

MULTISYSTEM INSTRUCTIONS

For more details visit our website:

www.lightingaustralia.com.au/products/lighting-track/multisystem-48v-track

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Warning

All the described operations of this instruction page must be done by specialised personnel only, shutting of the electrical power and respecting all national installation regulations and guidelines. A.A.G. Stucchi allows the use of only A.A.G. Stucchi parts in applications where the MULTISYSTEM® system is installed. These parts must be installed according to the installation instructions.

The company as a manufacturer is not responsible for the safety and functioning of the system if electrical or mechanical components not belonging to it are used or if there are any deviation from the installation instructions. It is then the user's responsibility to ensure the correct functionality and the electrical, electromechanical, electronic, mechanical and thermal compatibility between the system and any other third party products that are used or even developed for the system itself (i.e. drivers/ fixtures). The track, its components and also the adapters can't be used with accessories without the Quality/Approval mark of the region. On A.A.G. Stucchi track one can use only A.A.G. Stucchi connections. A.A.G. Stucchi connections can only be used with A.A.G. Stucchi tracks. Do not exceed listing loading indicated in the relevant section and respect fixing distances during the track mounting. This track system is Class III and is not compatible with Class I track systems or Class III track systems from other manufacturers. Insert the appropriate power circuit protections in order to prevent short circuits or overloads.

Safety Warnings for products and installation

- The use of NON SELV or U-OUT > 60V dc power supplies, drivers and components is strictly forbidden.
- A.A.G. Stucchi recommends the usage of an opto-insulated repeater DALI compatible (eg. RP-DALI-24-48V)
- You can choose to use the 4 conductors of the track in 2 different modes:
 - 2 different power supplies (2 circuits, 0 – 60V dc)
 - 1 circuit for 60V dc and 1 circuit for DATA BUS
- If you want to create a unique DATA BUS in your lighting project (building, shop etc), electrically connecting the low voltage track DATA BUS with the DATA BUS of other lighting application, all the components involved must be SELV approved.
- It is strictly forbidden to use any kind of solvent, glue, oil, grease or cleaner in contact with MULTISYSTEM components. The company is not responsible for any damage caused by the use of the materials mentioned above.

Technical Information

- *Supply Voltage (input): 0 – 60 V dc "The supply voltage must be between 0 and 60 VDC"*
- *Supply Current: max. 15A "supply current must not exceed 15 A."*
- *Max operating temperature: 70°C The operating temperature must not exceed 70°C (Ta 25°C)*
- *Class III (SELV) "The MULTISYSTEM track is a Class III - SELV product"*
- *End Feed wiring cables: 4X1.5mm "Use 4 x 1.5 mm² / 4xAWG16 cables to wire the end power feed."*
- *UL certification 48V-12A.*
- *Maximum weight of the lighting fixture: 10N with magnetic adapter; 20N with mechanical adapter*
- *Tracks to be used both in NON polarised and polarised versions. All tracks come with a mechanical key (Fig. 3)*
- *The plastic components are supplied in both polarised and NON-polarised versions. During assembly operations, respect the polarity only for the lighting fixtures that require it.*

Voltage Drop Table

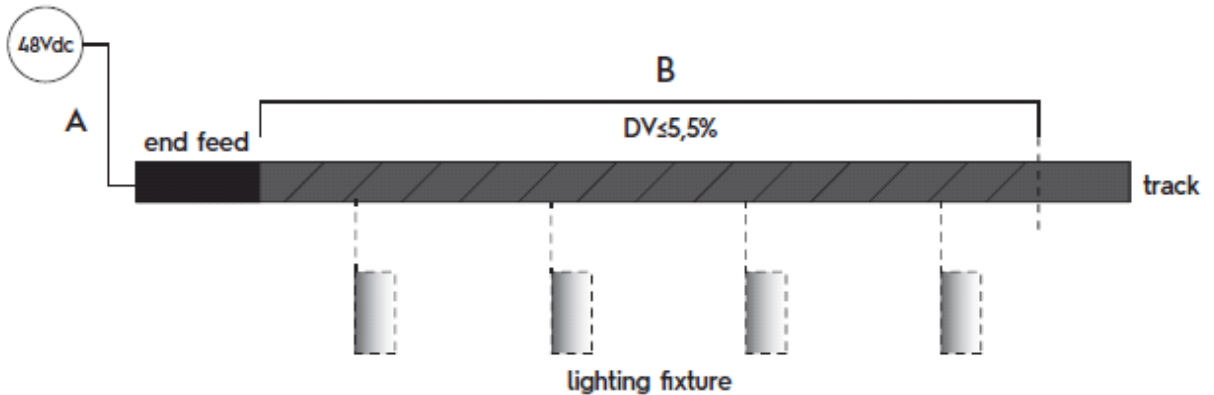
Power supply (W)	A Distance power supply/feed unit (2x1,5mm ²)			
	5m	10m	20m	30m
	B Track length with $\Delta v \leq 5,5\%$ (m)			
(m)	(m)	(m)	(m)	(m)
60	50	50	50	50
100	50	50	40	25
150	50	40	20	Not admitted
200	40	30	Not admitted	Not admitted
250	35	20	Not admitted	Not admitted

Information refers to a load equivalent to the power supplied and equally distributed on the relevant length in the table

A: Distance power supply/feed unit (2x1,5mm²)

B: Track length with $\Delta V \leq 5,5\%$ (m)

power supply

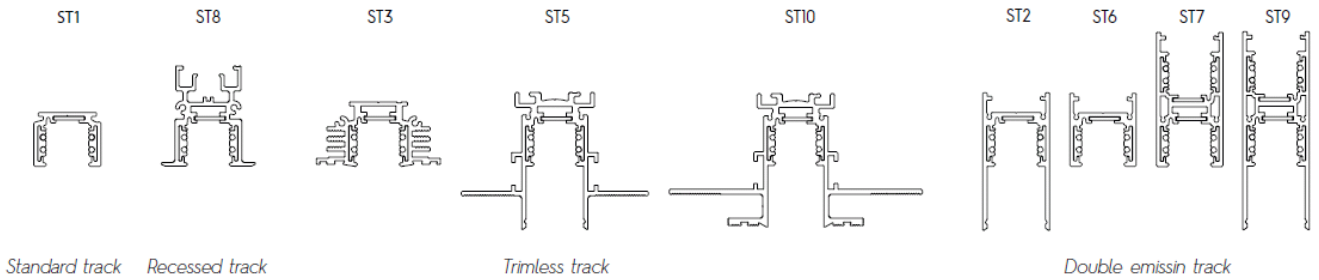


DIRECTIVE 2012/19/UE (Waste Electrical and Electronic Equipment - WEEE) The product at the end of life must be disposed of and recycled in a designated collection point, cannot be treated as household waste. Details on the collection points available c/ local government office or the product retailer.

EN Would you please be informed that the Italian version of these instructions is the only valid for legal purposes. The English version is offered only for your info and to make you reading easier and comprehensible.

MULTISYSTEM Track:

www.lightingaustralia.com.au/products/lighting-track/multisystem-48v-track/multisystem-48v-track-accessories

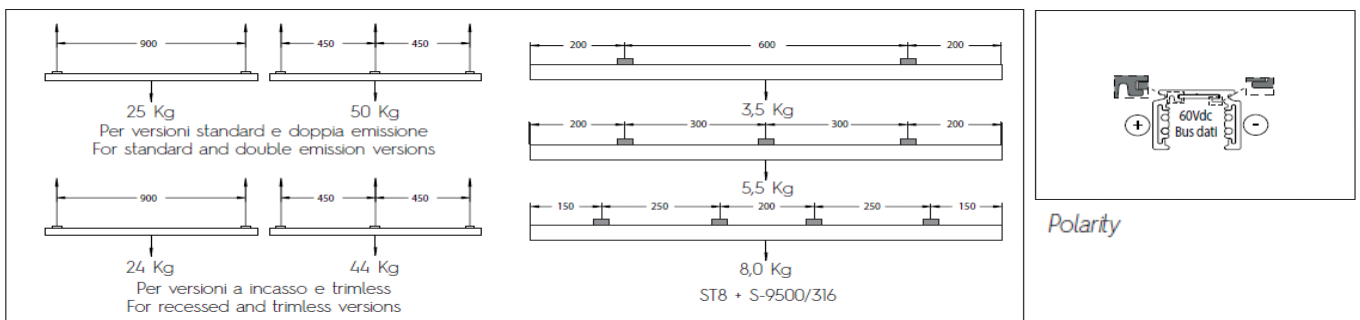


Standard track Recessed track

Trimless track

Double emission track

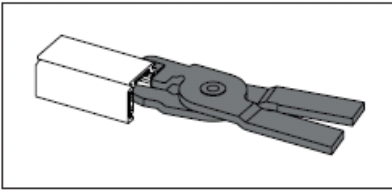
The MULTISYSTEM® track is a Class III – SELV product. The supply voltage must be between 0 and 60 VDC and the supply current must not exceed 15A. The room temperature must be 25°C while the operating temperature must not exceed 70°C. The 4 track conductors can be used to create two separate power supply circuits, or one circuit for the power supply and one for the DATA BUS. It is forbidden to use control gear, drivers, DATA BUS systems and components that are not SELV-approved and/or with U-OUT greater than 60 VDC. If in an installation the track system is being integrated with a larger lighting control system by electronically merging the DATA BUS of the low-voltage track with that of other fittings, all components used must be SELV-approved. Multiple track versions are available in order to create different light applications (see above). To fasten and use them, follow the instructions described in the individual product data sheet and do not exceed the maximum loads specified (see below). When installing the fittings in false ceilings, comply with the maximum load-bearing capacity of the relevant structure. The upper part of all tracks is fitted with a metal plate for the magnetic attachment of the adapters. It must not be removed for any reason whatsoever. All tracks come with a mechanical key the electrical accessories are supplied in both polarised and non-polarised versions (see below). During assembly operations, respect the polarity only for the light fittings that require it.



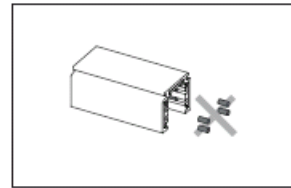
Polarity

Load scheme

Recessing track conductors



Recessing
track
conductors

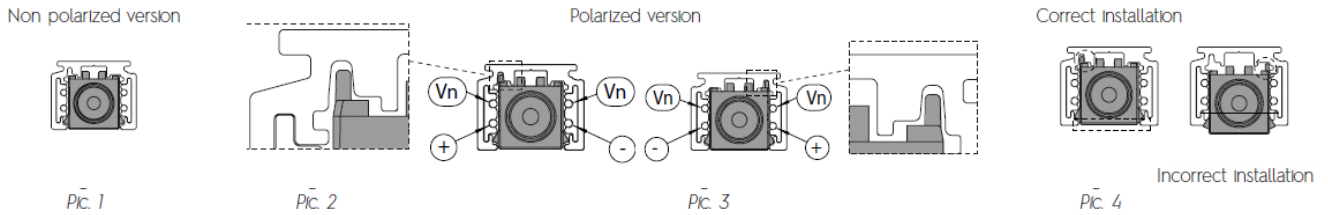


The track bars with 1-2-3 m length are supplied with the copper conductors already recessed at each finished edge, to prevent them coming into contact with one another in case of dual power supply or, if end caps are used, to prevent the copper conductors from coming into contact with them. If the track must be shortened during installation, after cutting it use the special pliers (S-9000/T) to cut back the 4 copper conductors of the track. Make sure to remove the 4 pieces of copper conductor cut. Proceed with the installation of another track or apply the end caps as explained in the instruction sheet.

MULTISYSTEM End Feeds & Connections:

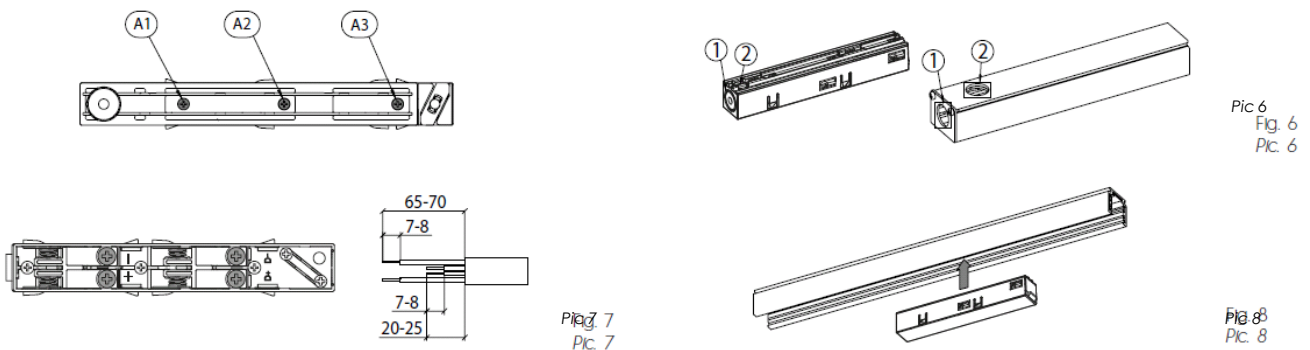
<http://www.lightingaustralia.com.au/products/lighting-track/multisystem-48v-track/multisystem-48v-end-feeds-connection-joints-accessories>

End Power Feed



There are two types of end power feeds: the non-polarised version (without mechanical key; codes 9501/... Pic 1) and the polarised version (with mechanical key on the left, code 9501-KL/... Pic 2, or on the right, code 9501-KR/... Pic 3)

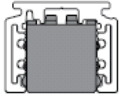
If polarised end power feeds are used, it is important to respect the wiring inside the item and to be very careful when inserting the end power feed into the track. Once inserted with the key properly orientated, the end power feed must lie perfectly flush with the track without protruding, and the key must not interfere with the track (Pic 4).



Use 4 x 1.5mm² cables to wire the end power feed. Remove the end power feed cover by loosening the three screws A1-A2-A3 (Pic 5) to access the electrical contacts. Apply force to removable section 1 or 2 and feed the power cable through the resulting hole. Subsequently, depending on the hole used, make a hole to pass the cable through the end cap or track (Pic 6). Remove the cable sheaths and strip the cables (Pic 7), then wire the contacts of the end power feed taking care to respect the markings on it (Vn/+/-). After completing the operations, use the screw-mount cable clamp located on the power end feed, put the cover back on and tighten the three screws A1-A2-A3. Lastly, insert the power end feed into the track (Pic 8). The electrical connection to the mains can only be achieved using items 9501...

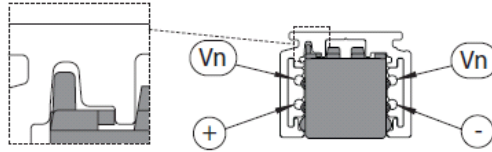
Linear Joint

Non polarized version



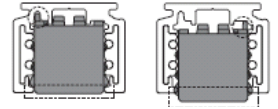
Pic. 10

Polarized version



Pic. 11

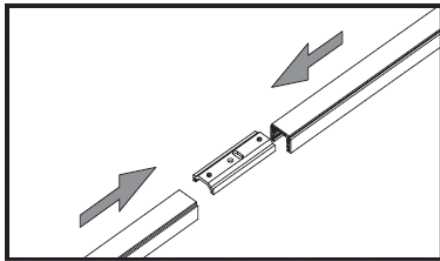
Correct installation



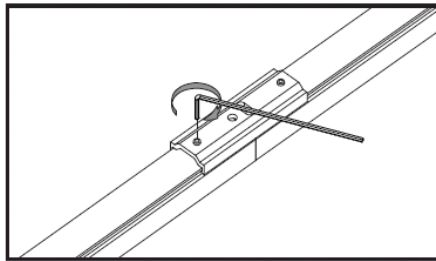
Pic. 12

Incorrect installation

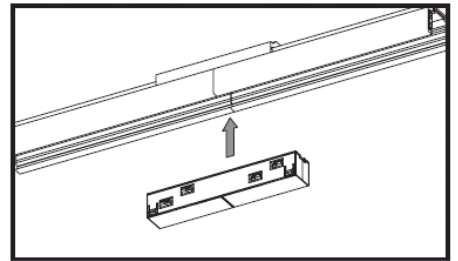
There are two types of linear joints: the non-polarised version (without the mechanical key, code 9503-S/... Pic 10) and the polarised version (with mechanical key, code 9503-S-K/... Pic 11). If polarised linear joints are used, take special care when inserting the joint into the track; once it has been inserted with the key properly oriented, the joint must lie completely flush with the track without protruding, and the key must not interfere with the track (Fig.12).



Pic. 13

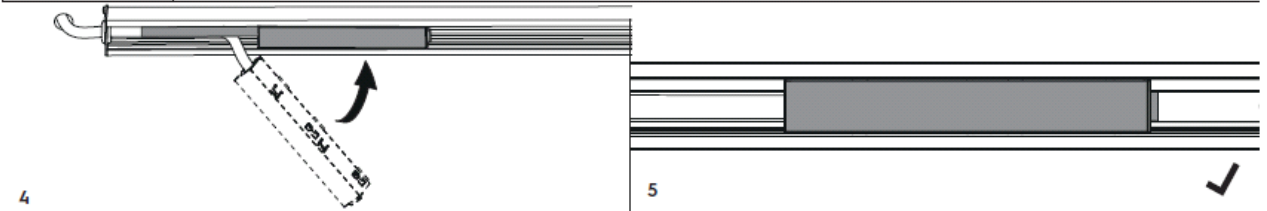
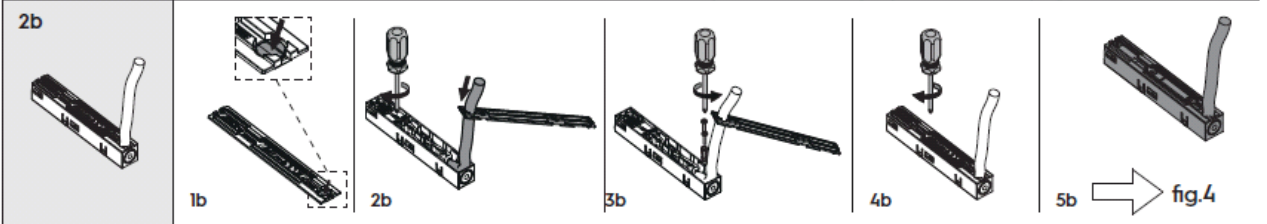
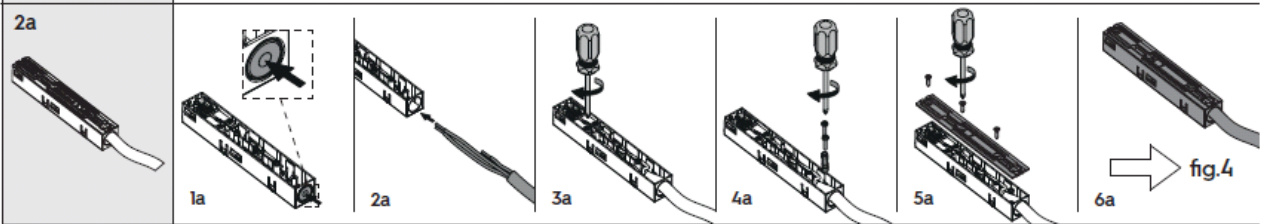
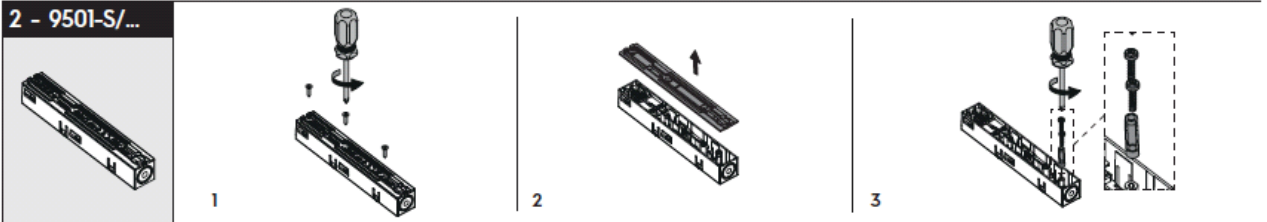
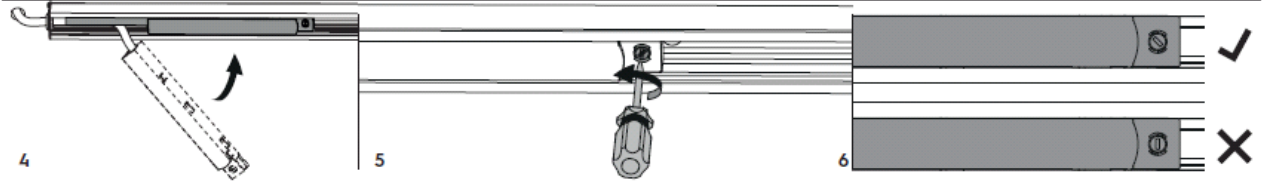
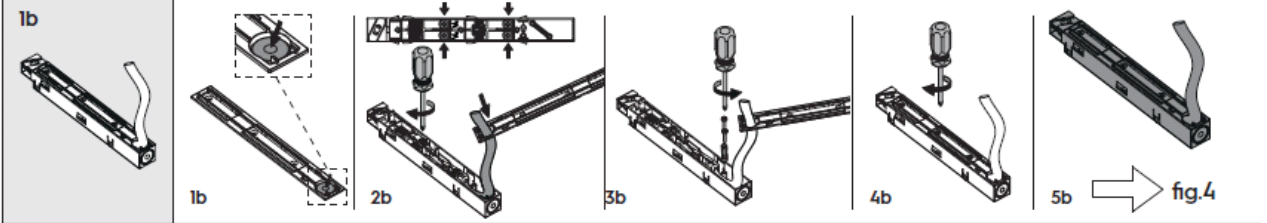
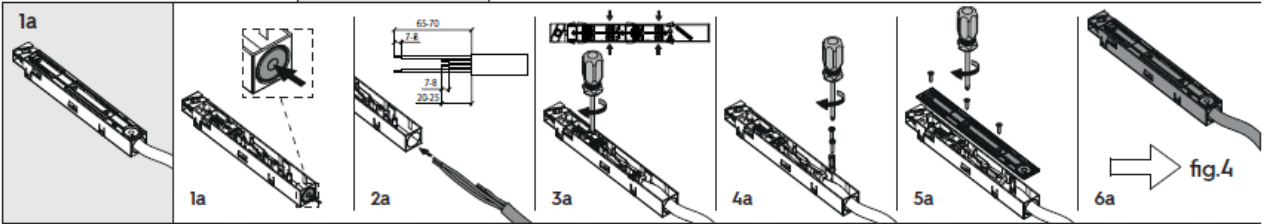
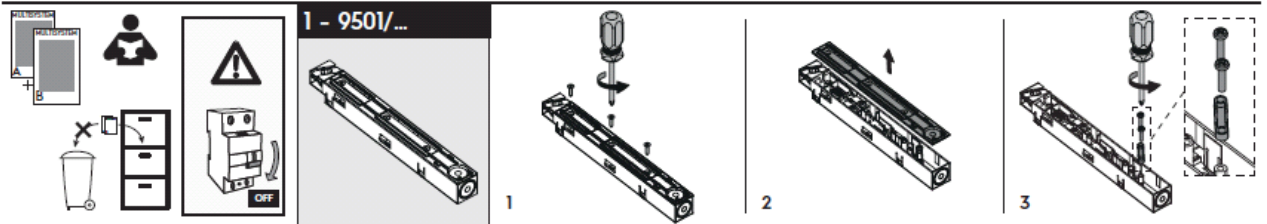


Pic. 14



Pic. 15

MULTISYSTEM



MULTISYSTEM

3 - 90° ANGLE

9511...

9500-.../...-ST... (X2)

S-9000/T

WITH 9511...

1

Al
Fe
Cu

45°

45°

2

POLARITY!

✓ ✗

3

4

x 9500-.../...ST2; 9500-.../...ST6:
S-9511/316-LA

5

4 - ≠ 90° ANGLE

9518...

9500-.../...-ST... (X2)

S-9000/T

WITH 9518...

1

Al
Fe
Cu

X°

X°

2

POLARITY!

3

4

5

6

5 - WALL CEILING 90° ANGLE

9518...

9500-.../...-ST... (X2)

S-9000/T

WITH 9518...

1

Al
Fe
Cu

90°

45°

45°

2

POLARITY!

3

4

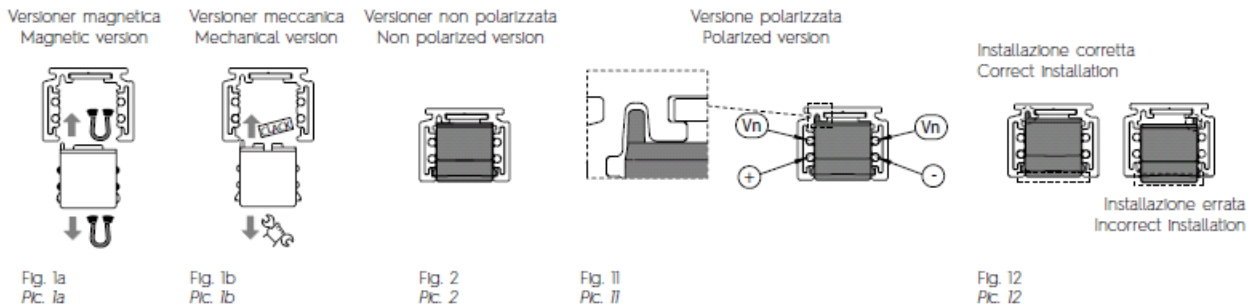
5

6

MULTISYSTEM Adapter (2A-60V dc; 10N):

www.lightingaustralia.com.au/products/lighting-track/multisystem-48v-track/multisystem-48v-adapters-and-accessories

Adapter



MULTISYSTEM adapters are available in two versions:

- Magnetic version adapters are equipped with permanent magnets which provide a connection to the metal plate inside the track (Pic. 1).
- Mechanical version adapters with automatic lock (Pic 1b)

All MULTISYSTEM adapter series come in two versions; non-polarised (without mechanical key, codes 9519... and 9529... Pic. 2) and polarised (with mechanical key, codes 9519...-K... and 9529...-K... Pic.3). When using polarised adapters, take special care when inserting the adapter into the track. Once inserted with the key properly oriented, the adapter must fit perfectly flush with the track without protruding, and the key must interfere with the track (Pic. 4)

To wire the adapter, use stranded and finned cables with cross sectional area between 0.5mm² and 1mm² rated appropriately for the luminaire's power to be connected to the adapter.

Remove the adapter cover by loosening the two screws C1-C2 (Pic. 6). Wire the cables to the adapter (Pic. 7) using the appropriate tool (made up of S-9009/T-HANS+S-9009/T-INS, to be ordered separately) can comply with the pole markings inside the adapter (Vn, +, -); push the cable in until it is completely inserted in the IDC contact. After wiring the 4 contacts, feed the cables through the central hole F1 (if items 9519...are used) or through the two side hole F2 and F3 (if series 9529... items are used) (Pic. 8). The luminaire can be fastened to the adapter using the following accessories: S-9519/5 + S-9519/M8 or S-9519/M10.

After wiring the fitting and fastening it to the adapter, put the cover on the adapter and tighten the two screws C1 and C2 (when using polarised versions, make sure that the cove is mounted in the proper direction).

Once mounted, the adapter cover must be perfectly level with the plane L, without bulging, so that it does not interfere with the correct operation of the adapter once it is installed on the track (Pic. 8).

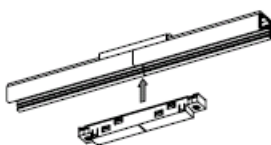


Fig. 13
Pic. 13

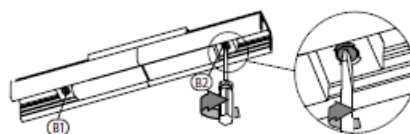


Fig. 14
Pic. 14

Adapter Rotation Kit and M10 or M8 Nipples



Fig. 9
Pic. 9



Fig. 10
Pic. 10

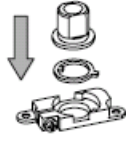


Fig. 11
Pic. 11

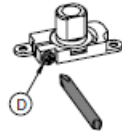


Fig. 12
Pic. 12

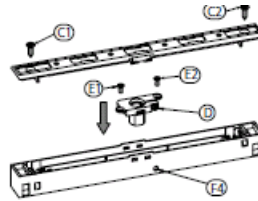


Fig. 13
Pic. 13

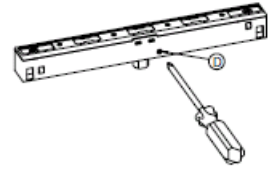


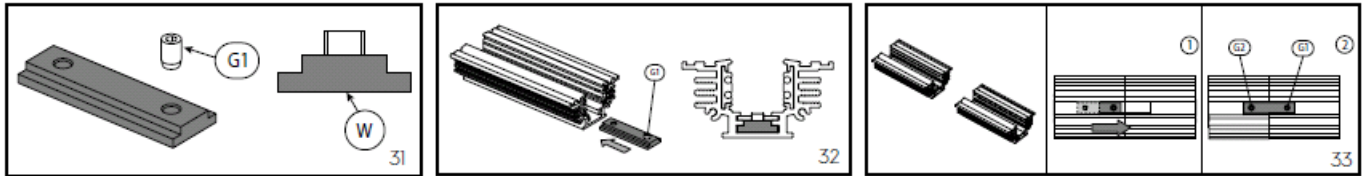
Fig. 14
Pic. 14

The luminaire can be fastened to the adapter using following accessories: S-9519/5 (Pic. 9) + S-9519/M8 or S-9519/M10 (Pic. 10). If series 9529...M adapters are used, two rotation kits and two nipple kits must be ordered. First place the special washer inside the plastic body of the rotation kit, followed by S-9519/M10 or S-9519/M8 nipple (Pic. 11). Next, tighten screw B lightly so that the washer and nipple are held in place inside their plastic housing (Pic. 12). Loosen the two screws C1-C2 from the series 9519...M or 9529...M adapter and remove the cover; insert the rotation kit, previously assembled with the washer and threaded nipple, by passing it through the hole on the base of the adapter body. During assembly, screw D of the rotation kit must be on the same side as hole F4 on the side wall of the adapter. Subsequently, screw the rotation kit onto the adapter using the two screws E1-E2. After completing this operation, put the cover on the adapter and tighten the two screws C1-C2 (Pic. 13) (when using polarised versions, make sure that the cover is mounted in the proper direction). To increase or decrease the friction of the adapter against the stem of the luminaire, tighten or loosen screw D using an appropriate screwdriver (Pic. 14).

MULTISYSTEM Trimless Track Brackets:

www.lightingaustralia.com.au/products/lighting-track/multisystem-48v-track/multisystem-48v-track-mounting-components

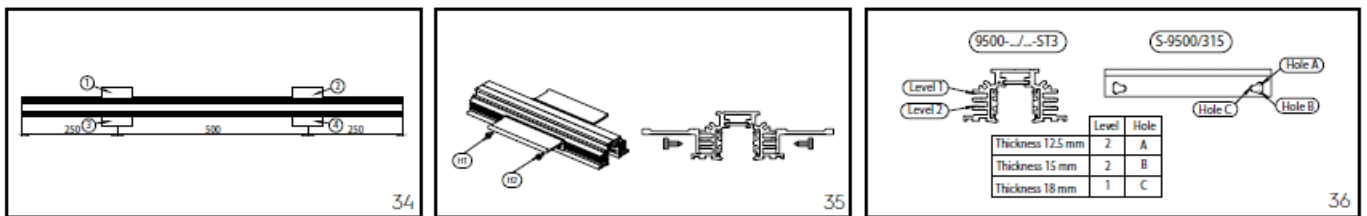
Reinforcement Bracket for Trimless Tracks



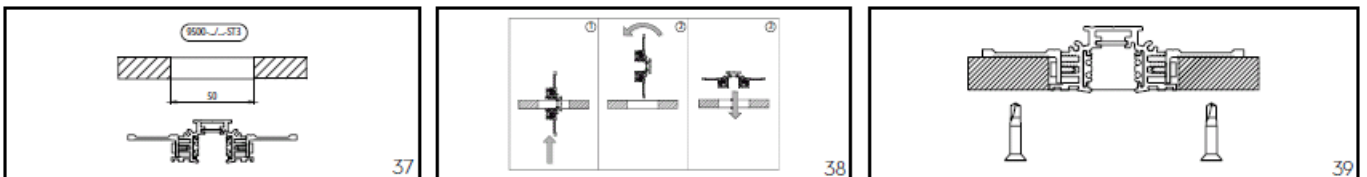
To fasten two sections of the trimless track, we recommend using bracket S-9500/314-B. Only screw one of the set screws G1 onto the bracket, making sure that it does not protrude from the lower side W of the bracket (Fig. 31). Slide the bracket into the first track section, from the side where set screw G1 has not been inserted, and push it completely inside the track (Fig. 32). Take the second track section and join it to the first section; slide the bracket (1) until it lies mid-way with respect to the two sections (2), then insert the second set screw G2. Lastly, tighten both set screws G1 and G2 until the bracket is tightly secured to the two track sections (Fig. 33).

For the electrical connections between the tracks use the pass-through joint 9503/...

Mounting Bracket for Trimless Tracks



To fasten trimless tracks (9500-.../...-ST3) to plasterboard, we recommend using bracket S-9500/315. Use 4 brackets for every metre of track; 2 of them must be secured to each side and distributed uniformly along the entire length of the track (Fig. 34), using the two screws H1 and H2 for each bracket (Fig. 35). The track has two bracket mounting positions (Level 1 and Level 2), while the bracket has 3 mounting holes (Hole 1, Hole 2 and Hole 3). Observing the various possible combinations (Fig. 36), the track can be anchored to plasterboard with 3 different thicknesses: 12.5mm/ 15mm/ 18mm.



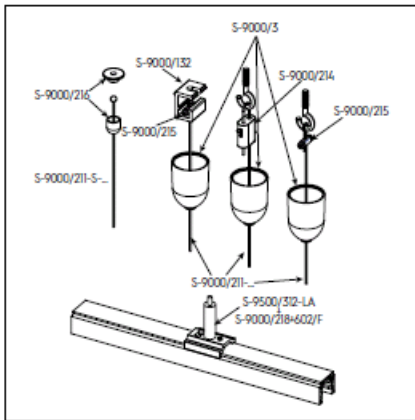
Once the 4 brackets have been fastened to the track, openings of suitable size must be cut into the plasterboard (Fig. 37) then the track must be positioned above the plasterboard in the manner illustrated (Fig. 38). Use appropriate screws (not supplied with the brackets) to fasten the track to the plasterboard (Fig. 39). Before inserting the track into the plasterboard, mark on the outside the position of the screws in relation to the track's bracket.

MULTISYSTEM Track Fixing Accessories:

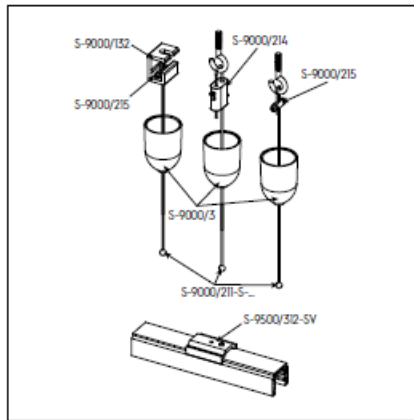
www.lightingaustralia.com.au/products/lighting-track/multisystem-48v-track/multisystem-48v-track-mounting-components

Assembly Diagrams

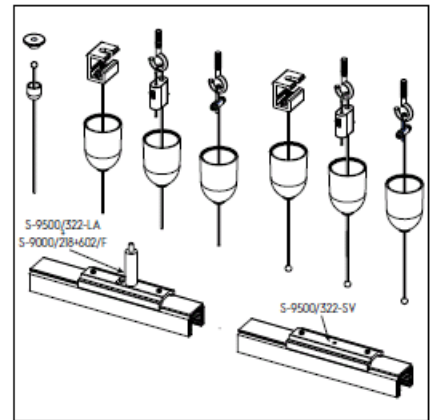
ST1 TRACK



Suspension accessories with track adjustment

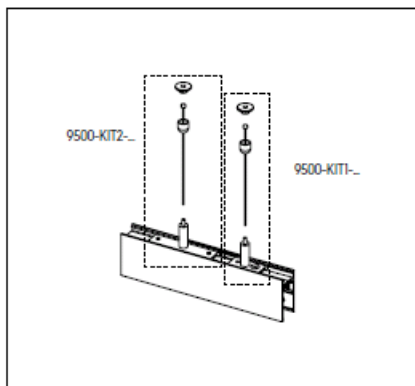


Suspension accessories with ceiling adjustment

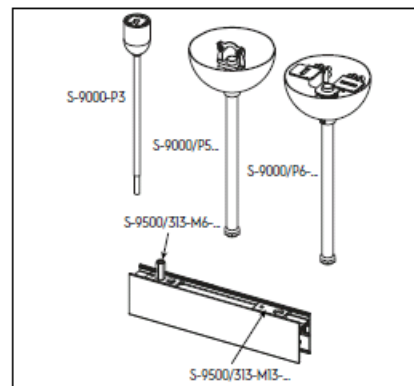


Accessories for "in row" use junctions

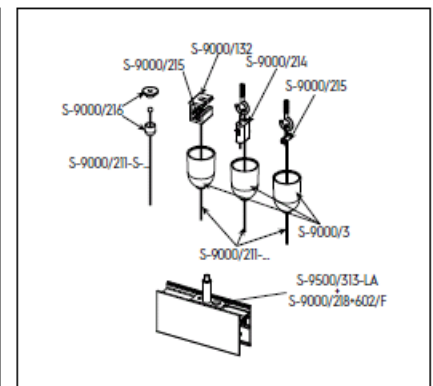
ST2, ST6 TRACKS



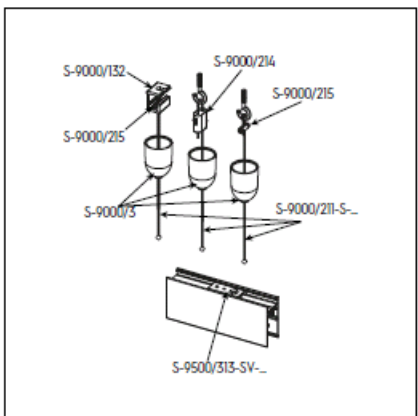
Complete suspension kit



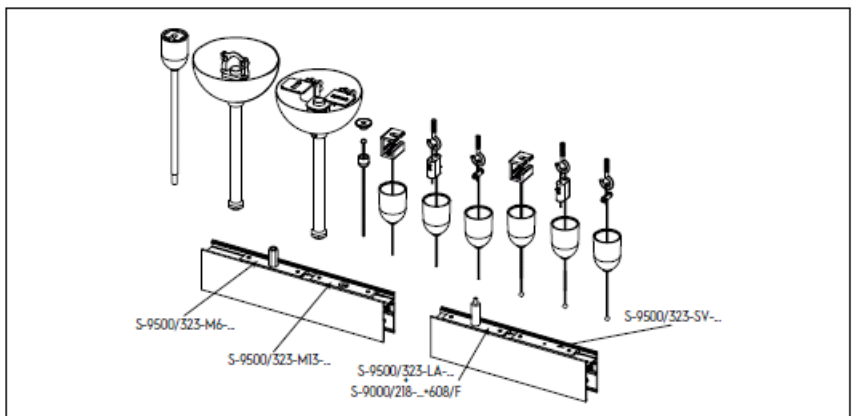
Suspension sets



Suspension accessories with track adjustment

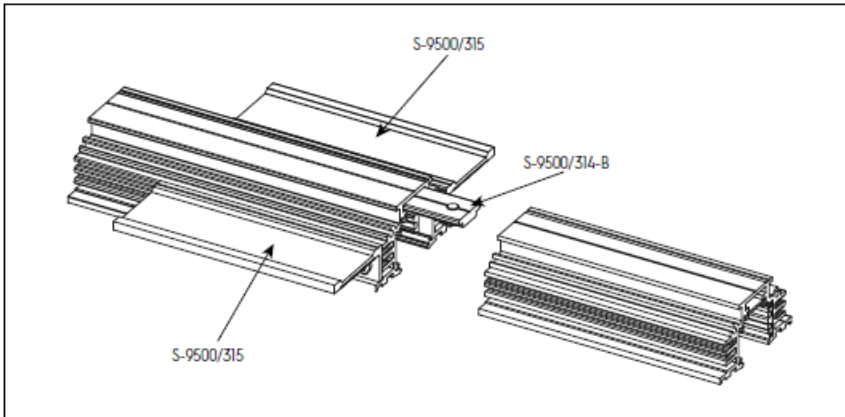


Suspension accessories with ceiling adjustment



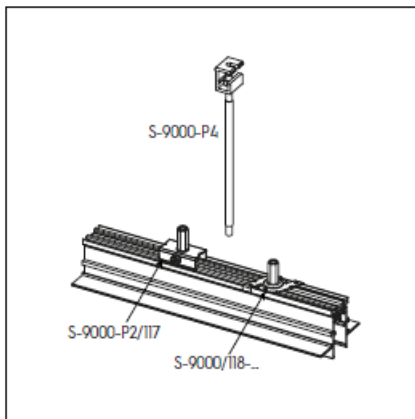
Accessories for "in row" use junctions

ST3 TRACKS

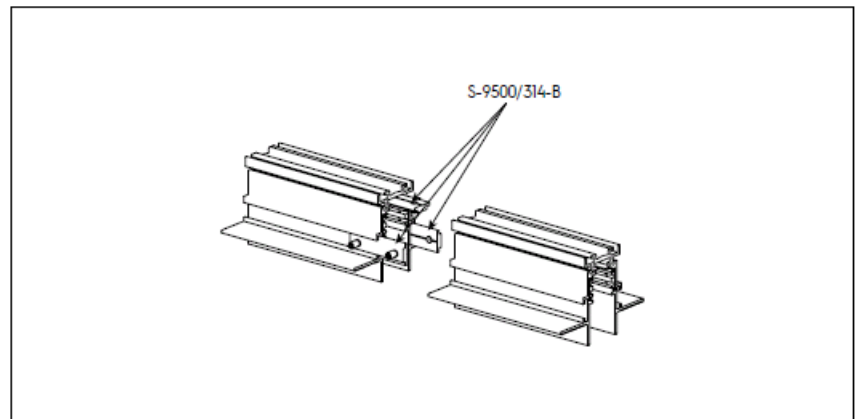


Accessories for trimless track

ST5, ST10 TRACKS

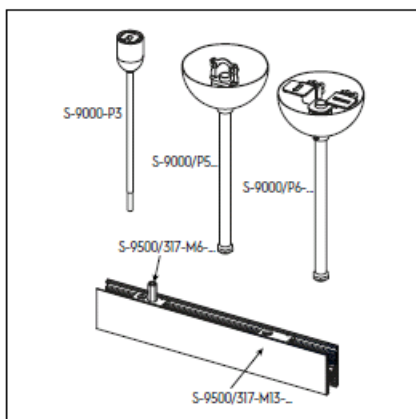


Suspension sets

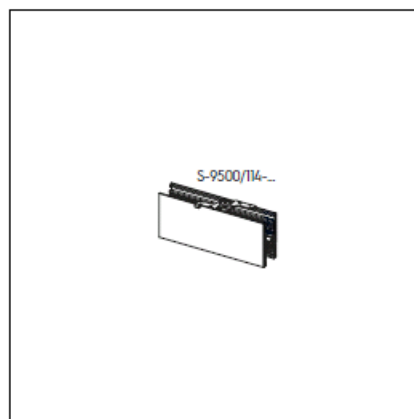


Accessories for "in row" use junctions

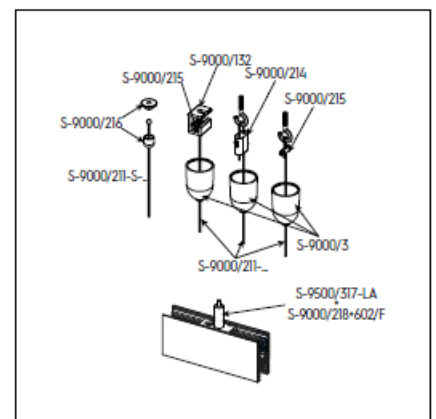
ST7, ST9 TRACKS



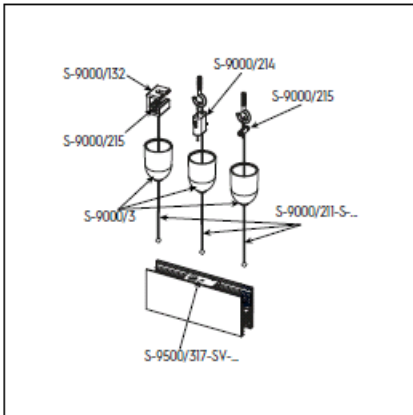
Suspension sets



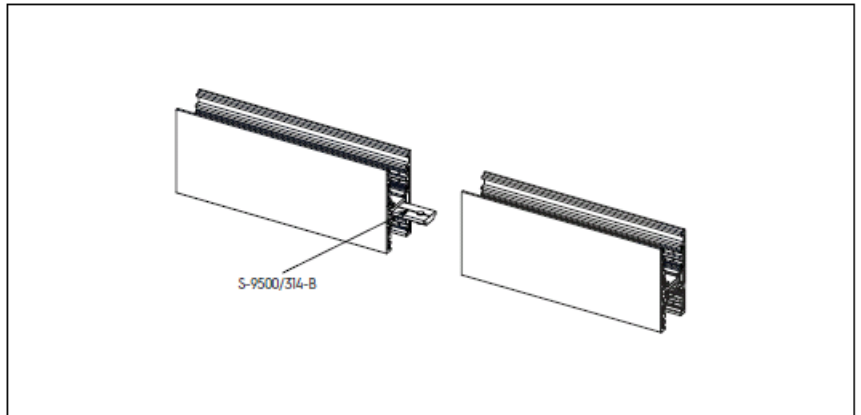
Ceiling fixing accessories



Suspension accessories with track adjustment

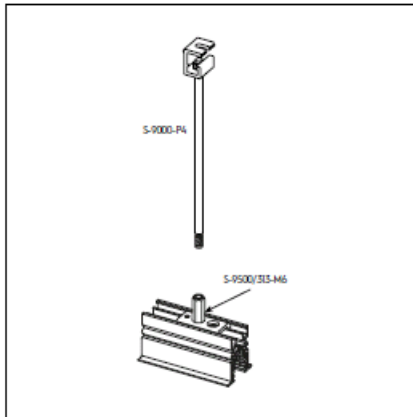


Suspension accessories with ceiling adjustment

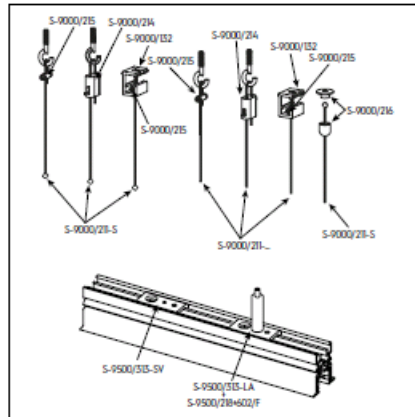


Accessories for "in row" use junctions

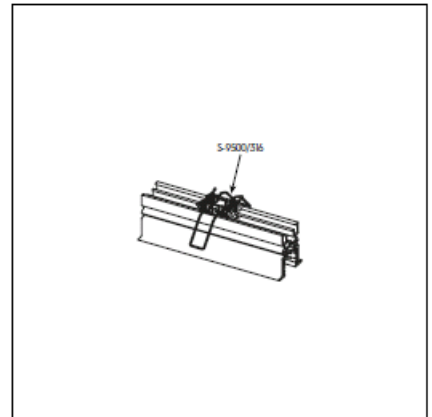
ST8 TRACKS



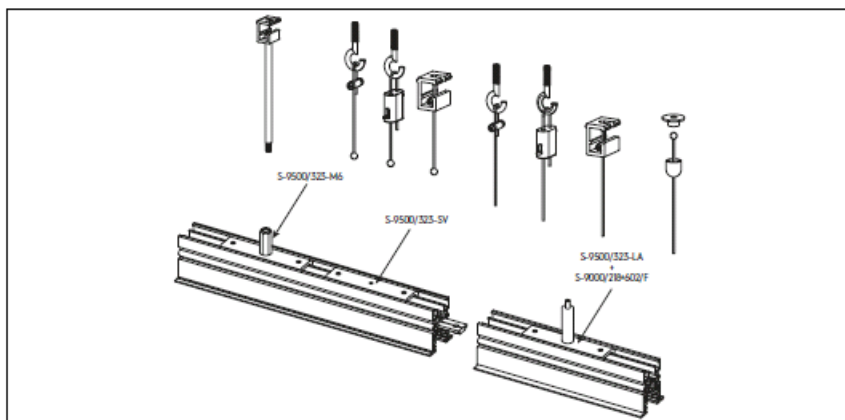
Suspension sets



Suspension accessories with track adjustment



Spring fixing



Accessories for "in row" use junctions