

## Installation Instructions

### For Juno TLR Series Connectors and Feeds

### Important Safety Instructions-Save these Instructions

1. Read all of these installation instructions before installing the trac system.
2. Do not install this trac in damp or wet locations.
3. Do not install any fixture assembly closer than 6" from any curtain or similar combustible material.
4. Disconnect electrical power before adding to or changing the configuration of the trac.
5. Do not attempt to energize anything other than lighting fixtures on the trac. To reduce the risk of fire or electrical shock, do not attempt to connect power tools, extension cords, appliances and the like to the trac.
6. Power to this trac system is to be supplied by either Juno 12V transformers (TL544N and TL547 (remote mounted only), TL548, TL549, TL550, TL554, TF5150, TF5300, TF5300-277, TF5600, TF5600-277, TF6150E, TF6300) or 24V transformers (TL551, TL552, TL553, TF5600-24V, TF5600277-24V, TF51200-24V, TF51200277-24V). Check with a qualified electrician before wiring trac. If 25 amps is exceeded anywhere in the installed trac system, an overload will occur, resulting in a potential fire.
7. These feeds and connectors are to be used with Juno TLR series trac systems only. Use only fixtures intended for use with Juno TL or TLR series trac.
8. Save these instructions and refer to them when additions to or changes in the trac configuration are made.

#### NOTES:

**\*\* This low voltage trac lighting system must be wired in accordance to national and/or local codes using approved Class 1 wiring methods when applicable. Check with a qualified electrician before installing.**

**\*\* All wire retaining set screws on terminal block connectors must be tightened to 12 to 18 in-lbs (1 to 1.5 ft-lbs) to ensure reliable and safe operation.**

**\*\* The terminal block used on all Trac 12/25 (TLR series) feeds and connectors is compatible with a minimum of 18 AWG thru a maximum of 6 AWG solid or stranded wire. The use of any field-installed wire that does not fall within this range or is not suitable for the level of the transformer output voids the Juno warranty and poses a possible safety hazard.**

#### WARRANTY

Juno warrants that its products are free from defects in material and workmanship. Juno's obligation is expressly limited to repair or replacement, without charge, at Juno's factory after prior written return authorization has been granted. This warranty shall not apply to products which have been altered or repaired outside of Juno's factory. This warranty is in lieu of all other warranties, express or implied, and without limiting the generality of the foregoing phrase, excludes any implied warranty of merchantability. Also, there are no warranties which extend beyond the description of the product on the company's literature setting forth terms of sale. Product Services phone (888) 387-2212

## TLR21 Junction Box End Feed

Used to make electrical connection to a remote mounted low voltage transformer. The TLR21 mounts to various junction boxes.

1. Pull transformer secondary wires out of junction box and strip off 5/16" of insulation from both.
2. Remove the connector cover by loosening screw.
3. Loosen the (4) set-screws in the terminal block to allow wire entry and loosen the pointed screw which fastens the connector to the trac.
4. Insert the transformer secondary wires into the terminal block openings on the strap side as shown, and tighten the (2) set screws until wires are snug.
5. Orient the mounting strap so the mounting holes line up with the junction box holes and the terminal block is in-line with the trac.
6. Verify the trac has from 3/8"-7/16" of buss wire extending past the end. Slide the connector so the mounting plate slides into the channel in the top of the trac. Hold firmly together and tighten the pointed screw until snug.
7. Tighten the trac to the corresponding surface, then fasten the connector mounting strap to the junction box, and tighten.
8. To make electrical connection to the buss, tighten the (2) set-screws closest to the trac to 12 to 18 in-lb (1 to 1.5 ft-lb). Tighten the set-screws retaining the transformer wires to 12 to 18 in-lb.
9. Reinstall the cover by placing over the terminal block assembly and tightening the screw removed in step 1 into the last terminal block hole as shown.

## TLR38 End Feed Connector

Used to make electrical connection to a remote mounted low voltage transformer. The TLR38 accepts (1) electrical fitting for a 1/2" trade size knockout from the top.

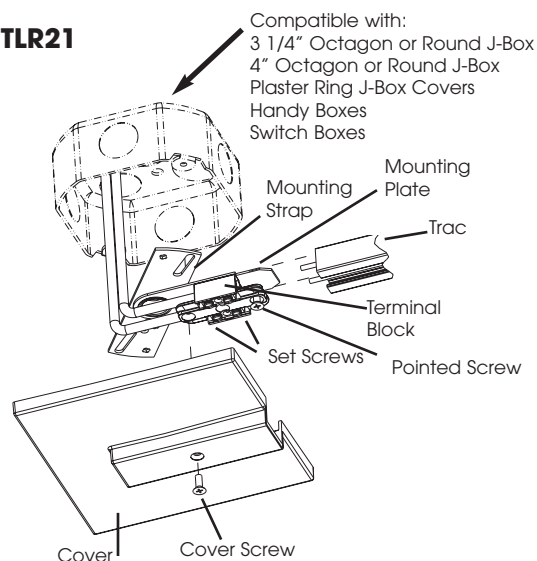
1. Remove connector cover by loosening screw.
2. Remove terminal block from mounting plate by removing the (2) screws on top of the plate.
3. Connect the 1/2" electrical fitting to the mounting plate. Take note that the plastic spacer is installed over the fitting on the top side of the plate to reduce the amount of fitting protruding into the connector.
4. Bend wires so they form a 90° angle towards the front of the mounting plate as shown. Cut and strip the wires to length per the plate markings.
5. Bend the wires slightly away from the plate and insert them into the corresponding terminal block opening. Set-screws may have to be loosened to allow wire to be inserted. (Note: terminal block is to be positioned with the pointed screw opposite wire entry). Tighten the (2) terminal block set-screws until snug to retain the wires.
6. Position the terminal block (with wires attached) so the terminal block holes line up with the holes in the mounting plate. Fasten to the mounting plate with the screws removed in step 2.
7. Loosen the (2) set-screws on the open side of the terminal block (enough to allow the buss-wire to enter the terminal block) and loosen the pointed screw which fastens the connector to the trac.
8. Verify the trac has from 3/8"-7/16" of buss wire extending past the end. Slide the connector so the mounting plate slides into the channel in the top of the trac. Hold firmly together and tighten the pointed screw until snug.
9. To make electrical connection to the buss, tighten the (2) set-screws closest to the track to 12 to 18 in-lb (1 to 1.5 ft-lb). Tighten the set-screws retaining the transformer wires to 12 to 18 in-lb.
10. Reinstall the cover by placing over terminal block assembly and tightening the screw removed in step 1.

## TLR34 Conduit End Feed Connector

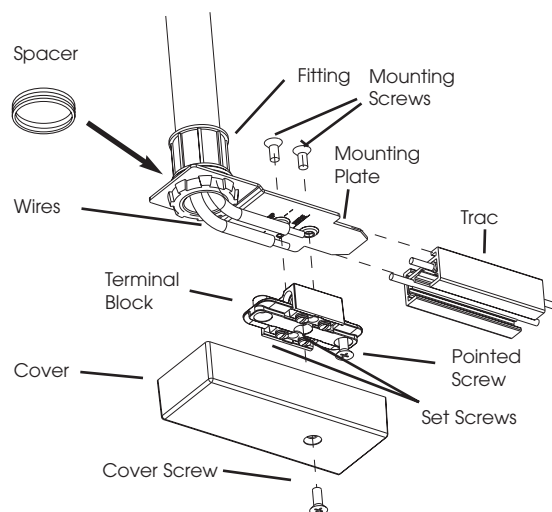
Used to make electrical connection to a remote mounted low voltage transformer. The TLR34 accepts (1) electrical fitting for a 1/2" trade size knockout from the top or from the back.

1. Remove connector cover by loosening screw.
2. Remove terminal block from mounting plate by removing the (2) screws on top of the plate.
3. Connect the 1/2" electrical fitting to the mounting plate from the top (metal knockout in plate must be removed) or from the back (plastic tear out on cover must be removed). Take note that the plastic spacer is installed over the fitting on the top side of the plate to reduce the amount of fitting protruding into the connector.
4. Route wires towards the front of the mounting plate as shown. Cut and strip the wires to length per the plate markings.
5. Bend the wires slightly away from the plate and insert them into the corresponding terminal block opening. Set-screws may have to be loosened to allow wire to be inserted. (Note: terminal block is to be positioned with the pointed screw opposite wire entry). Tighten the (2) terminal block set-screws until snug to retain the wires.
6. Position the terminal block (with wires attached) so the terminal block holes line up with the holes in the mounting plate. Fasten to the mounting plate with the screws removed in step 2.
7. Loosen the (2) set-screws on the open side of the terminal block (enough to allow the buss-wire to enter the terminal block) and loosen the pointed screw which fastens the connector to the trac.
8. Verify the trac has from 3/8"-7/16" of buss wire extending past the end. Slide the connector so the mounting plate slides into the channel in the top of the trac. Hold firmly together and tighten the pointed screw until snug.
9. To make electrical connection to the buss, tighten the (2) set-screws closest to the trac to 12 to 18 in-lb (1 to 1.5 ft-lb). Tighten the set-screws retaining the transformer wires to 12 to 18 in-lb. Reinstall the cover by placing over terminal block assembly and tightening the screw removed in step 1.

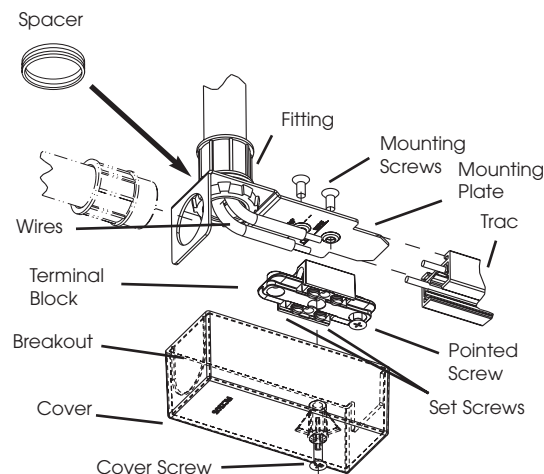
## TLR21



## TLR38



## TLR34

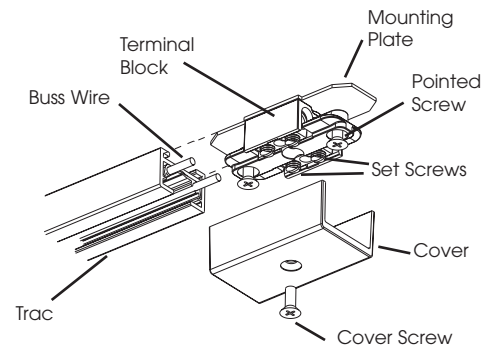


## TLR23 Miniature Straight Connector

Joins 2 track sections end-to-end to continue a straight run.

1. Remove connector cover by loosening screw.
2. Back off the (2) pointed screws in the outboard terminal block holes to allow insertion into the trac.
3. Loosen the (4) set-screws enough to allow the buss-wire to enter the terminal block.
4. Verify the trac has from 3/8"-7/16" of buss wire extending past the end. Slide the connector so the metal mounting plate slides into the channel in the top of the trac extrusion. Hold firmly together and tighten the pointed screw until snug.
5. To make electrical connection to the buss, tighten the (2) set-screws closest to the trac to 12 to 18 in-lb (1 to 1.5 ft-lb)
6. Repeat steps 4 & 5 to connect the other trac section.
7. Reinstall the cover by placing over terminal block assembly and tightening screw removed in step 1.

## TLR23



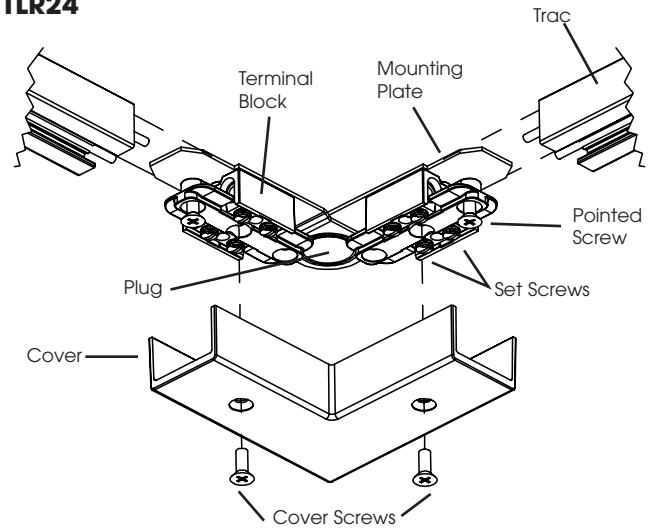
## TLR24 Adjustable Connector

Joins 2 trac sections to form a 90° corner or a straight coupling in surface mount or pendant mount applications.

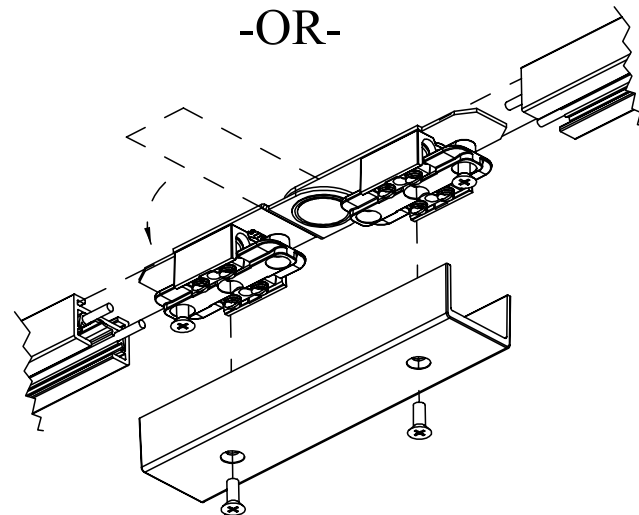
1. Remove connector cover by loosening cover screws.
2. Back off the (2) pointed screws in the outboard terminal block holes to allow insertion into the trac.
3. Loosen the (2) set-screws in both terminal blocks where the buss-wires will enter the terminal blocks (4 total). Do not loosen the set-screws that retain the jumper wires.
4. Depending on the desired application (straight or 90°) rotate the connector to the corresponding position and discard the unused cover (see illustrations).
5. Verify the trac has from 3/8"-7/16" of buss wire extending past the end. Slide the connector so the metal mounting plate slides into the channel in the top of the trac extrusion. Hold firmly together and tighten the pointed screw until snug.
6. To make electrical connection to the buss, tighten the (2) set-screws closest to the trac to 12 to 18 in-lb (1 to 1.5 ft-lb)
7. Repeat steps 5 & 6 to connect the other trac section.
8. Verify that the set-screws that retain the factory installed jumper wires are tightened to 12 to 18 in-lb (1 to 1.5 ft-lb).
9. Reinstall the corresponding cover (90° or straight) by placing over connector assembly and tightening the (2) screws removed in step 1.

## TLR24

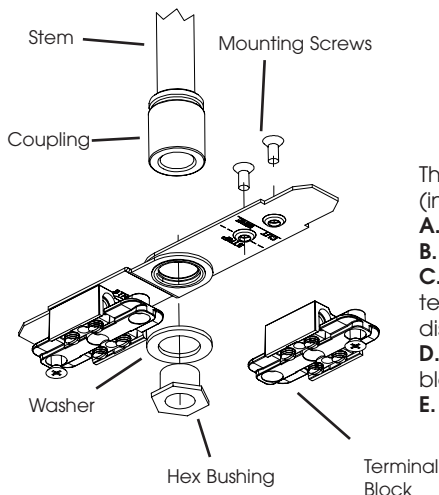
Note: Jumper wires removed for clarity



-OR-



Note: Jumper wires removed for clarity



The TLR24 adjustable connector can also be used to support the trac in a pendant mount application (in 90° & straight configurations).

A. Install the TLR series pendant mounting kit per the installation instructions included with the kit.

B. Follow the TLR24 instructions in steps 1-4 above.

C. Remove the (2) screws holding (1) of the terminal blocks to the mounting plate and rotate the terminal block out of the way to access the hole plug. (Do not remove the jumper wires) Remove and discard hole plug. (see illustration)

D. Fasten the TLR24 to the pendant mounting kit using the components shown. Bend the loose terminal block back to the original position and fasten to the plate.

E. Continue installation according to steps 5-9 above.

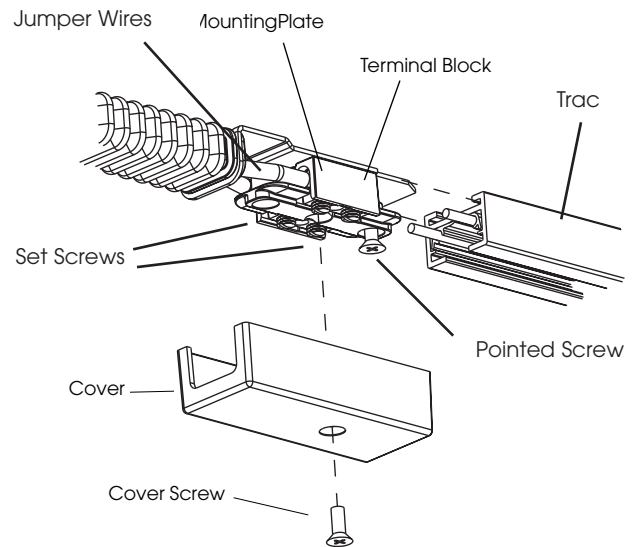
## TLR20 Adjustable Joiner

Joins 2 track sections at variable angles to left, right, up, or down to continue a run.

1. Remove connector covers by loosening screws.
2. Back off the (2) pointed screws in the outboard terminal block holes to allow insertion into the trac.
3. Loosen the (2) set-screws in both terminal blocks where the buss-wires will enter the terminal blocks (4 total). Do not loosen the set-screws that retain the jumper wires.
4. Verify the trac has from 3/8"-7/16" of buss wire extending past the end. Slide the connector so the metal mounting plate slides into the channel in the top of the trac extrusion. Hold firmly together and tighten the pointed screw until snug.
5. To make electrical connection to the buss, tighten the (2) set-screws closest to the trac to 12 to 18 in-lb (1 to 1.5 ft-lb)
6. Repeat steps 4 & 5 to connect the other trac section on the opposite side of connector.
7. Verify that the (4) set-screws that retain the factory installed jumper wires are tightened to 12 to 18 in-lb (1 to 1.5 ft-lb).
8. Reinstall the covers by placing over terminal block assembly and tightening screws removed in step 1.

### TLR20

(Typical for both sides of connector)

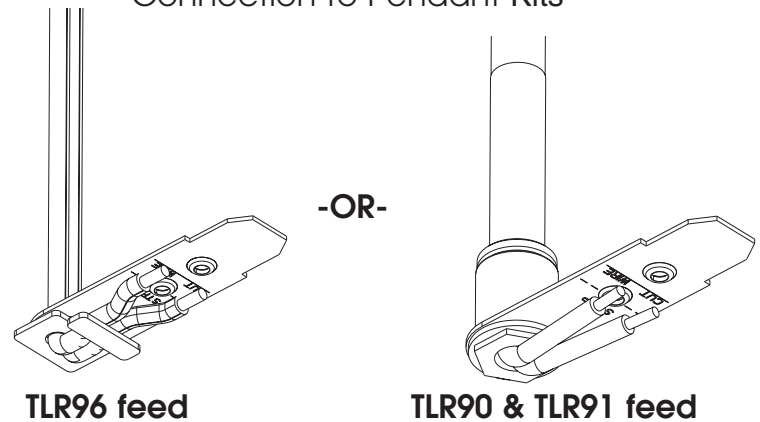


## TLR50 Pendant End Feed

For use in conjunction with TLR series pendant mounting kits. The TLR50 is used to support and/or feed the trac. when pendant mounting.

1. Install the TLR series pendant mounting kit per the installation instructions included with the kit.
2. Remove connector cover by loosening screw.
3. Remove the terminal block from the mounting plate by removing the (2) screws on top of the plate.
4. Fasten the pendant mounting kit to the TLR50 mounting plate as shown (see pendant mounting kit directions for further clarification).
5. Bend wires so they form a 90° angle towards the front of the mounting plate as shown. Cut and strip the wires to length per the plate markings.
6. Bend the wires slightly away from the plate and insert them into the corresponding terminal block opening. Set-screws may have to be loosened to allow wire to be inserted. (Note: terminal block is to be positioned with the pointed screw opposite wire entry). Tighten the (2) terminal block set-screws until snug to retain the wires.
7. Position the terminal block (with wires attached) so the terminal block holes line up with the holes in the mounting plate. Fasten to the mounting plate with the screws removed in step 3.
8. Loosen the (2) set-screws on the open side of the terminal block (enough to allow the buss-wire to enter the terminal block) and loosen the pointed screw which fastens the connector to the trac.
9. Verify the trac has from 3/8"-7/16" of buss wire extending past the end. Slide the connector so the mounting plate slides into the channel in the top of the trac. Hold firmly together and tighten the pointed screw until snug.
10. To make electrical connection to the buss, tighten the (2) set-screws closest to the trac to 12 to 18 in-lb (1 to 1.5 ft-lb). Tighten the set-screws retaining the transformer wires from the pendant kit to 12 to 18 in-lb.
11. Reinstall the cover by placing over terminal block assembly and tightening the screw removed in step 2.

### Connection to Pendant Kits



### TLR50

