

SURFACE TRACK (277V) • SPECIFICATIONS

GENERAL Lighting Track shall allow fixtures to be located anywhere along the track length. Fixtures shall be easily focused, switched, dimmed, accessorized and removed as desired. Track system shall have a twelve year warranty from date of shipment.

MECHANICAL 277V Lighting Track shall be constructed of .070 (2mm) extruded aluminum with overall height of 1.42 (36mm) and overall width of 1.812 (46mm). Track shall have same overall dimensions and physical appearance for both one and two circuit models.

277V Track shall be available in nominal 4 foot (1.2m), 8 foot (2.4m), and 12 foot (3.7m) lengths, in Silver, Black, and White high temperature baked paint finish. Track shall be field cuttable to any length with a single cut.

277V Track system shall be available with End Feed, End Cap, Straight Mini-Joiner, Straight Joiner/Feeder, Flexible Joiner and L, T, and X Joiner/Feeders as standard components.

277V Track shall have the ability to be directly surface mounted. Track shall have pre-punched mounting slots for direct mounting to any surface. Track shall have the ability to: be mounted 1/2 inch (13mm) from a surface by extruded aluminum mounting clips, be suspended from a surface by a field cuttable stainless steel cable system, be suspended from a surface by a field cuttable steel stem system, and be mounted into UniTrack housing.

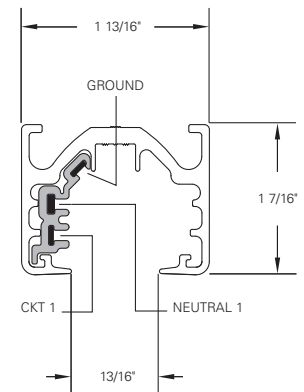
ELECTRICAL 277V Lighting Track and components shall be UL and CUL listed, CE Certified, and comply with the National Electric Code standards for Lighting Track. One and two circuit Lighting Track shall be rated at 277 volt, 60 Hz. 5540 watts maximum each circuit. Each 20 amp/277 volt circuit shall be comprised of flat copper busbars and have a separate neutral busbar for each circuit busbar. The neutral busbar shall be oversized to be comparable to #10 gauge 30 amp wire to reduce the possibility of overheating due to non-linear loads and harmonics. **Track shall have integral wiring channels for six (6) additional #12 THHN wires to create three (3) additional 20 amp/277 volt circuits, which can be dropped into any Joiner/Feeder, for a total track power capacity of 100 amps.** A separate grounding busbar shall be integral in all track lengths. All busbars shall be insulated to prevent contact with aluminum extrusion.

277V Track shall have electric feed capability through all Joiner/Feeders (except Flexible Joiner and Straight Mini-Joiner) using either 1/2 or 3/4 U.S. trade size knock-outs (.875 diameter [22mm] or 1.125 diameter [29mm]). Joiner/Feeders can be electrically field modified by removing the Lexan™ cover and rerouting internal pre-wired jumpers. All Joiner/Feeders shall be available in Black, White, and Silver GE fiber reinforced Lexan™.

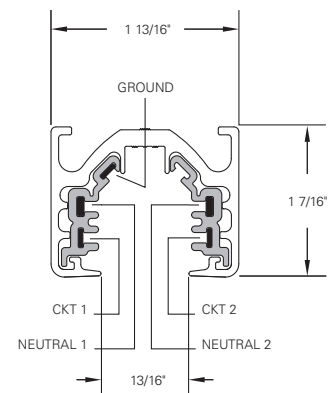
One and two circuit 277V Lighting Track with separate neutral busbars shall have the ability to have each circuit separately dimmed as required when using standard voltage and low voltage fixtures with either magnetic or electronic transformers. Track shall have the ability to be dimmed or switched in selected sections in addition to dimming or switching an entire track configuration or track run.

FIXTURE FITTING INTERFACE 277V Track shall accept GE fiber reinforced Lexan™ fixture fittings which positively lock into track and cannot be energized by the integral switch until safety interlock handle is in the closed position. Safety interlock shall also prevent fixture fitting removal from track unless the switch is in the "off" position. Upon insertion of fixture fitting into track, grounding connection from fixture fitting to track shall be automatically completed before any electrical contact is made with busbars. When removing fixture fitting from track, the grounding connection shall automatically be disconnected last. The fixture fitting shall recess into the track, creating a minimal profile below the track. 277V Track fixture fittings shall be identified by a red rotor and a 277 volt label.

One Ckt 277V Track

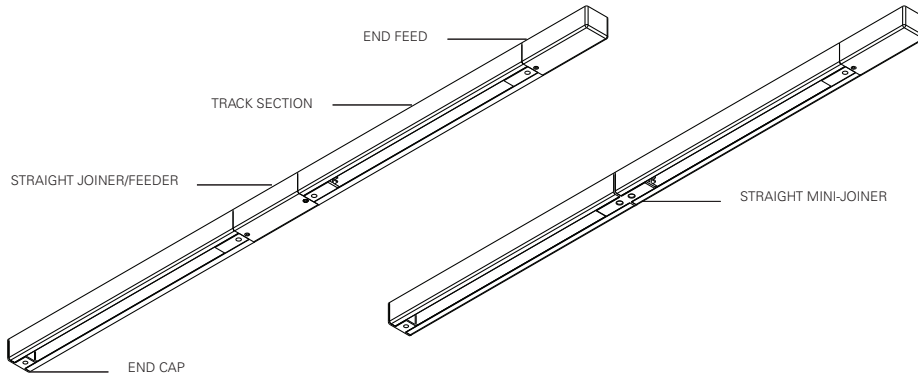


Two Ckt 277V Track

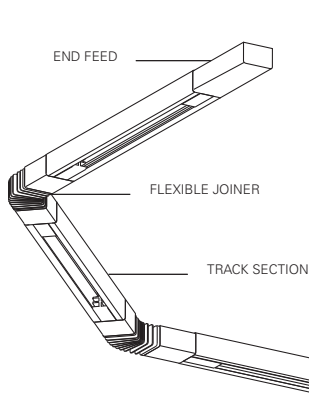


SURFACE TRACK (277V) • CONFIGURATIONS

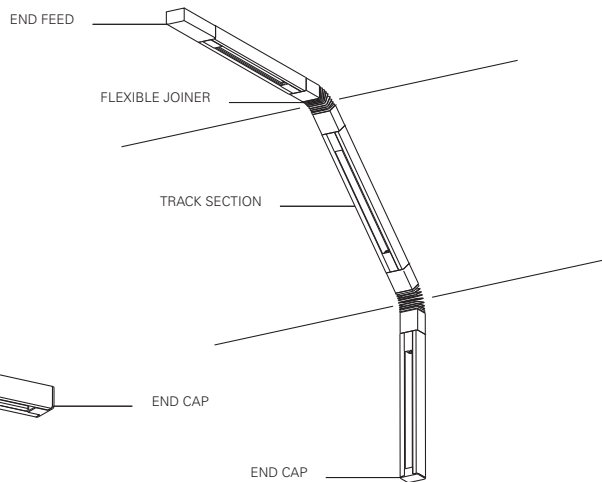
Straight Track Application



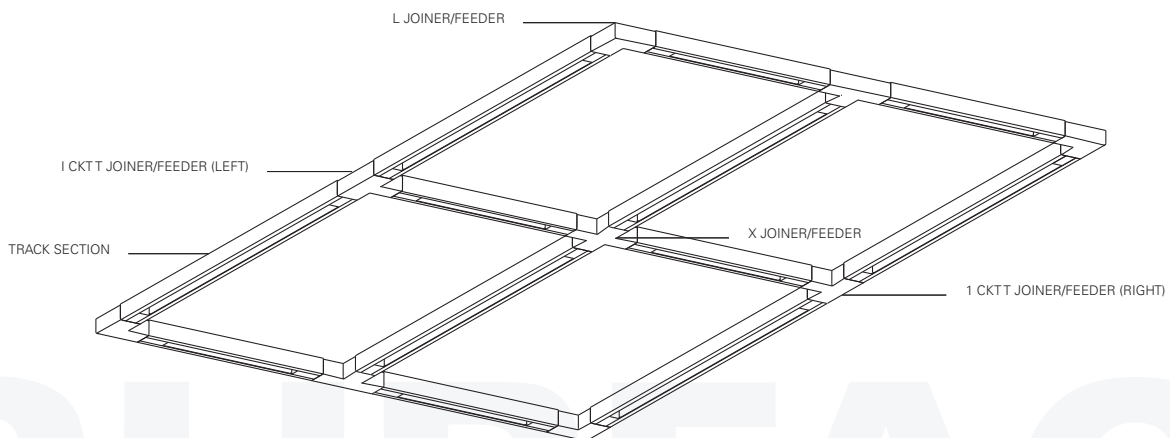
Ceiling Application/Horizontal Mount



Ceiling to Wall Application/Vertical Mount



One Circuit Configuration



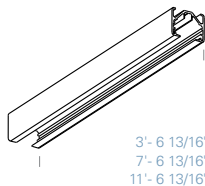
SURFACE

SURFACE TRACK (277V) • COMPONENTS

Key Features / Applications

UL and CUL listed, CE Certified, Dry Location • IBEW union made at LSI plant in USA • Specification grade heavy duty .070 (2mm) extruded aluminum track • 4 foot (1.2m), 8 foot (2.4m) and 12 foot (3.7m) field cuttable lengths • One circuit 20 amp or two circuit 40 amp capacity/277 volt • 100 amp total capacity when using integral wireways • Copper busbars equivalent to #12 AWG wire used as circuit and ground track conductors • Oversized copper busbars equivalent to #10 AWG wire used as neutral track conductors • Separate neutral track conductor used for each circuit track conductor • Separate copper grounding busbar used throughout track system • Black, White, and Silver finishes • All Joiner/Feeders, Flexible Joiners, Mini-Joiners, End Feeds and End Caps are injection molded of GE fiber reinforced Lexan™ • All Joiner/Feeders and Flexible Joiners are prewired and simply couple into track • All Joiner/Feeder circuits can be easily field modified by changing internal jumper wires • Fixture fitting recesses into track for minimum profile • LSI 277V surface track can be mounted directly to any surface 8'-0" above finished floor.

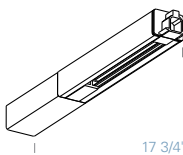
Surface Track Sections



277V Surface Track Sections are used in conjunction with an End Feed, End Cap and a variety of Joiner/Feeders to form track runs and configurations. Track Section lengths are nominal 4 foot (1.2m), 8 foot (2.4m) and 12 foot (3.7m) which are field cuttable.

Finish		Nominal Length		
		4 ft	8 ft	12 ft
Silver	One Ckt	61010	61020	61030
	Two Ckt	62010	62020	62030
Black	One Ckt	61210	61220	61230
	Two Ckt	62210	62220	62230
White	One Ckt	61310	61320	61330
	Two Ckt	62310	62320	62330

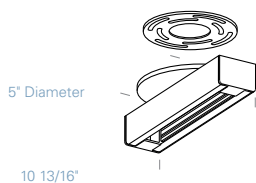
Security/Worklight Track



277V Security/Worklight Track is a separately fed one circuit Track Section, suitable for most LSI track fixtures, that integrates into any LSI Track run or configuration at any location. Consult fixture cutsheet. LSI fixtures (add suffix EF) mechanically lock into Security/Worklight Track by means of special hardware and do not have on/off switches.

Finish	All One Ckt			
	18" Joiner Section	18" End Feed Section	18" End Cap Section	18" Conduit End Feed Section
Silver	61050	61051	61052	61053
Black	61250	61251	61252	61253
White	61350	61351	61352	61353

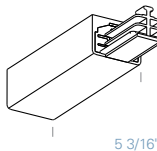
Unimount



277V Unimount is a compact canopy mount Track Section which will accept most single LSI Track fixtures up to 500 watts. Consult fixture cutsheet.

Finish		
Silver	One Ckt	61161
Black	One Ckt	61261
White	One Ckt	61361

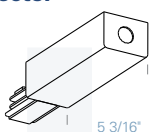
End Feed



277V End Feed is used in conjunction with a Canopy Kit for top feeding from a recessed outlet box and can also be top fed directly with cable.

Finish		
Silver	One Ckt	61100
	Two Ckt	62100
Black	One Ckt	61200
	Two Ckt	62200
White	One Ckt	61300
	Two Ckt	62300

End Feed for Conduit Connector



277V End Feed for Conduit Connector is used when feeding directly into the end of an End Feed. Connector supplied with 1/2" US trade size hole.

Finish		
Silver	One Ckt	61102
	Two Ckt	62102
Black	One Ckt	61202
	Two Ckt	62202
White	One Ckt	61302
	Two Ckt	62302

SURFACE TRACK (277V) • COMPONENTS

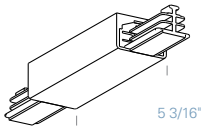
End Cap



277V End Cap is used for mechanically ending any straight run, individual Track Section, or open configuration Track Section.

Finish		
Silver	One & Two Ckt	60103
Black	One & Two Ckt	60203
White	One & Two Ckt	60303

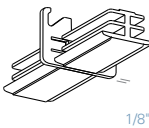
Straight Joiner/Feeder



277V Straight Joiner/Feeder is used to mechanically and electrically couple any two lengths of track in a straight line. Straight Joiner/Feeder can also be top fed to energize the track from a recessed outlet box when used in conjunction with appropriate Canopy Kit or can be top fed directly with cable.

Finish		
Silver	One Ckt Two Ckt	61104 62104
Black	One Ckt Two Ckt	61204 62204
White	One Ckt Two Ckt	61304 62304

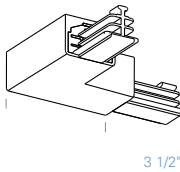
Straight Mini-Joiner



277V Straight Mini-Joiner is used to mechanically and electrically couple any two lengths of track in a straight line. Add .125 (3mm) for Straight Mini-Joiner when calculating overall lengths of straight runs or configurations (overall lengths are not the same as when using Straight Joiner/Feeder). Not for use as feeder.

Finish		
Silver	One Ckt Two Ckt	61111 62111
Black	One Ckt Two Ckt	61211 62211
White	One Ckt Two Ckt	61311 62311

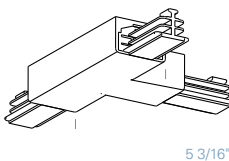
L Joiner/Feeder



277V L Joiner/Feeder is used to mechanically and electrically couple any two lengths of track in an L right angle configuration. This L Joiner/Feeder can also be top fed to energize the track from a recessed outlet box when used in conjunction with appropriate Canopy Kit or can be top fed directly with cable.

Finish		
Silver	One Ckt Two Ckt	61105 62105
Black	One Ckt Two Ckt	61205 62205
White	One Ckt Two Ckt	61305 62305

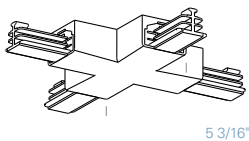
T Joiner/Feeder



277V T Joiner/Feeder is used to mechanically and electrically couple any three lengths of track in a T configuration. This T Joiner/Feeder can also be top fed to energize the track from a recessed outlet box when used in conjunction with appropriate Canopy Kit or can be top fed directly with cable. Internal Joiner wiring can be field modified. Note that in the one circuit version, a right or a left T must be ordered and must be used directly opposite each other when used in a configuration so that busbar continuity is maintained. For two circuit track, a left and right T is not necessary.

Finish		Left Joiner	Right Joiner
Silver	One Ckt Two Ckt	61106 62108	61107 62108
Black	One Ckt Two Ckt	61206 62208	61207 62208
White	One Ckt Two Ckt	61306 62308	61307 62308

X Joiner/Feeder

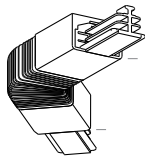


277V X Joiner/Feeder is used to mechanically and electrically couple any four lengths of surface track in an X configuration. This X Joiner/Feeder can also be top fed to energize the track from a recessed outlet box when used in conjunction with appropriate Canopy Kit or can be top fed directly with cable.

Finish		
Silver	One Ckt Two Ckt	61109 62109
Black	One Ckt Two Ckt	61209 62209
White	One Ckt Two Ckt	61309 62309

SURFACE TRACK (277V) • COMPONENTS

Flexible Joiner



7 1/8"

277V Flexible Joiner is used to mechanically and electrically couple any two lengths of surface mount track to create angles from 0° (straight) through 90° (right angle). The Flexible Joiner can be flexed in either horizontal or vertical planes. Not for use as feeder.

Finish

Silver	One Ckt	61112
	Two Ckt	62112
Black	One Ckt	61212
	Two Ckt	62212
White	One Ckt	61312
	Two Ckt	62312

Adjustable Angle Bracket



5 1/4"

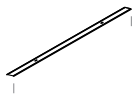
The Adjustable Angle Bracket for Flex Joiner is designed to attach to cable mounted track. This assembly locks the set angle of a Flex Joiner when there is no rigid mounting means.

Finish

Silver	One & Two Ckt	30116
Black	One & Two Ckt	30216
White	One & Two Ckt	30316

Raceway Cover

3'- 6 3/4"
7'- 6 3/4"
11'- 6 3/4"

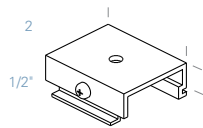


Field cuttable Raceway Covers are used to enclose additional lay-in circuit wiring in top section of track.

Nominal Length

Finish	4 Ft	8 Ft	12 Ft
Galvanized	30613	30614	30615

Surface Hanger Clip Kit



1/2"

Extruded Surface Hanger Clips space track .50 (13mm) from a surface to create a floating look or when mounting to an uneven surface. For normal usage, LSI recommends two hanger clips per 4 foot (1.2m) length, two hanger clips per 8 foot (2.4m) length and three hanger clips per 12 foot (3.7m) length. Two clips per package. 1/4" diameter hole.

Finish

Silver	One & Two Ckt	30025
Black	One & Two Ckt	30225
White	One & Two Ckt	30325

Display Hook

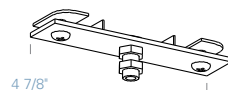


Display Hook is used to mechanically hang an item from the track without electrifying it. Do not exceed 20 lbs. at minimum spacing of two feet.

Finish

Silver	One & Two Ckt	30761
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Weight Support Bar



4 7/8"

Weight Support Bar provides threaded nipple and nuts to mount an item to track without electrifying it. Do not exceed 20 lbs. at minimum spacing of two feet. Nipple size 1/8-27 NPS.

Finish

Silver	One & Two Ckt	30762
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Track Closure Cover



11'- 4"

Field cuttable Noryl Track™ Closure Covers are used to enclose the open face of the track, and simply snap into place.

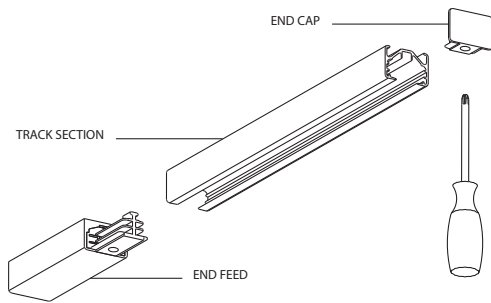
Nominal Length

Finish	12 Ft
Silver	30167
Black	30267
White	30367

SURFACE TRACK (277V) • INSTALLATION

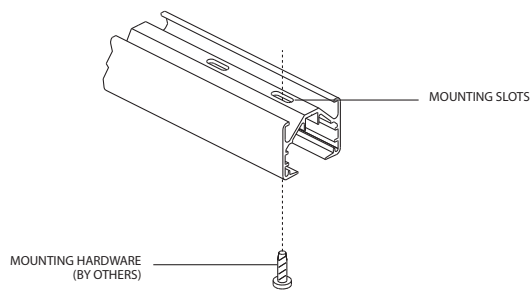
General Notes

When installing or using this track system, basic safety precautions should always be followed, including the following: Read all instructions. Do not install this track in damp or wet locations. Do not install any part of the track system less than eight feet from floor. Do not install any fixture assembly closer than six inches from any curtain or similar combustible material. Disconnect electrical power before adding to or changing the configuration of the track. Check with a qualified electrician. Do not attempt to energize anything other than lighting track fixtures 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. Install as per NEC and local codes. Save these instructions.



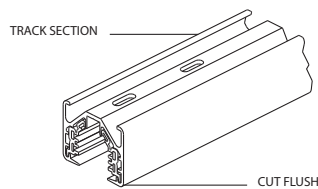
Assembling

Insert End Cap, End Feed or any other Joiner/ Feeder completely into Track Section and tighten the recessed Phillips head screw. Do not use excessive force when inserting components into Track Section.



Mounting

Fasten track directly to surface through pre-punched mounting slots with hardware (by others) capable of withstanding a 50 lb. pull. Mount track in compliance with NEC Lighting Track Article #410-101 (Installation), #410-104 (Fastening) and any other applicable codes. To prevent distortion of the track opening which may prevent insertion of fixture fittings do not over tighten mounting screws. LSI recommends a minimum of two mounting points per section of track. LSI track can be mounted on centers up to 6'-0".



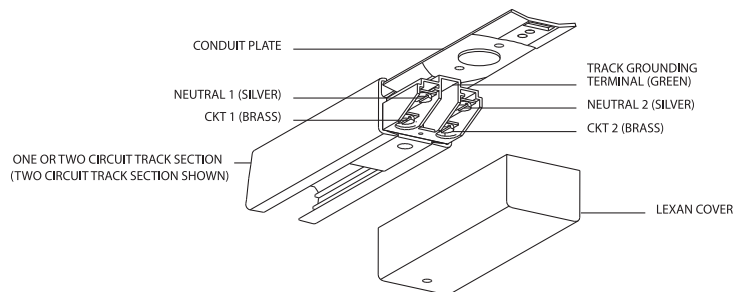
Field Cutting

LSI track can be easily field cut using a sharp hacksaw or a chop saw with a blade for non-ferrous metals, such as Oldham commercial carbide series metal blade. Together, cut the aluminum track, Noryl™ insulation, and copper with one straight cut. All pieces must be exactly the same length. Be sure to remove any burrs on the aluminum or the copper as this may affect the electrical and mechanical interconnection of components to track. Do not cut track to less than one foot in length.

SURFACE TRACK (277V) • INSTALLATION

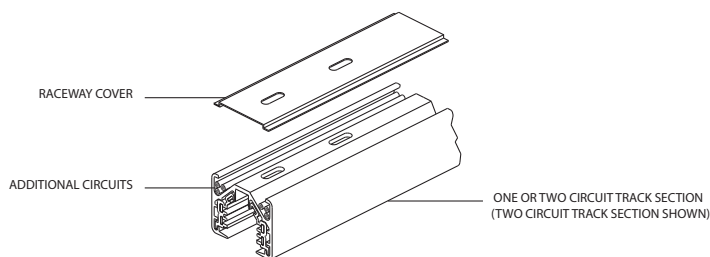
Electrical

Remove the Lexan™ cover from any End Feed or Joiner/Feeder, bring wires through combination 1/2, 3/4 U.S. trade size knock-out (.875 diameter [22mm], 1.125 diameter [29mm]) in feed plate and attach conductors to identified terminals. Joiner/Feeders can be electrically field modified after removal of Lexan™ cover by rerouting internal pre-wired jumpers.



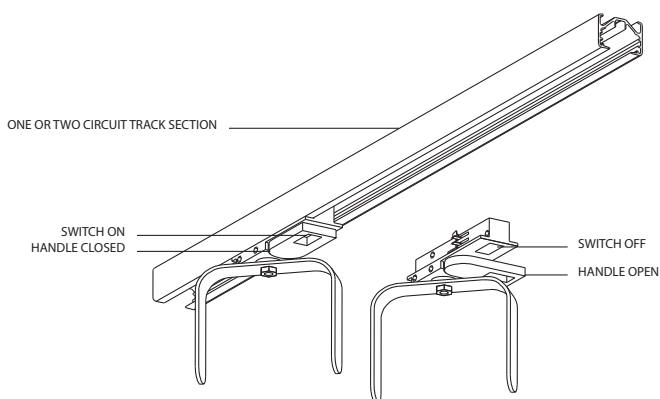
Additional Circuits

LSI Track has integral wiring channels for six additional #12 THHN wires to create three additional 20 amp circuits with separate neutrals. Place conductors in wiring channels and slide raceway covers into track prior to mounting.



Installing LSI Fixtures

LSI 277 volt fixtures always have a **red rotor** to identify them. To insert a fixture fitting into the track, the switch must be in the "off" position, with the handle open. Insert the fixture fitting straight up into the track until it seats evenly, close handle completely, switch on. If using one circuit track, make sure that the brass contacts which protrude from the side of the fixture fittings are inserted facing the copper busbars. If using two circuit track, inserting the fixture fitting in one direction will connect to circuit one. Removing and reversing the direction of the fitting will connect to circuit two.

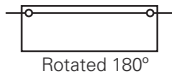
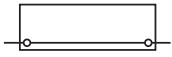


TYPICAL WIRING DIAGRAMS

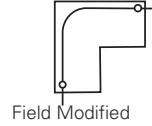
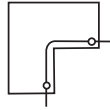
Diagrams apply to 120V Surface Track, 277V Surface Track and Recessed Track Systems

Single Circuit

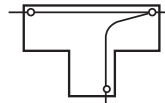
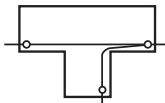
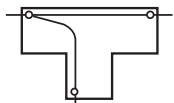
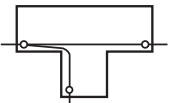
Straight Joiner/Feeder



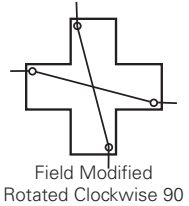
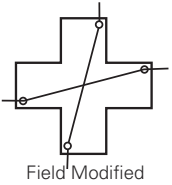
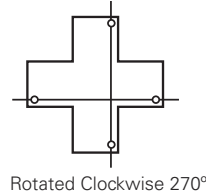
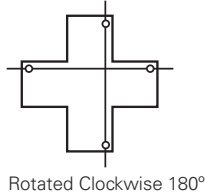
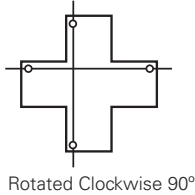
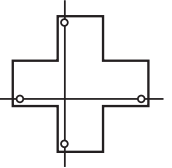
L Joiner/Feeder



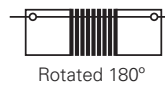
T Joiner/Feeder



X Joiner/Feeder



Flexible Joiner

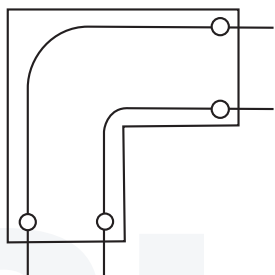
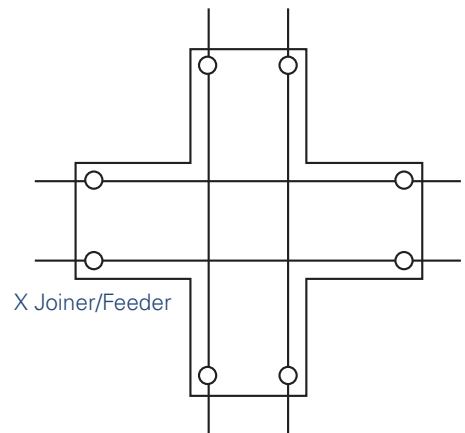
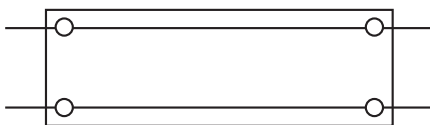


Notes:

All diagrams shown are installed view, not RCP.

Except as noted, all modifications can be done simply and quickly on the job with a Philips and straight blade screwdriver

Two Circuit



* Prewired internal jumpers cannot be modified.