling must be inserted into the track pointing at the polarity line. (Figure 12)
- Insert couplings and track feeds fully into track housing maintaining polarity. Tighten set screw at each coupling/feed point.

CONTINUED ON PAGE 6

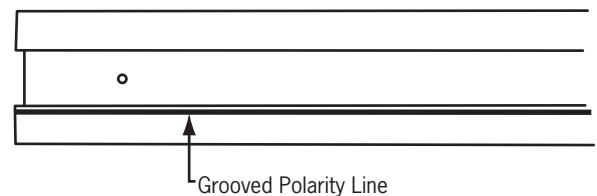
Single-Circuit Track:



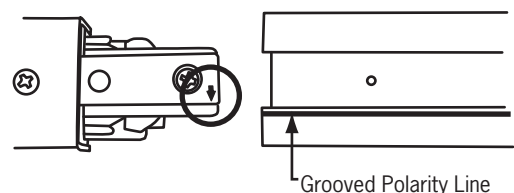
Two-Circuit Track:



11



12



INSTALLATION AND MAINTENANCE PROCEDURES FOR CONTECH LIGHTING LT SERIES TRACK AND TRACK FIXTURES:

SINGLE-CIRCUIT FIXTURE POLARITY ALIGNMENT

- All fixtures have indicator arrows designed to point to the track polarity line.
- To install (Figure 13):
 - A. Insert the fixture contacts into the track channel.
 - B. Retract the track latch by gently pulling down.
 - C. Rotate the adapter 90° so that the polarity arrow points to the polarity line on the track.
- When the fixture is installed, the track latch will lock the fixture into the track. NOTE: All latches should face the same direction after installation.
- Once the fixture is installed into the track, move the ON/OFF switch to the ON position.

TWO-CIRCUIT FIXTURE POLARITY ALIGNMENT

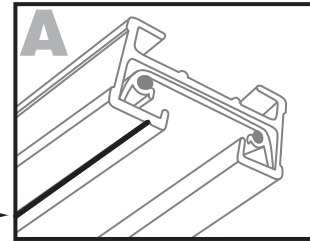
All ConTech track fixtures have two contacts in the base that engage conductors within the track; one for neutral and the other for the positive (hot) conductor. Dual circuit tracks contain one neutral and two positive conductors.

- To engage the second live conductor (Figure 14):
 - A. Identify the "POSITIVE" contact on the lighting fixture base, marked "P".
 - B. To access the second circuit, pull up the contact marked "P" to the position shown.
 - C. Slide the plastic shim (shipped with track) beneath the contact, locking the tabs in place.
- Follow fixture installation instructions for Single-Circuit Fixtures.

MAINTENANCE PROCEDURES

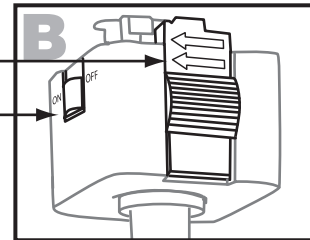
- All track fixtures are installed correctly per instructions.
- All fittings, power feeds and connectors are secure and installed properly.
- Be sure all parts (fixtures, track and accessories) are clean and dust free.
- Inspect all lamps, replace burned out lamps, and insure proper type and wattages are being used per UL lamping instructions. When using LED replacement lamps, only use the incandescent equivalent in LED. For example, 75W PAR should only be a 10-15W LED, don't overlap.

13



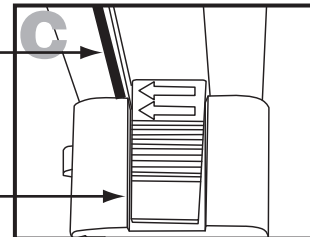
Polarity Line

Track Latch with Polarity Arrows

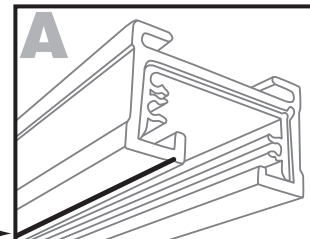


Polarity Line

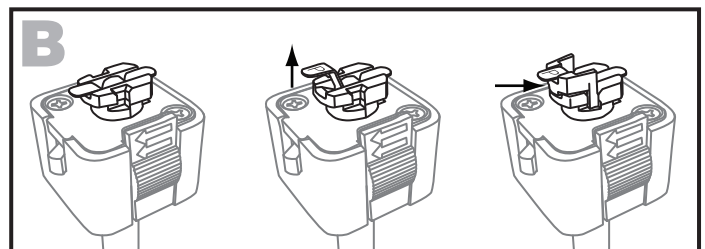
Track Latch with Polarity Arrows



14



Polarity Line



Polarity Line

Track Latch with Polarity Arrows

