

Installation instructions D1974g

**NORDIC ALUMINIUM**

# GLOBAL <sup>LED</sup>tek series

## 2-circuit Lighting Track with independent neutrals

### INSTALLATION INSTRUCTIONS

#### **IMPORTANT SAFETY INSTRUCTIONS**

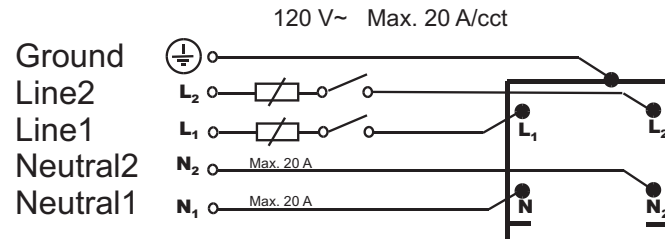
##### **Read All Instructions Before Installation**

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

1. Read all of these installation instructions before installing the GLOBAL tek lighting track system
2. The GLOBAL tek track system is intended for use only with GLOBAL tek components and fixtures marked for use with GLOBAL tek system. To reduce risk of fire and electric shock, do not use other components as part of this system.
3. Track installation is to only be performed by a certified electrician in accordance with the National Electrical Code and all local codes and ordinances.
4. The GLOBAL tek system is designed to be fed by two branch circuits rated 120VAC, 20A, eg. the system is a two-circuit / two-neutral track and care must be taken to keep circuits designated as circuit1 and circuit2 separate.
5. Do not install the track in damp or wet locations.
6. Do not install any parts of the track system less than 5 ft above the floor.
7. Do not install any fixtures closer than six inches from combustible materials.
8. Do not use this track with a power supply cord or convenience receptacle adapter.
9. Do not install the track with electric power connected. Similarly, disconnect electricity when installing or removing fixtures or components or changing the configuration of the track.
10. Do not attempt to energize anything other than Lighting Track Fixtures on the track. To reduce the risk of fire and electrical shock, do not attempt to connect power tools, extension cords, appliances and the like to the track.

**IMPORTANT**  
SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE WHEN  
ADDING FIXTURES OR CHANGING THE TRACK  
CONFIGURATION

## ELECTRICAL CONNECTION



## TRACK ADAPTERS

### TEK SYSTEM ADAPTERS

#### TEK 67

Non-switchable. Built in strain relief  
Max. 20lbs / 600W

#### TEK 100

2-circuit 120V, with independent neutrals  
Switchable between circuits 1,2 & on/off  
Includes nipple rotation lock.  
Max. 20lbs (100N)  
Max. 120V/60Hz

## FIELD CUTTING OF TRACK TO LENGTH

The standard length TEK track is supplied with the conductor ends factory bent to allow for proper connection of fittings. However, the track can easily be field cut to different lengths with a hacksaw or a circular saw intended for cutting aluminum. After cutting, the conductor ends must be bent in the field with the Nordic XTSV 12 bending tool.

### STEP 1

Carefully cut the track to length using a hacksaw or other metal saw. Ensure that the cut is clean and straight.

### STEP 2

Insert the bending tool so that the track conductor fits in the outermost slot at the tip of the bending tool.

### STEP 3

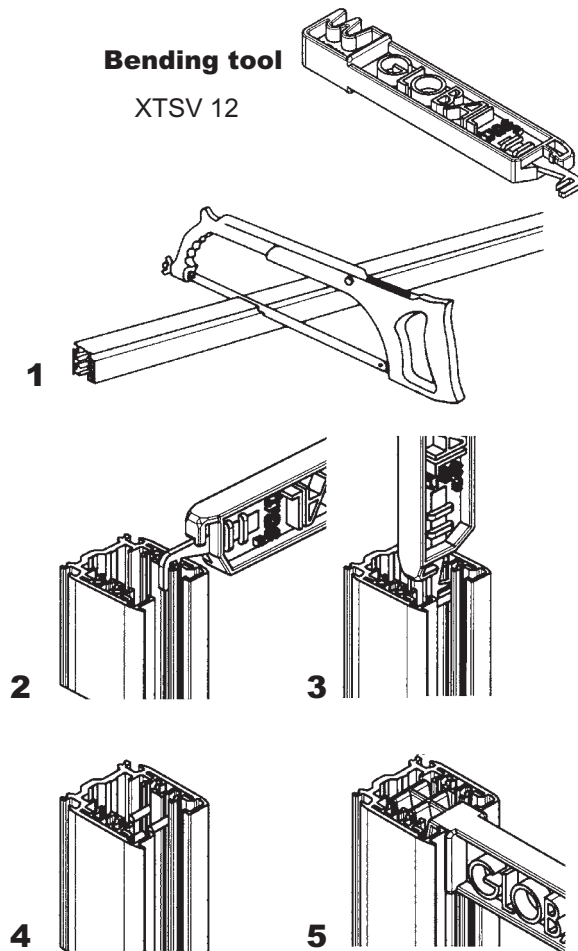
Rotate the bending tool 90 degrees upward. Repeat steps 2 and 3 for all four conductors.

### STEP 4

Bent conductors should look similar to the factory finished ends, as shown.

### STEP 5

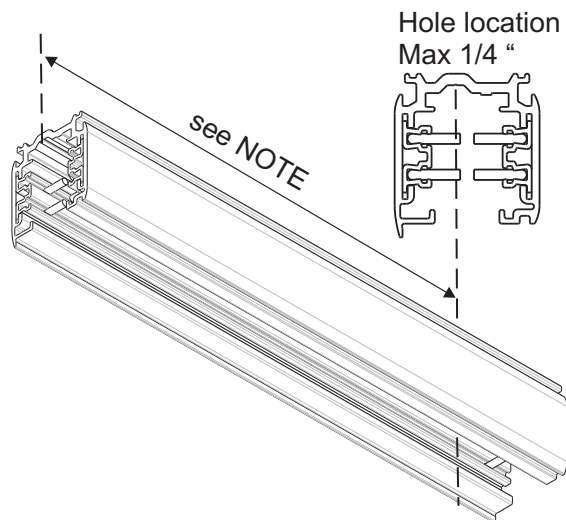
Confirm correct bending by inserting the opposite end of the tool in the end of the track.



## FIELD DRILLING OF MOUNTING HOLES

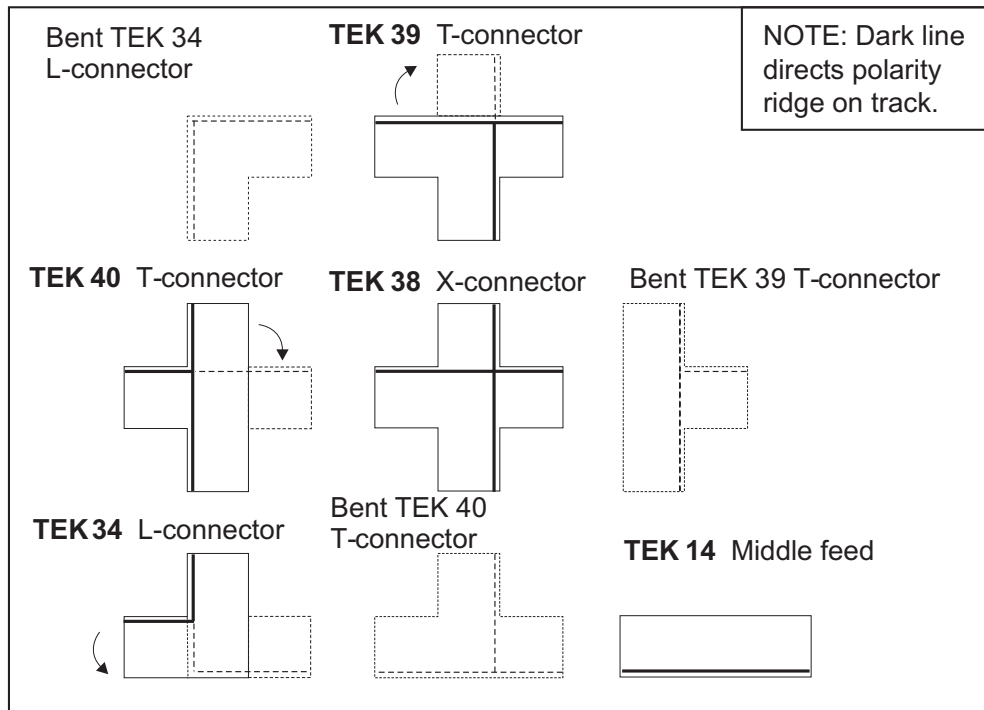
If track is field cut, it may become necessary to drill new mounting holes. If so, use one of the off-cut pieces with existing mounting hole as a template for new hole to be drilled. The drill bit should be no larger than  $\frac{1}{4}$  inch in diameter. The hole should be centered in the groove in the bottom of the track. Remove burrs after drilling. Hole location should be in accordance with the note below.

NOTE: A single section of the track that is 4 feet or less in length must have one mounting opening spaced a **maximum of 6 inches** from each end of the track section. Additional openings may be provided. A single section of the track that is greater than 4 feet in length is to be provided with mounting openings spaced a maximum of 12 inches from each end of the track section with additional openings provided a minimum of every 4 feet along the length of the track section.



## FEEDING TRACK AT A CORNER CONNECTOR

GLOBAL tek track can be fed at the following corners and track intercept connectors

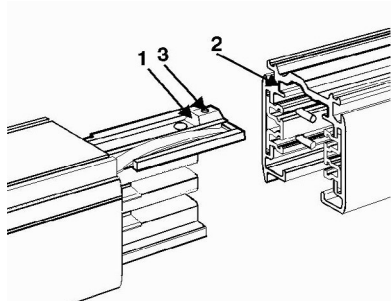


When feeding at one of the above connectors, follow the feeding instructions as shown under 'INSTALLATION OF GLOBAL TEK TRACK TO AN OUTLET BOX'.

NOTE: The track is polarized, so connectors can only be installed in the track in one direction. I, L, T, X-connectors are pre-wired, and should not be re-configured in the field. When requiring a turn in a different direction, or if an opposite T-connector is required, remove the cover and turn the connector as shown above.

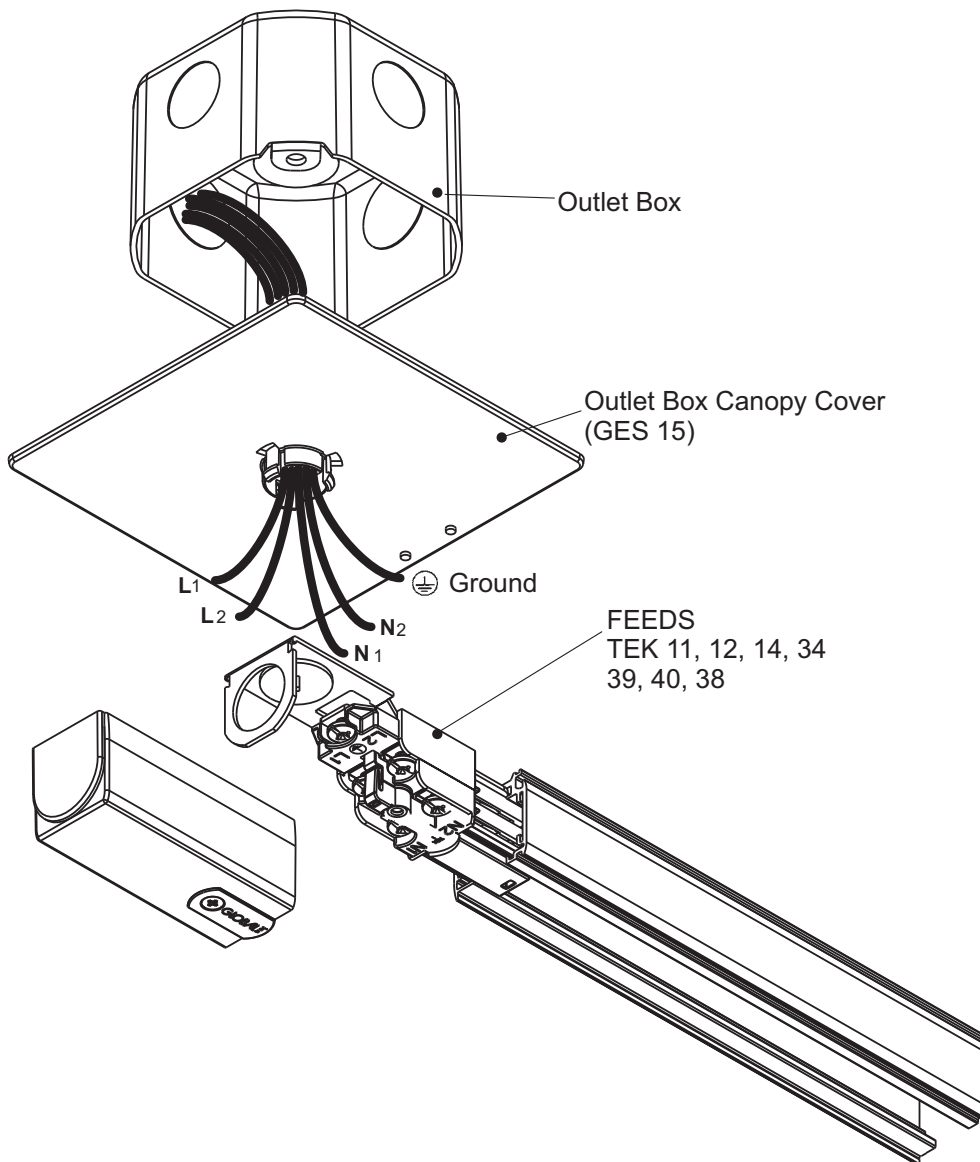
**TEK 21** Straight connector

## INSTALLING CONNECTORS



1. Select the correct connector to fit the end of the track.
2. Align the guide lug of the connector with the groove on the track.
3. Insert the connector into the end of the track, ensuring that the guide lug enters the groove in the base of the track.
4. If the connection is too tight, loosen the lock screw until the connector slides in.
5. Once the connector is correctly inserted, tighten the lock screw.

## INSTALLATION OF TEK TRACK TO AN OUTLET BOX



### STEP 1.

Remove the knock-out hole provided on the back side of the feed connector. Remove feed connector cover.

### STEP 2.

Pass the supply, neutral and ground wires through the canopy cover.

### STEP 3.

Attach feed connector to track (NOTE: track is polarized and feed connector will only fit one end of track). Pass wires through hole on feed and mount track to ceiling using toggle bolts or screws.

### STEP 4.

ALWAYS CONNECT GROUND WIRE TO GREEN GROUND TERMINAL. Connect live conductors to the appropriate terminal marked "L1", or "L2". Connect neutral conductors to the appropriate terminal marked "N1" or "N2".

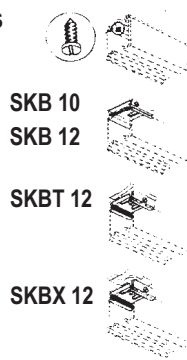
### STEP 5.

Replace feed connector cover plate

## MOUNTING THE TRACK

**NOTE:** The track should be securely mounted at the maximum intervals of the 4ft, and must be mounted in accordance with all applicable codes and standards.

### Ceiling mounting options

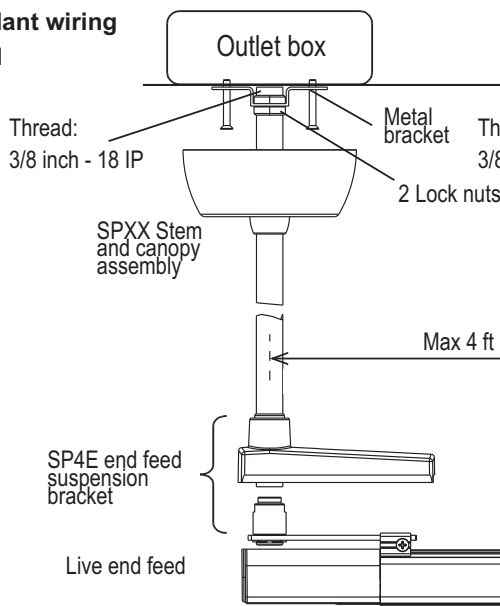


Instructions for each option:

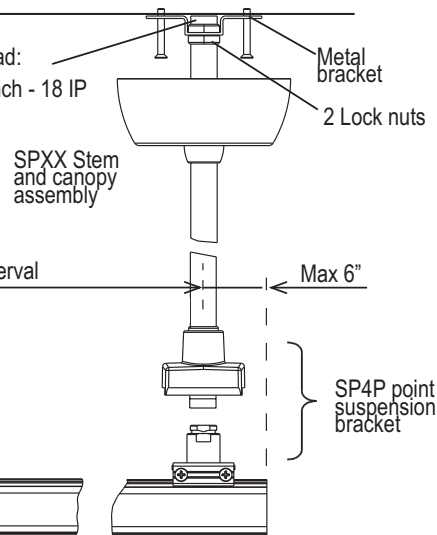
- A. Using the factory provided mounting holes, use appropriate screw or toggle bolt for securing the track to the ceiling.
- B. Mark the location of the centerline of the track on the ceiling. Using an appropriate screw or toggle bolt, secure SKB mounting clips at the correct position on ceiling. Loosen the set screw on the side of the clips and insert the track, tightening the set screws while holding the track position.
- C. Use the SKBT 12 for securing the track to T-bar ceiling grids. Snap the clips onto the grid in the correct locations, then insert the track, tightening the set screws while holding the track in the position.
- D. Use the SKBX 12 for T-bar grid recessed into the ceiling tile. Follow the same procedure as C above.

### Pendant Suspension

#### A. Pendant wiring detail



#### B. Mechanical pendant support detail



#### Electrical feed through pendant feed stem, Catalog numbers SP XX.

1. Secure mounting bracket to outlet box using hardware provided.
2. Thread one nut on upper end of feed stem. Pass required supply wires and ground wire (by others) through second nut and through feed stem. Attach upper threaded portion of stem to mounting bracket and secure second nut tightly.
3. Loosen lock screw and slide canopy up stem, taking care not to scratch the surface finish. Tighten canopy once in position.
4. Remove plastic cover from SP 4E mounting bracket. Using a sharp knife, cut out the top protrusion to allow the feed stem to pass through cover. Slide cover up stem while completing remaining connections.
5. Pass supply and ground wires through metal bushing of SP 4E mounting bracket. Thread bracket onto stem and tighten.
6. Cut out knock-out on back side of live end feed connector using a sharp knife. Pass wires from the mounting bracket through the knock-out and attach live end to track.
7. Secure mounting bracket to back of track, fastening the set screws.
8. Attach supply leads and ground wire to proper screw terminals in the live end and replace the cover.
9. Slide mounting bracket cover down the stem and over the mounting bracket.

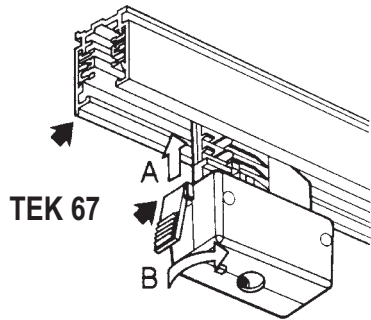
#### Track support using pendant stem, Catalog numbers SP XX.

1. Secure mounting bracket to outlet box using hardware provided or other appropriate fasteners.
2. Thread one nut on upper end of feed stem. Attach upper threaded portion of stem to mounting bracket and secure second nut tightly.
3. Loosen lock screw and slide canopy up stem, taking care not to scratch the surface finish. Tighten canopy once in position.
4. Remove plastic cover from SP 4P mounting bracket. Using a sharp knife, cut out the top protrusion to allow the feed stem to pass through cover. Slide cover up stem while completing remaining connections.
5. Thread SP4P metal bracket onto stem and tighten.
6. Secure mounting bracket to back of track, fastening the set screws.
7. Slide mounting bracket cover down the stem and over the mounting bracket.

(XX = Stem length in inches)

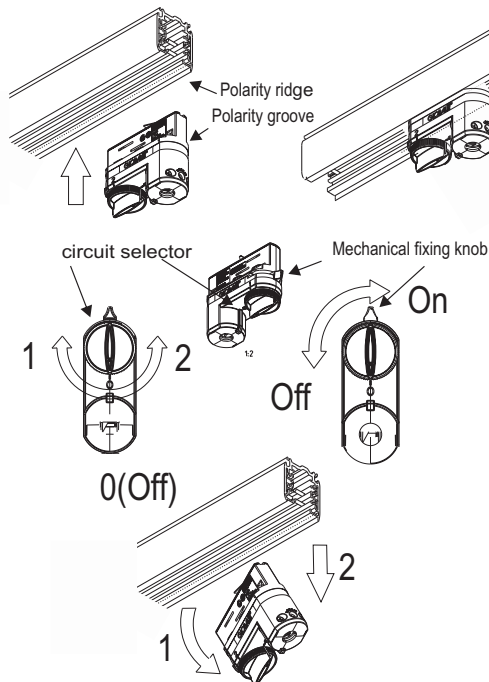
## INSTALLING AND REMOVING FIXTURES

To reduce the risk of fire and electric shock, use only fixtures marked for use with Nordic Aluminium TEK system



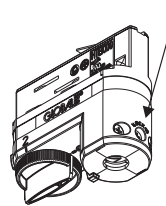
*Fixtures with TEK 67 adapter are factory wired to circuit-1 or circuit-2 and can not be field modified. Fixtures must be returned to the manufacturer or distributor for modification of the circuit selection.*

1. Align the fixture adapter so that the flange (ridge) on the track is on the same side as the locking knob of the adapter.
2. Insert the adapter into the track (A), turning it at the same time to the right (B) until the locking knob snaps into place behind the flange.  
**NOTE: ENSURE THAT THE ADAPTER IS TURNED ENOUGH THAT THE KNOB POSITIVELY SNAPS INTO PLACE OVER THE FLANGE.**
3. To remove the adapter, push the locking knob and pull the fixture assembly out, turning it to the left at the same time.



1. The fixture adapter is inserted with the polarity groove towards to the polarity ridge on the track
2. Push the adapter into the track till it snaps into place.
3. Turn the mechanical fixing knob clockwise.
4. Select the desired circuit with the circuit selector knob (1-0-2).
5. To remove the adapter from track, select 0-position (OFF) before turning the mechanical fixing knob counterclockwise. Pull first from fixing knob end.

rotation lock screw, (do not overtight)



TEK100

Nipple for TEK 100 :



**HTEK 61**  
rotating  
NSPM1/8"-27

## WARNING

### NORDIC ALUMINIUM LIGHTING TRACK SYSTEMS

**DO NOT** solder connectors as this will prohibit the adapters circuit switch to move freely from circuit to circuit.

Nordic Aluminium track adapters and accessories are made of strong polycarbonate material.

To clean, use only a damp cloth.

**DO NOT** expose to any lubricants, solvents or cleaning solutions, as they may impair the strength of the product.

Also, when changing the location of a fixture/adaptor **DO NOT** slide the adapter down the track as it will damage the connectors and cause faulty lighting. Fixture must be taken out of track and placed to its desired location.

## NORDIC ALUMINIUM

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## INSTALLATION INSTRUCTIONS

### TEK 11CB LIVE END FEED WITH CIRCUIT BREAKERS TEK 12CB LIVE END FEED WITH CIRCUIT BREAKERS (Mirror image)

#### FOR USE WITH GLOBAL Tek SYSTEM ONLY

**UPON RECEIPT OF MERCHANDISE:** Thoroughly inspect for any freight damage, which should be brought to the attention of the carrier. Compare the catalog description listed with the track or accessory label on the merchandise to be sure you have received the correct merchandise.

#### TEK 11CB (TEK 12CB) consists of:

- Body with circuit breaker(s) and track feeding module(s);
- Canopy
- security torx screws for canopy fastening

### IMPORTANT SAFETY INFORMATION

#### Read all instructions before installation

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

1. Read all of these installation instructions before installing the GLOBAL Tek 120V lighting track system
2. The GLOBAL Tek 277V track system is intended for use only with GLOBAL Tek components and fixtures marked for use with GLOBAL Tek system. To reduce risk of fire and electric shock, do not use other components as part of this system.
3. Track installation is to only be performed by a certified electrician in accordance with the National Electrical Code and all local codes and ordinances.
4. The GLOBAL Tek system is designed to be fed by two branch circuits rated 120VAC, 20A, eg. the system is a two-circuit / two-neutral track and care must be taken to keep circuits designated as circuit1 and circuit2 separate.
5. Do not install the track in damp or wet locations.
6. Do not install any parts of the track system less than 8 ft above the floor.
7. Do not install any fixtures closer than six inches from combustible materials.
8. Do not use this track with a power supply cord or convenience receptacle adapter.
9. Do not install the track with electric power connected. Similarly, disconnect electricity when installing or removing fixtures or components or changing the configuration of the Track.
10. Do not attempt to energize anything other than Lighting Track Fixtures on the track. To Reduce the risk of fire and electrical shock, do not attempt to connect power tools, Extension cords, appliances and the like to the track.

#### IMPORTANT

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE WHEN ADDING FIXTURES OR CHANGING THE TRACK CONFIGURATION

#### TEK 11CB & TEK 12CB (Mirror image)

1. Place Feed metal body plate at desired location.
2. Match the lock screw ridge on the connector in the track groove as shown in Figure 1.
3. Insert the connector into the track.
4. Tighten the lock screws on the connector until secure.
5. Install dead end to any end of track. Tighten all dead ends securely to the track.
6. Make proper electrical connections. Connect as follows: As shown in figure 2:
  - Colored wire (Circuit 1) to black wire/L1 terminal.
  - Colored wire (Circuit 2) to black wire/L2 terminal.
  - White wire (Neutral 1) to white wire/N1 terminal.
  - White wire (Neutral 2) to white wire/N2 terminal.
  - Ground wire to green wire /ground terminal  $\perp$
 refer to Installation Instruction included with feedable connector for proper electrical connections.
7. Locate canopy over the outlet box and feed connector. To secure, run the retaining screws through the corner holes in the canopy and into the steel body.

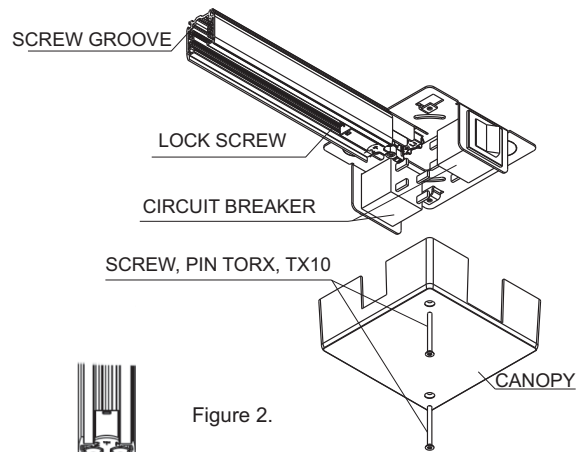
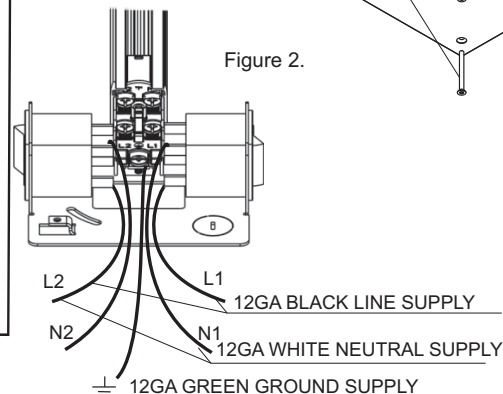


Figure 2.



# NORDIC ALUMINIUM

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