EXILITY MANUAL

MAGNETIC TRACK SYSTEM EXILITY

MAYTONI

MAYTONI

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1. Description and application of the device

The TRX034 series magnetic track system is the basis for building track lighting and is designed for mounting and supplying power to track lights in the DC electrical power grid with 48V of nominal voltage.

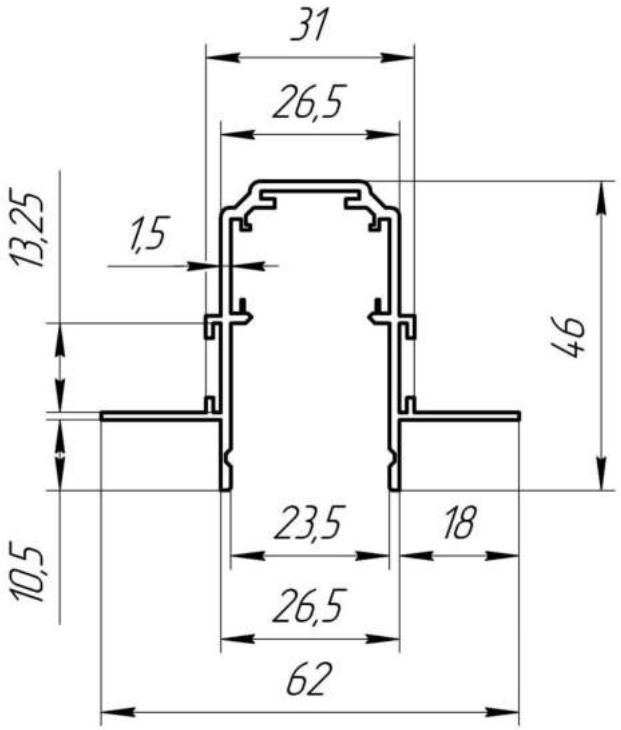
The track system is for internal use only in a non-aggressive environment free of aerosol particles and where a temperature range of 0°C to +50°C is guaranteed. The relative humidity should be equal to less than 80 percent. It is possible to mount the track system to walls and ceilings made out of mildly flammable materials. The other option would be to carry out installation with cable suspensions. The track system is delivered in different lengths: either 1 or 2 metres. It is possible to cut and connect these tracks in various forms in order to assemble configurations depending on bespoke requirements. Since the entire system is built specifically for 48V of nominal voltage, it is essential to select the correct power source to light every bulb in the circuit.

It is crucial to note that the reserve power supply should not be less than 20% of the overall power consumption for optimal performance. This ratio provides support for reliable, continuous use and prevents the luminaires from overheating.

1.1. Technical data

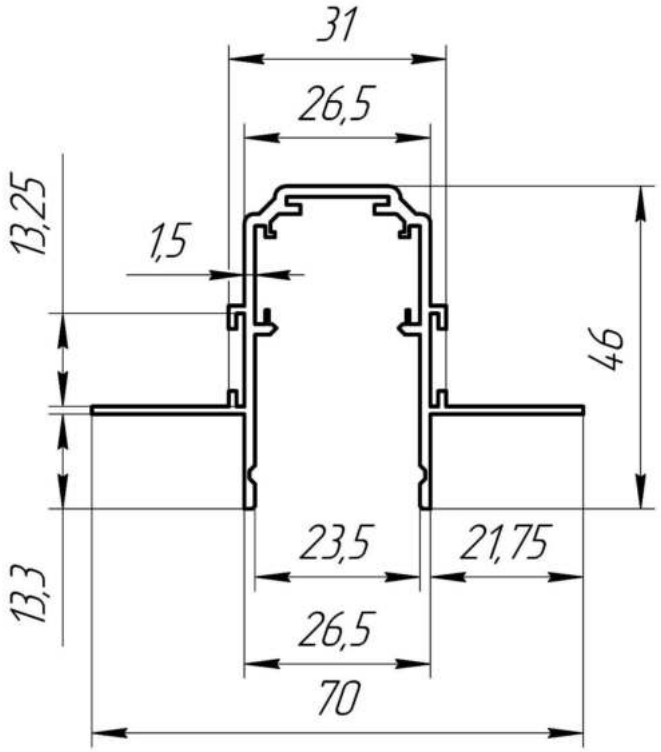
Segment length	1 meter	2 meters
Surface-mounted/suspended track	TRX034-411B TRX034-411W	TRX034-412B TRX034-412W
Recessed mounting track for plasterboard 9.5 mm	TRX034-421B TRX034-421W	
Recessed mounting track for plasterboard 12.5 mm	TRX034-421.12B TRX034-421.12W	TRX034-422.12B TRX034-422.12W
Rated voltage	DC 48 V	
Electrical shock protection class	III	
Ingress Protection Code	IP20	
Climate category	UHL4	
Operating temperature	0 °C …+50 °C	
Housing material	Aluminum	

1.2 Dimensions of recessed mounting track for plasterboard 9.5 mm



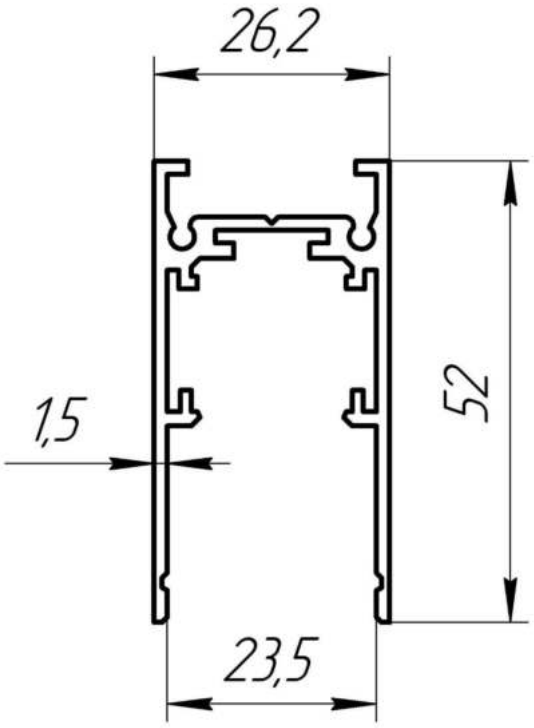
TRX034-421B / TRX034-421W

1.3 Dimensions of recessed mounting track for plasterboard 12.5 mm



TRX034-421.12B / TRX034-421.12W
TRX034-422.12B/TRX034-422.12W

1.4 Dimensions of surface-mounted/suspended track



TRX034-411B / TRX034-411W
TRX034-412B / TRX034-412W

2. Safe handling guidelines

All installation and mounting services must be rendered by persons with the appropriate permits and qualifications. Please contact a qualified electrician where necessary.

All installation and dismantling work should be performed in a powered down state only.

Operation of the track without a power source is forbidden. Do not connect the track directly to the 230V 50Hz AC mains to prevent failure of the luminaires.

When building a track system, do not exceed the total current load of the selected power source keeping the power reserve of 20% in mind.

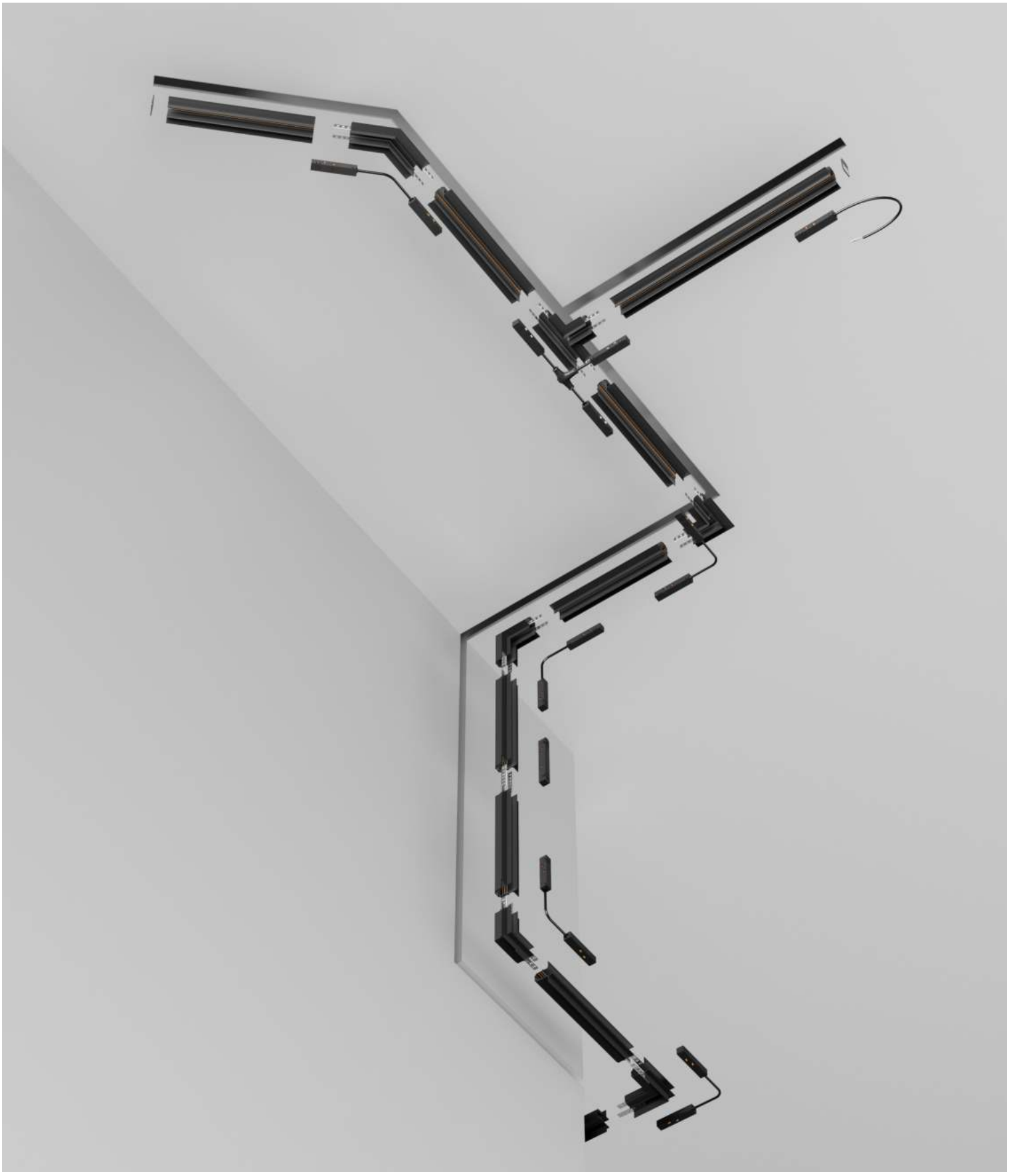
Do not use the product if the housing and/or supply cable insulation is damaged.

The product is intended for indoor use only.

Do not use the product in rooms with high humidity and with a high content of dust or aerosol particles in the air.

Use a soft, dry cloth to clean the product with the power switched off. Do not use chemically aggressive cleaning agents.

3. Recessed mounting magnetic track in plasterboard ceiling 9.5 mm and 12.5 mm



3.1 System configuration for plasterboard 9.5 mm

PLUG	■ BLACK □ WHITE	TRA034EC-42B TRA034EC-42W
TRACK	■ BLACK	TRX034-421B
TRACK	■ BLACK	TRX034-422B
INTERNAL RECESSED ANGLE CONNECTOR	■ BLACK	TRA034CL-42B
RECESSED ANGLE CONNECTOR	■ BLACK	TRACL034-42B-R
ROUND ANGLE CONNECTOR	■ BLACK	TRA044-angle
STRAIGHT POWER CONNECTOR	■ BLACK □ WHITE	TRA034PC-42B TRA034PC-42W
FLEXIBLE ANGLE POWER CONNECTOR	■ BLACK □ WHITE	TRA034CPC-42B-15 TRA034CPC-42B-15-1 TRA034CPC-42W-15-1
ANGLE POWER CONNECTOR	■ BLACK	TRA034CPC-42B-50
POWER INPUT	■ BLACK □ WHITE	TRA034B-42B TRA034B-42B-1 TRA034B-42W-1
STRAIGHT CONNECTOR	■ SILVER	TRA034C-42S

3.2 System configuration for plasterboard 12.5 mm

PLUG	■ BLACK □ WHITE	TRA034EC-42B TRA034EC-42W
TRACK	■ BLACK □ WHITE	TRX034-421.12W TRX034-421.12B
TRACK	■ BLACK □ WHITE	TRX034-422.12W TRX034-422.12B
T-ANGLE CONNECTOR	■ BLACK □ WHITE	TRA034CT-42.12B TRA034CT-42.12W
RECESSED ANGLE CONNECTOR	■ BLACK □ WHITE	TRA034CL-42.12B TRA034CL-42.12W
INTERNAL RECESSED ANGLE CONNECTOR	■ BLACK □ WHITE	TRA034ICL-42.12B TRA034ICL-42.12W
ROUND ANGLE CONNECTOR	■ BLACK □ WHITE	TRA044-angle.12B TRA044-angle.12W
STRAIGHT POWER CONNECTOR	■ BLACK □ WHITE	TRA034PC-42B TRA034PC-42W
FLEXIBLE ANGLE POWER CONNECTOR	■ BLACK □ WHITE	TRA034CPC-42B-15 TRA034CPC-42B-15-1 TRA034CPC-42W-15-1
ANGLE POWER CONNECTOR	■ BLACK	TRA034CPC-42B-50
POWER INPUT	■ BLACK □ WHITE	TRA034B-42B TRA034B-42B-1 TRA034B-42W TRA034B-42W-1
STRAIGHT CONNECTOR	SILVER	TRA034C-42S

4. System configuration for magnetic track system installed in plasterboard

RECESSED MOUNTING TRACK FOR PLASTERBOARD 9.5 mm*	■ BLACK	TRX034-421B TRX034-422B	H46*W62*L1000 mm H46*W62*L2000 mm



RECESSED MOUNTING TRACK FOR PLASTERBOARD 12.5 mm*	■ BLACK ☐ WHITE	TRX034-421.12B TRX034-422.12B TRX034-421.12W TRX034-422.12W	H46*W70*L1000 mm H46*W70*L2000 mm H46*W70*L1000 mm H46*W70*L2000 mm

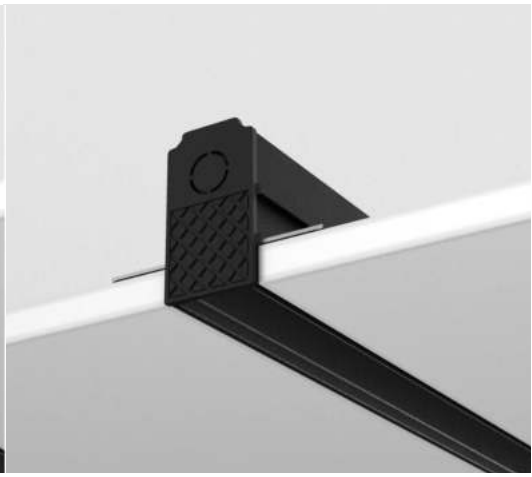




PLUG, 2 EA	■ BLACK ☐ WHITE	TRA034EC-42B TRA034EC-42W	H46*W26 mm H46*W26 mm

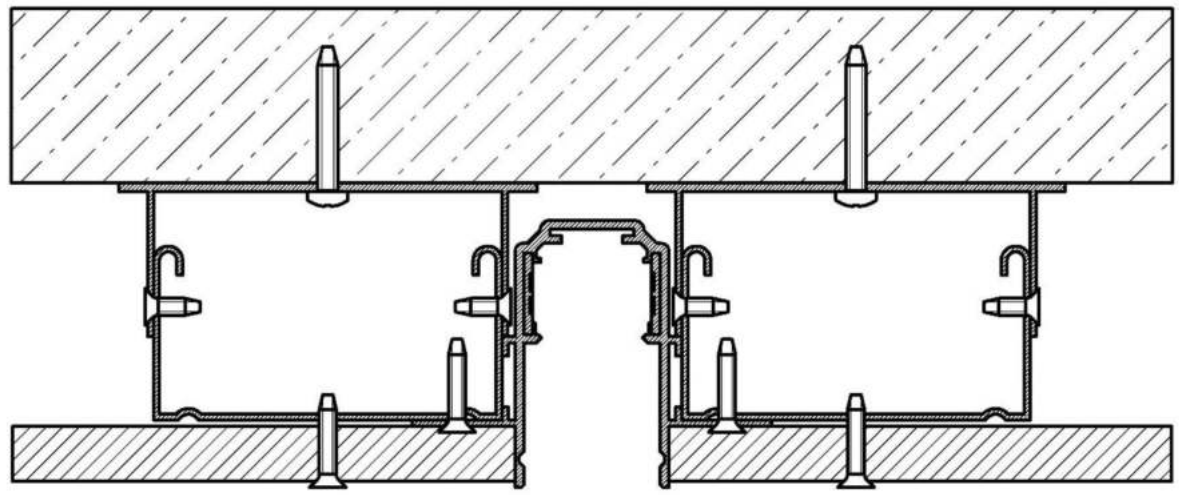


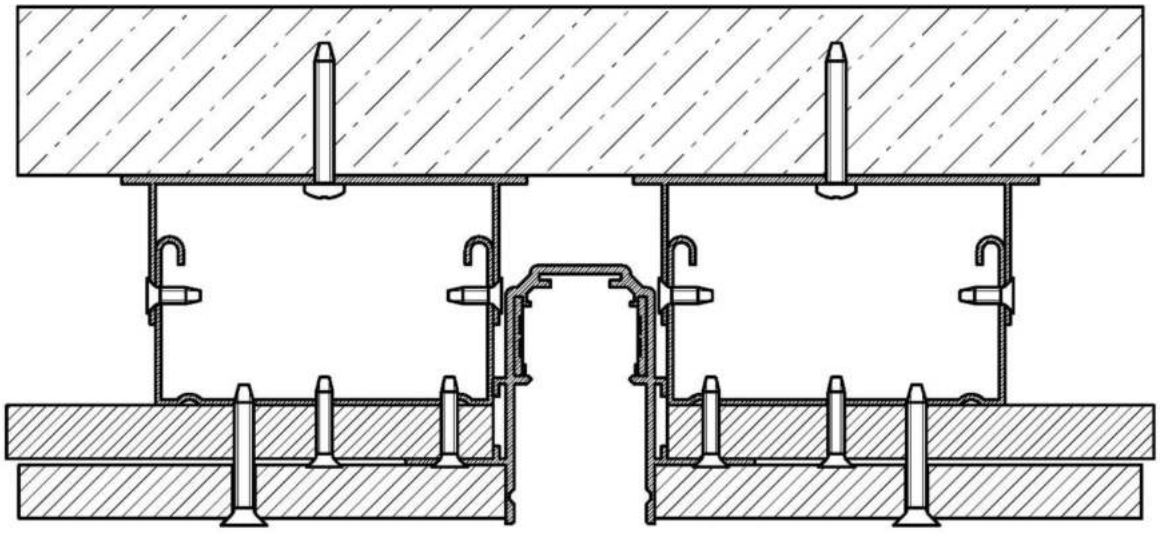




5. Track installation plasterboard 9.5 mm and 12.5 mm schematic

Attention! A recessed mounting track for installation in a plasterboard ceiling can be mounted using 1or 2 layers of plasterboard.





6. System elements

6.1 Power connectors

STRAIGHT POWER CONNECTOR	■ BLACK	TRA034PC-42B	H18.2*W16.4*L138	
	☐ WHITE	TRA034PC-42W	H18.2*W16.4*L138	
ANGLE FLEXIBLE POWER CONNECTOR 15 CM	■ BLACK	TRA034CPC- 42B-15	H18.2*W16.4*L92.7	
ANGLE FLEXIBLE POWER CONNECTOR 15 CM	■ BLACK	TRA034CPC- 42B-15-1	H19*W17*L260	
	☐ WHITE	TRA034CPC- 42W-15-1	H19*W17*L260	
ROUND POWER CONNECTOR 50 CM	■ BLACK	TRA034CPC- 42B-50	H92*W16*L500	
POWER INPUT	■ BLACK	TRA034B-42B	H16*W18*L358	
POWER INPUT	■ BLACK	TRA034B-42B-1	H19*W17*L350	
	☐ WHITE	TRA034B-42W-1	H19*W17*L350	

6.2 Mechanical connectors for 9.5 mm plasterboard track

ANGLE CONNECTOR	■ BLACK	TRACL034-42B-R	H46*W100*L100	
INTERNAL ANGLE CONNECTOR	■ BLACK	TRA034CL-42B	H46*W100*L100	
ROUND ANGLE CONNECTOR	■ BLACK	TRA044-ANGLE	H46*W300*L470	
STRAIGHT CONNECTOR (2 EA)	▨ SILVER	TRA034C-42S	H1*W12*L70	

6.3 Mechanical connectors for 12.5 mm plasterboard track

ANGLE CONNECTOR	■ BLACK	TRA034ICL-42.12B	H46*W100*L100	
	□ WHITE	TRA034ICL-42.12W	H46*W100*L100	
T-ANGLE CONNECTOR	■ BLACK	TRA034CT-42.12B	H46*W100*L138	
	□ WHITE	TRA034CT-42.12W	H46*W100*L138	
INTERNAL ANGLE CONNECTOR	■ BLACK	TRA034CL-42.12B	H46*W100*L100	
	□ WHITE	TRA034CL-42.12W	H46*W100*L100	
ROUND ANGLE CONNECTOR	■ BLACK	TRA044-angle.12B	H46*W300*L470	
	□ WHITE	TRA044-angle.12W	H46*W300*L470	
STRAIGHT CONNECTOR (2 EA)	▨ SILVER	TRA034C-42S	H1*W12*L70	

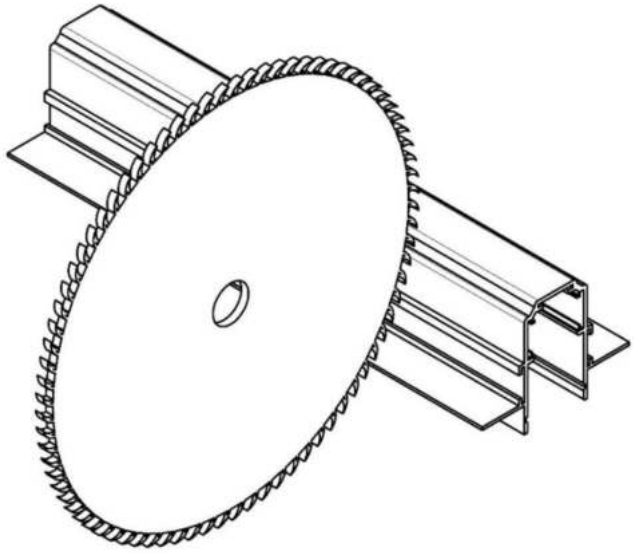
6.4 Power supplies

POWER SUPPLY

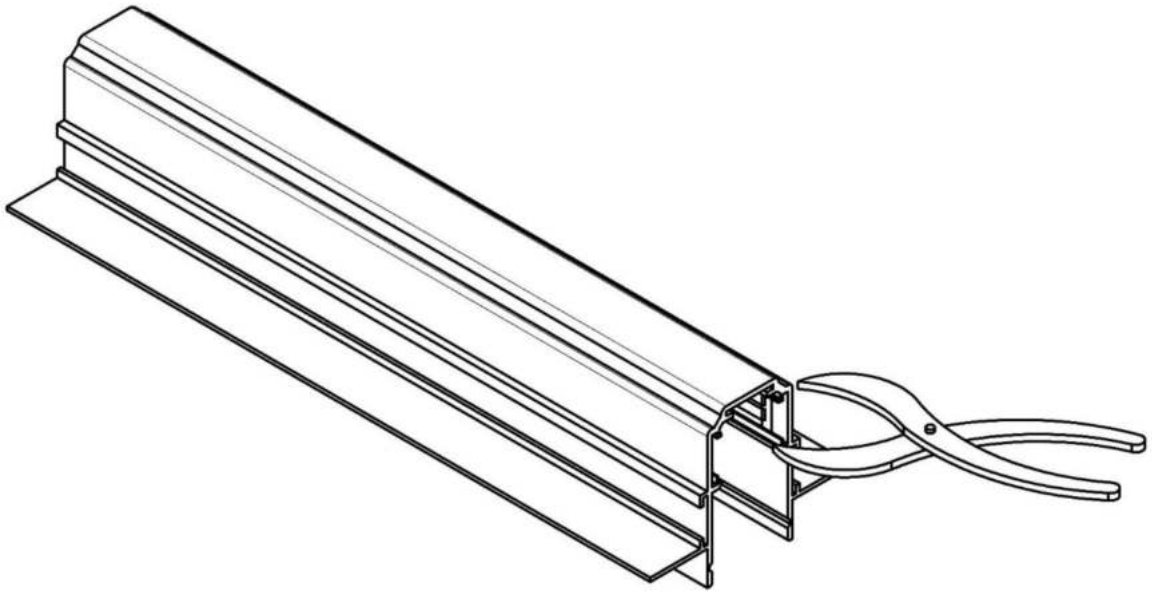
■	BLACK	TRX034DR4-100B-1	H42*W22*L250	
■	BLACK	TRX034DR4-200B-1	H42*W22*L330	
☐	WHITE	TRX034DR4-100W-1	H42*W22*L250	
☐	WHITE	TRX034DR4-200W-1	H42*W22*L330	
	SILVER	TRA004DR-100S	H30*W97*L129	
	SILVER	TRA004DR-150S	H30*W97*L159	
	SILVER	TRA004DR-200S	H30*W115*L215	
	SILVER	TRA004DR-320S	H30*W115*L215	

7. Procedure for track installation on plasterboard ceiling

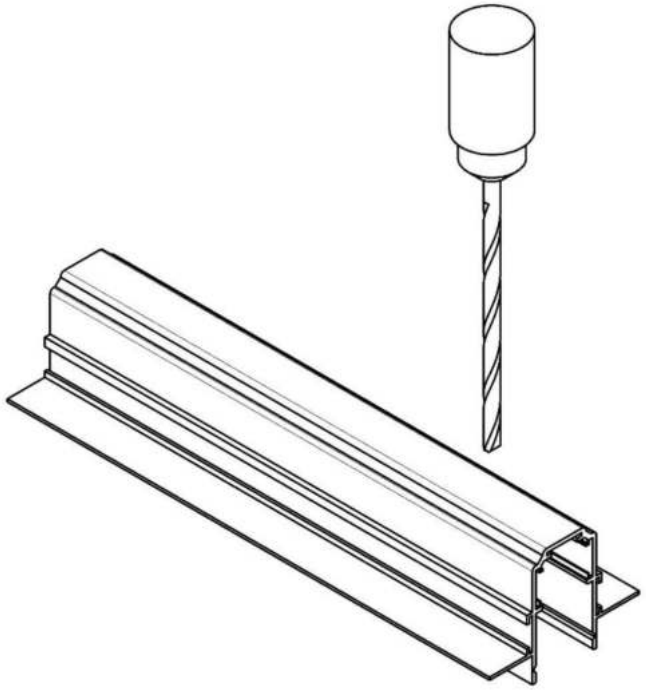
1. Cut the track according to the design dimensions after removing the conductor runs. Cutting can be done at any place and angle. Cut the track with a miter saw.



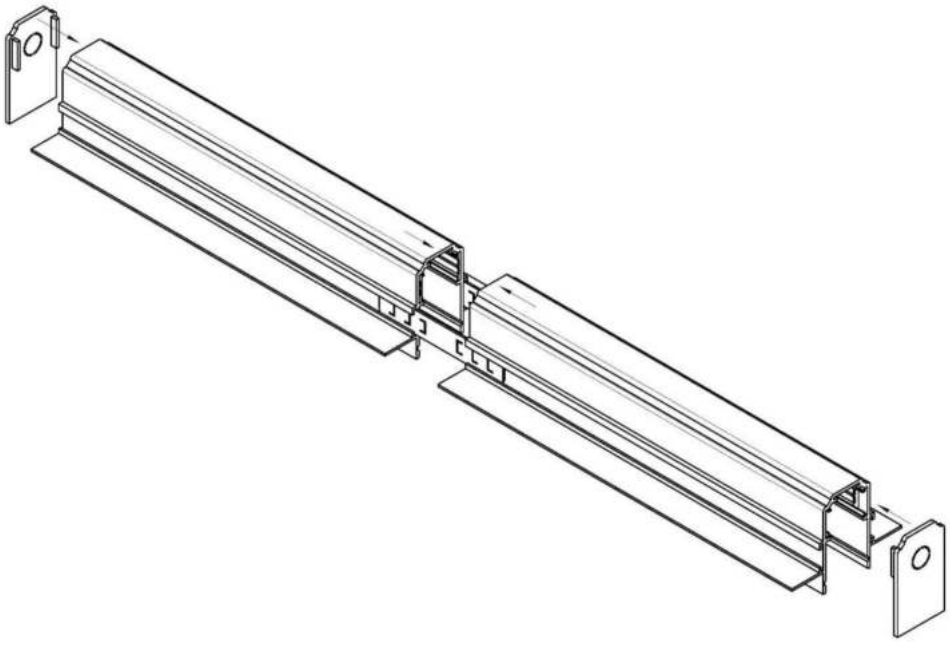
2. Shorten the conductor runs by 5mm, install them in the track and crimp their guides in the track.



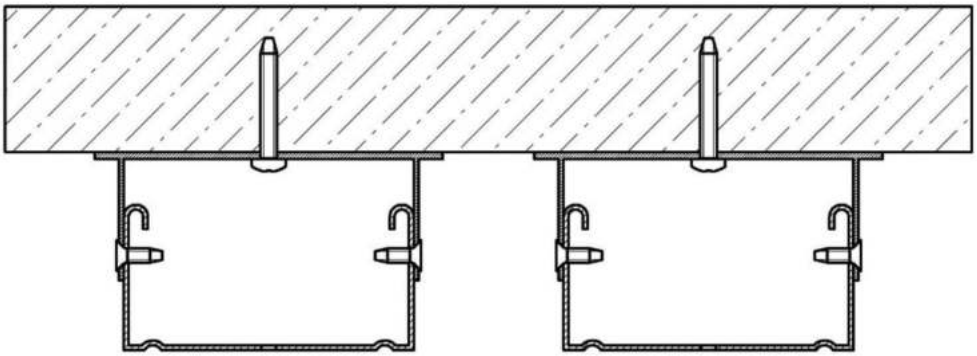
3. Drill the power cable entry holes and remove the chamfers.



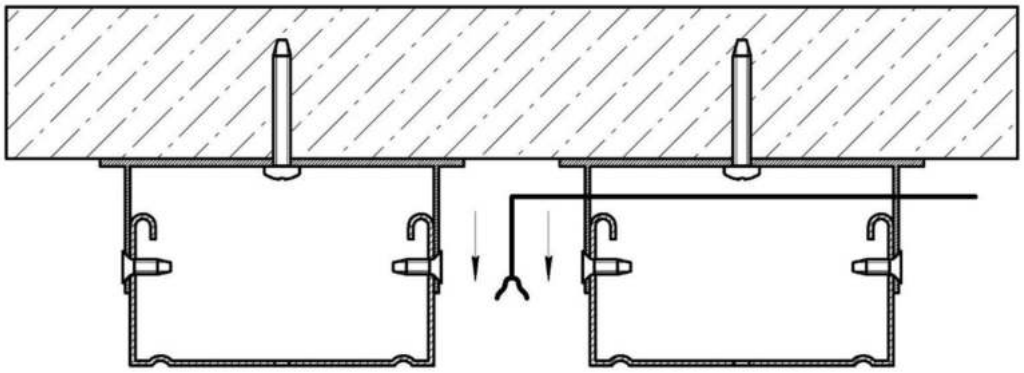
4. Connect the track sections using connectors and install the plugs. Pack the track in extruded polystyrene foam immediately after installation to protect it from deformation and dust during the remaining period of installation activities.



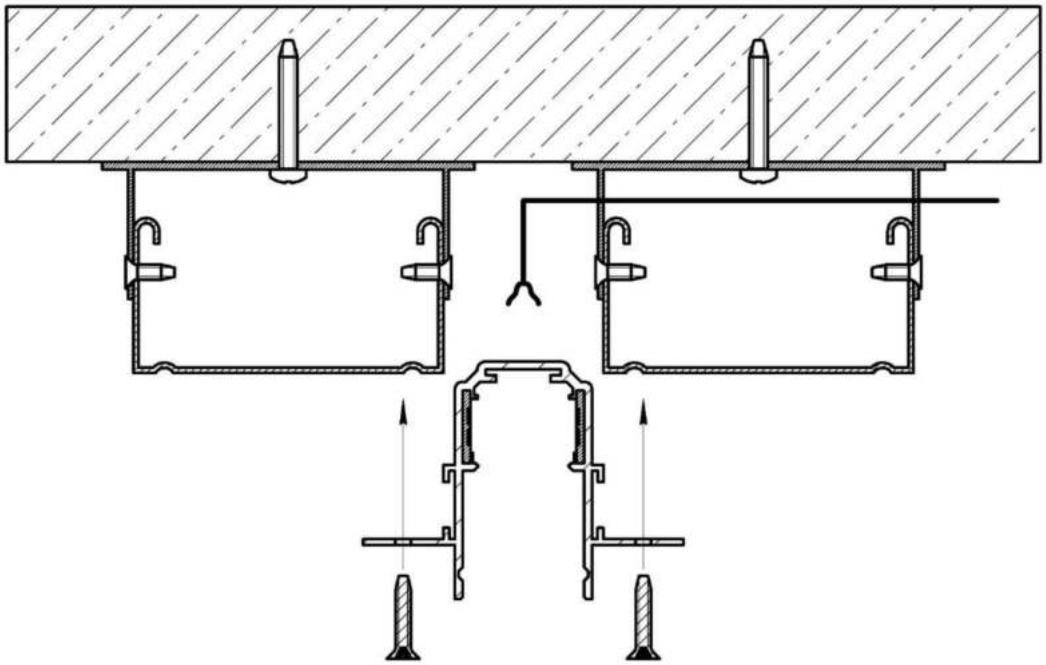
5. Install the ceiling profile in accordance with the required dimensions.



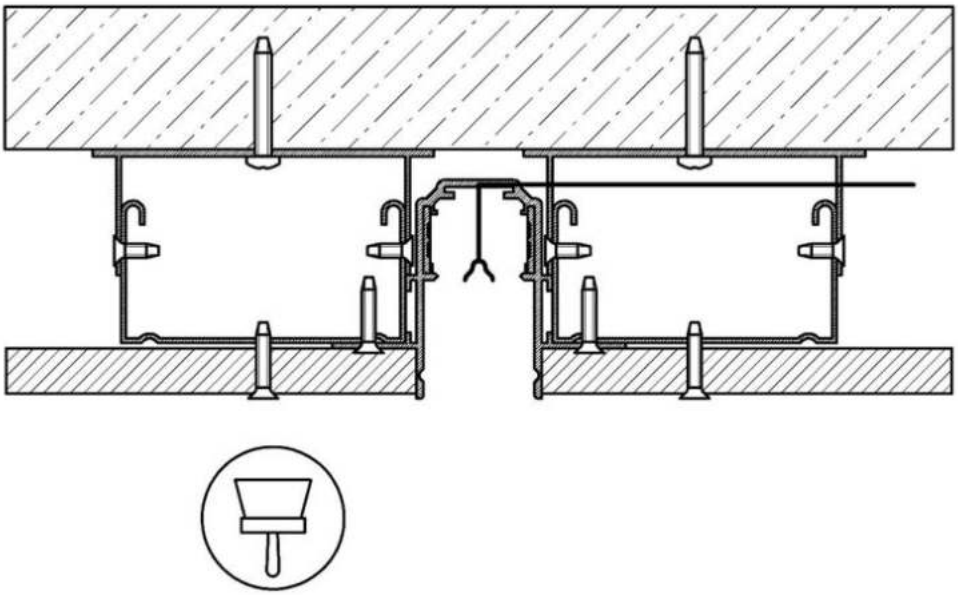
6. Insert the supply wire into the track and connect it to the power input or the recessed power supply

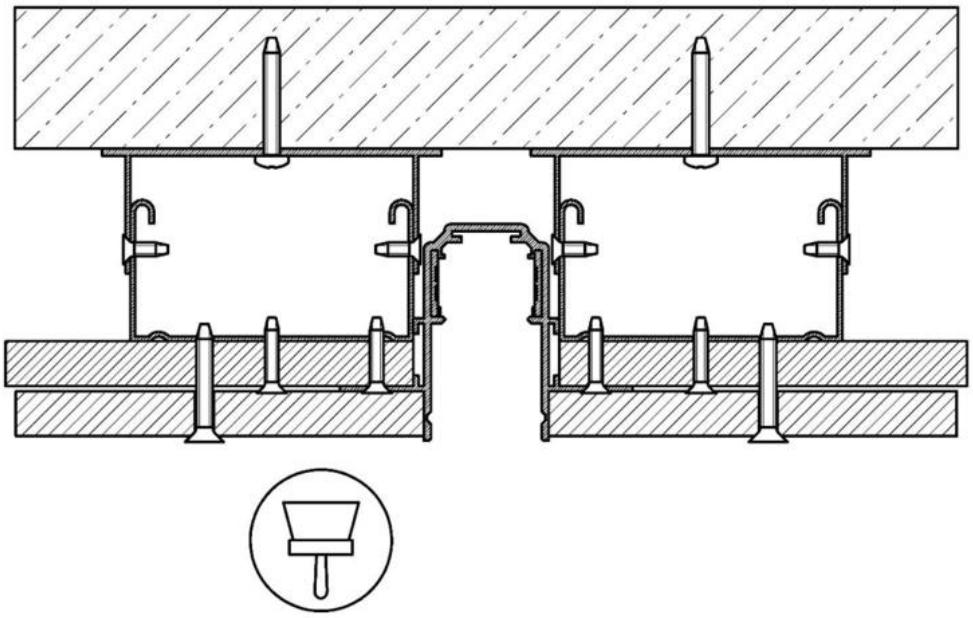


7. Install the track into the mounting slot and secure it with screws.



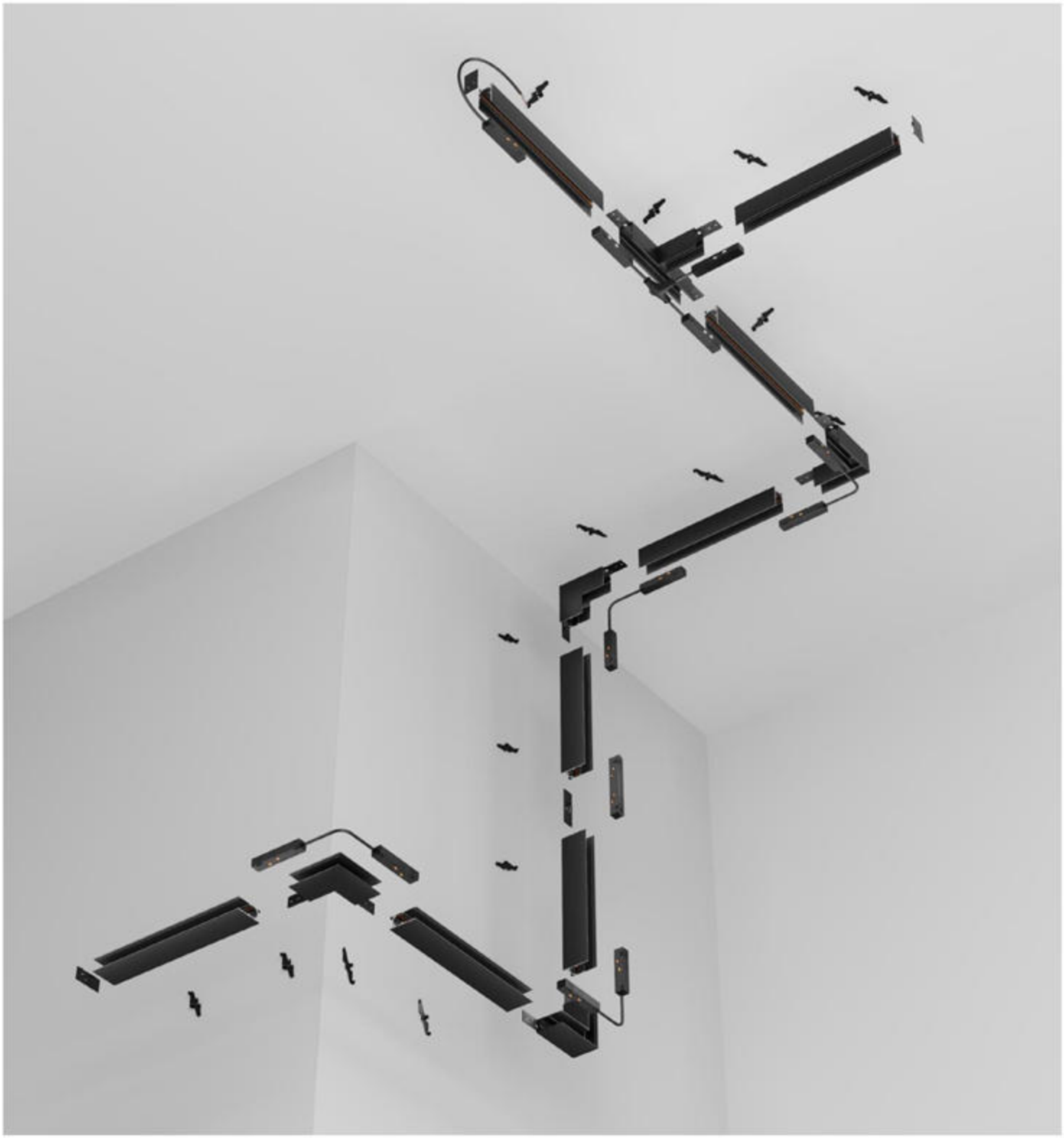
8. Install the plasterboard close to the track walls and secure it with screws. Bond a layer of fiberglass mesh. Cover the plasterboard with putty on the same level as the track walls.





8. Surface-mounted/suspended magnetic track

8.1Surface-mounted/suspended magnetic track schematic



8.2 Surface-mounted/suspended track system elements

*Two plugs and a decorative moulding are included.

TRACK*



■ BLACK

TRX034-411B	1000*26*52 mm
TRX034-412B	2000*26*52 mm
TRX034-413B	3000*26*52 mm



☐ WHITE

TRX034-411W	1000*26*52 mm
TRX034-412W	2000*26*52 mm
TRX034-413W	3000*26*52 mm

PLUG 2 EA



■ BLACK

TRA034EC-41B	H52*W26*2.4 mm
TRA034EC-42B	H52*W26*2.5 mm



☐ WHITE

TRA034EC-41W	H52*W26*2.4 mm
TRA034EC-42W	H52*W26*2.5 mm







9. System configuration of surface-mounted/suspended track system

9.1Mechanical connections for surface-mounted/suspended track

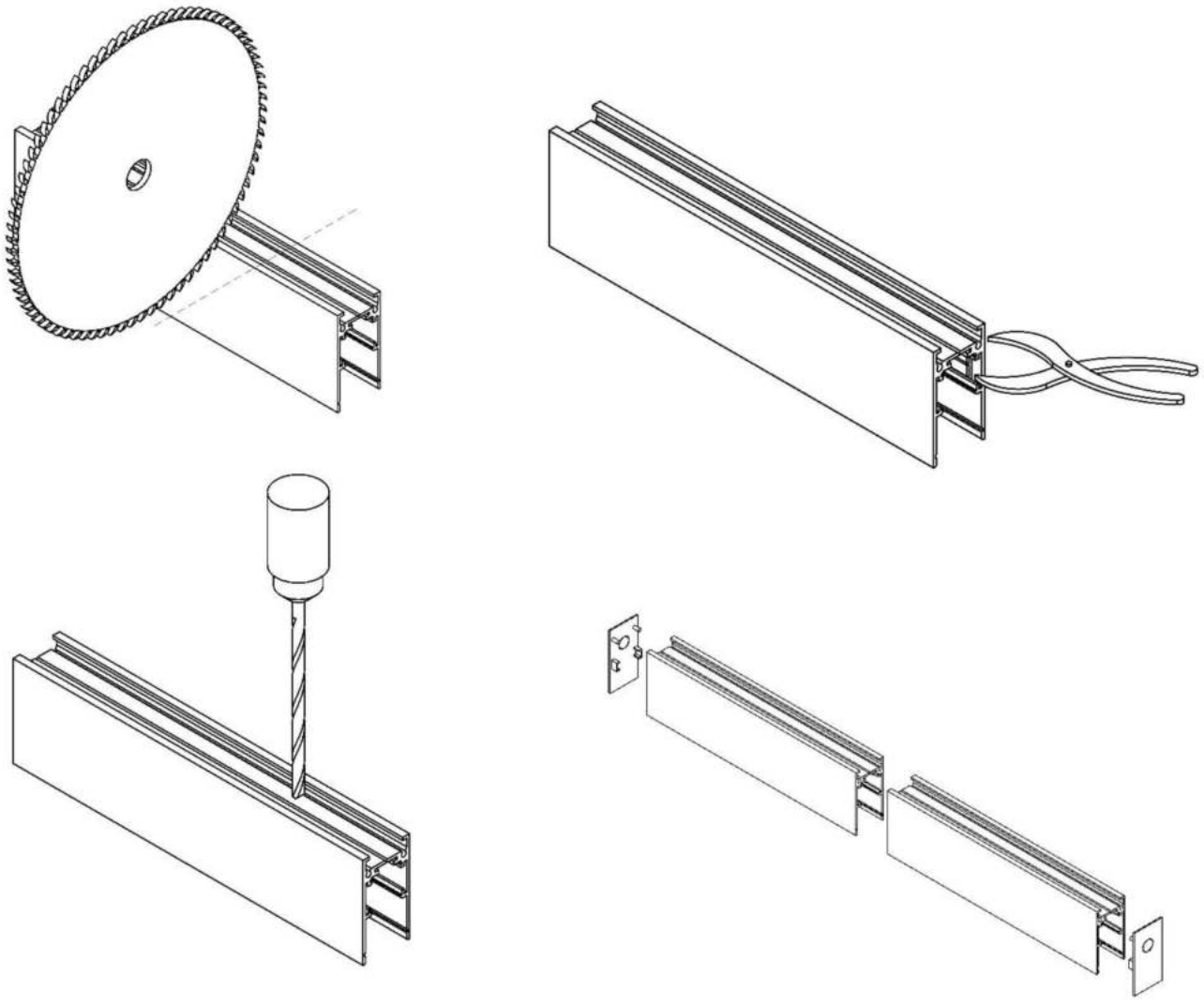
RETAINER FOR SURFACE MOUNTING	■ BLACK	TRA034HS-21B	6*60*38 mm	
	☐ WHITE	TRA034HS-21W	6*60*38 mm	
STRAIGHT CONNECTOR	■ BLACK	TRA034C-21B	80*2*22.5 mm	
	☐ WHITE	TRA034C-21W	80*2*22.5 mm	
CABLE SUSPENSION 2 EA	■ BLACK	TRA034SW-2B	80*2000*22 mm	
	☐ WHITE	TRA034SW-2W	80*2000*22 mm	
ANGLE CONNECTOR	■ BLACK	TRA034HCL-41B	100*52*100 mm	
	☐ WHITE	TRA034HCL-41W	100*52*100 mm	
INTERNAL ANGLE CONNECTOR	■ BLACK	TRA034ICL-41B	100*52*100 mm	
	☐ WHITE	TRA034ICL-41W	100*52*100 mm	

Attention! For power connectors and power supplies for a surface-mounted/ suspended magnetic track, see 6.1. and 6.4.

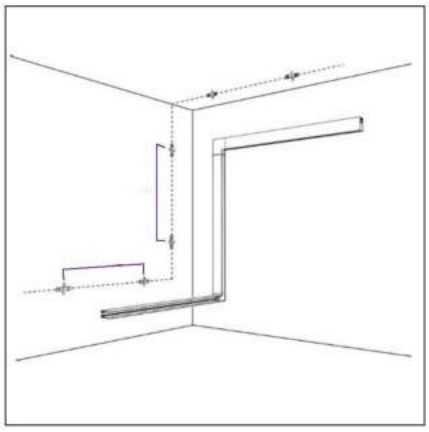
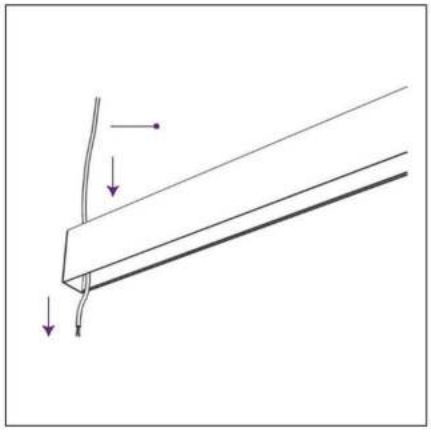
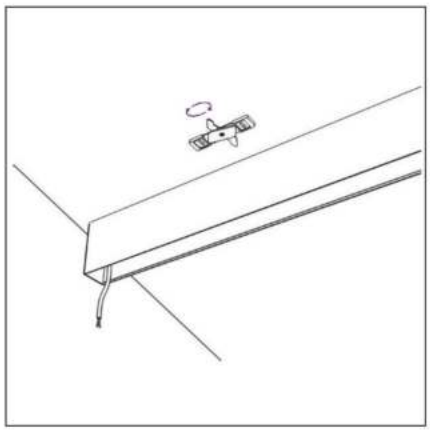
10. Procedure for installing surface-mounted/suspended magnetic track on surface using retainers

10.1 Procedure for installing surface-mounted magnetic track using retainers

1. Cut the track according to the design dimensions. Cutting can be done at any place at an angle of 90 degrees.
2. Shorten the conductor runs by 5 mm and crimp their guides in the track.
3. Drill the holes for the power cable entry and remove the chamfers.
4. Connect the track sections using connectors and install the plugs.

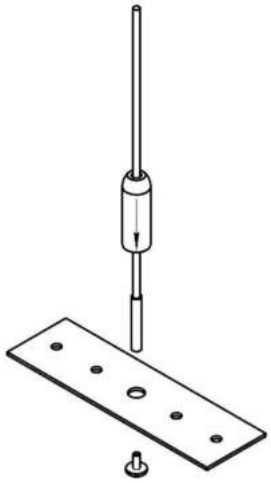
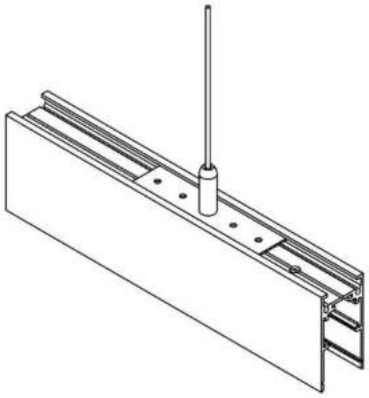
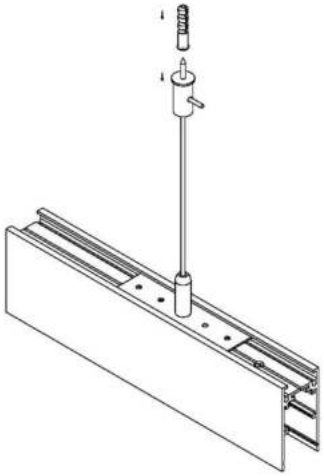
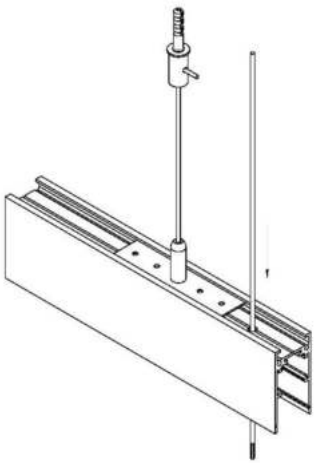
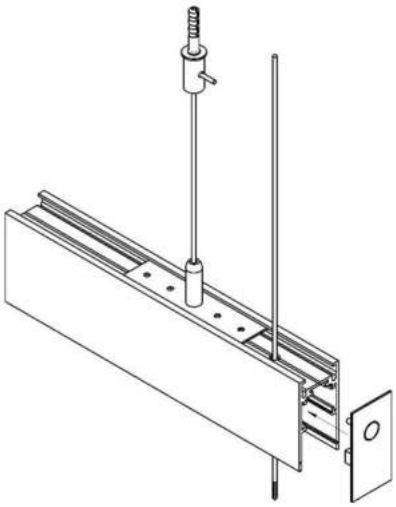


5. Fix the retainers for the surface-mounted track on the wall with an interval of 60 cm.
6. Insert the power cable into the track through the pre-drilled hole.
7. Attach the track close to the wall and turn the levers on the retainers.

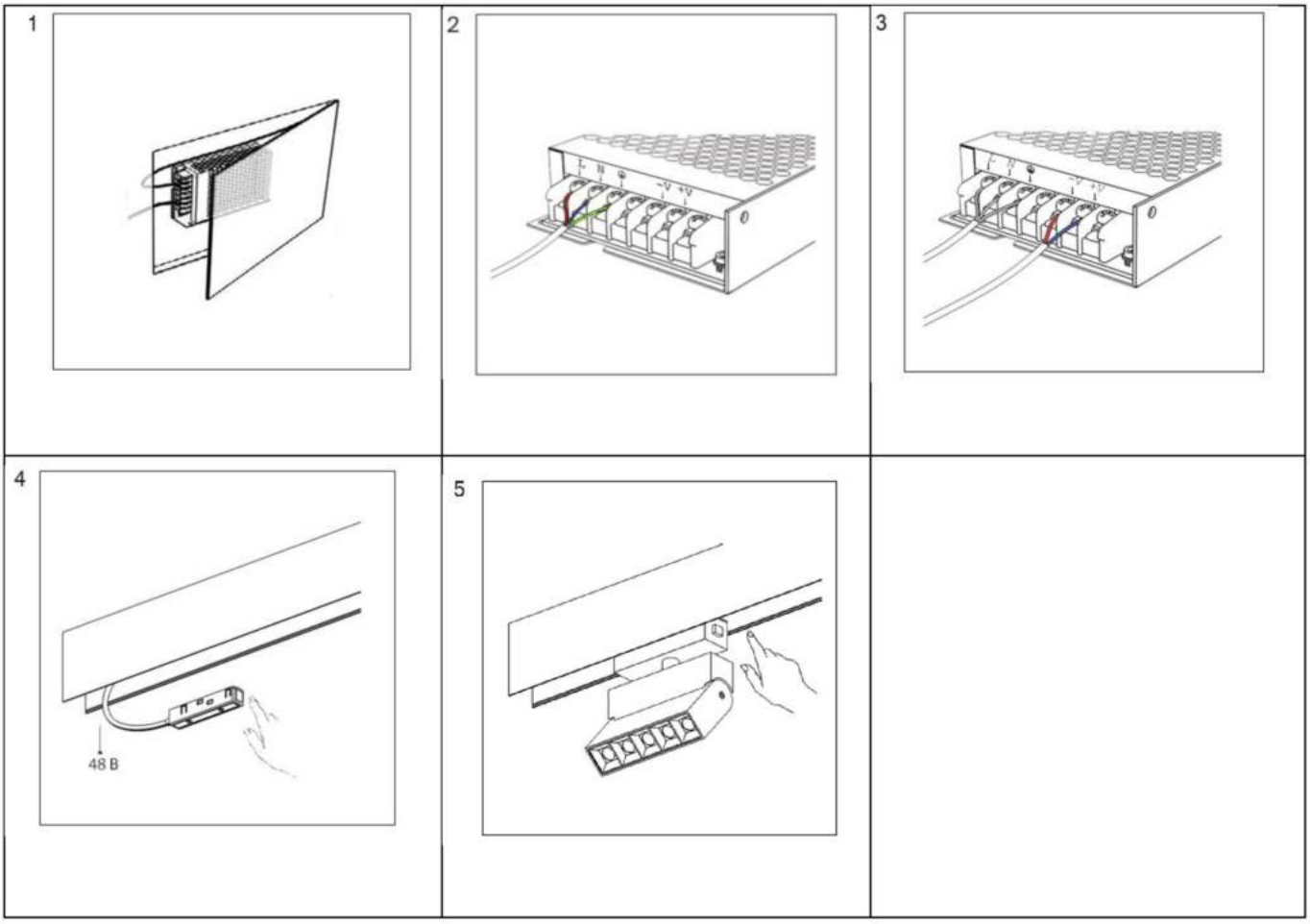
10.2 Screw the suspensions into the base

1. Screw the suspensions into the base.
2. Install the suspensions in the groove on the back of the track.
3. Secure the cable holder. Insert the cables into the holders. Adjust the length of the suspensions.
4. Insert the power cable into the track.
5. Install the plugs.

10.3 Connecting power supply to magnetic surface-mounted/suspended track using external power supply

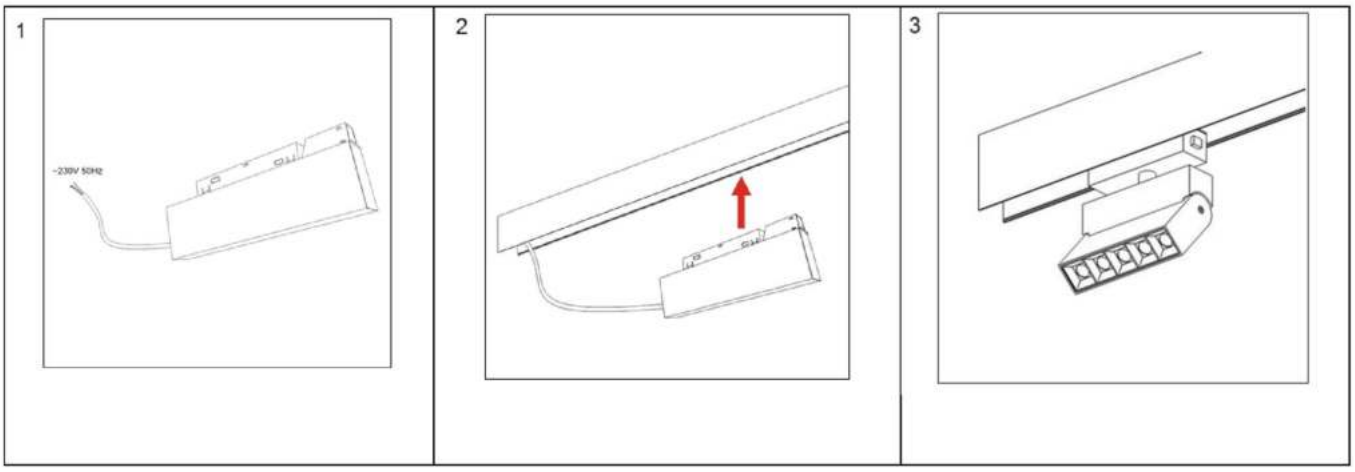
1. Prepare a niche, place the power supply in it and connect the wires of the 230V 50Hz mains to it.
2. Connect the power supply to the 230V 50Hz mains according to the markings on it. The power reserve of the power supply must be at least 20%. If there is a shortage of power, use a power supply with a large power rating or divide the circuit into several smaller circuits and use one power supply for each.
3. Connect the track power input to the corresponding terminals of the power supply (brown wire to DC 48V+ pin, blue wire to DC 48V- pin).
4. Install the connected power input into the track. Press the button and insert it into the adapter until it clicks. Connect with the mains switched off.
5. Install the luminaire in the track until it clicks.



10.4 Connecting power supply to magnetic surface-mounted/suspended track using recessed power supply

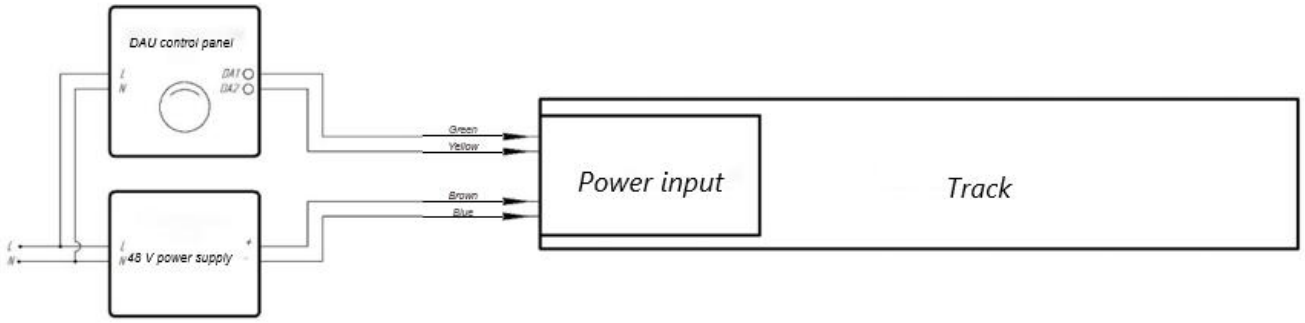
When using this power supply, there is no need to input power. These power supplies are selected in terms of power in the same way as power supplies recessed into niches and require 20% of the total load of the connected luminaire.

1. Connect the track power supply to the mains according to the marking on the input cable (G – ground, L – phase, N – neutral). Connect with the mains switched off.
2. Place the assembled connection in the track housing.
3. Install the luminaire in the track until it clicks



10.5 Connecting digital DALI protocol to magnetic track.

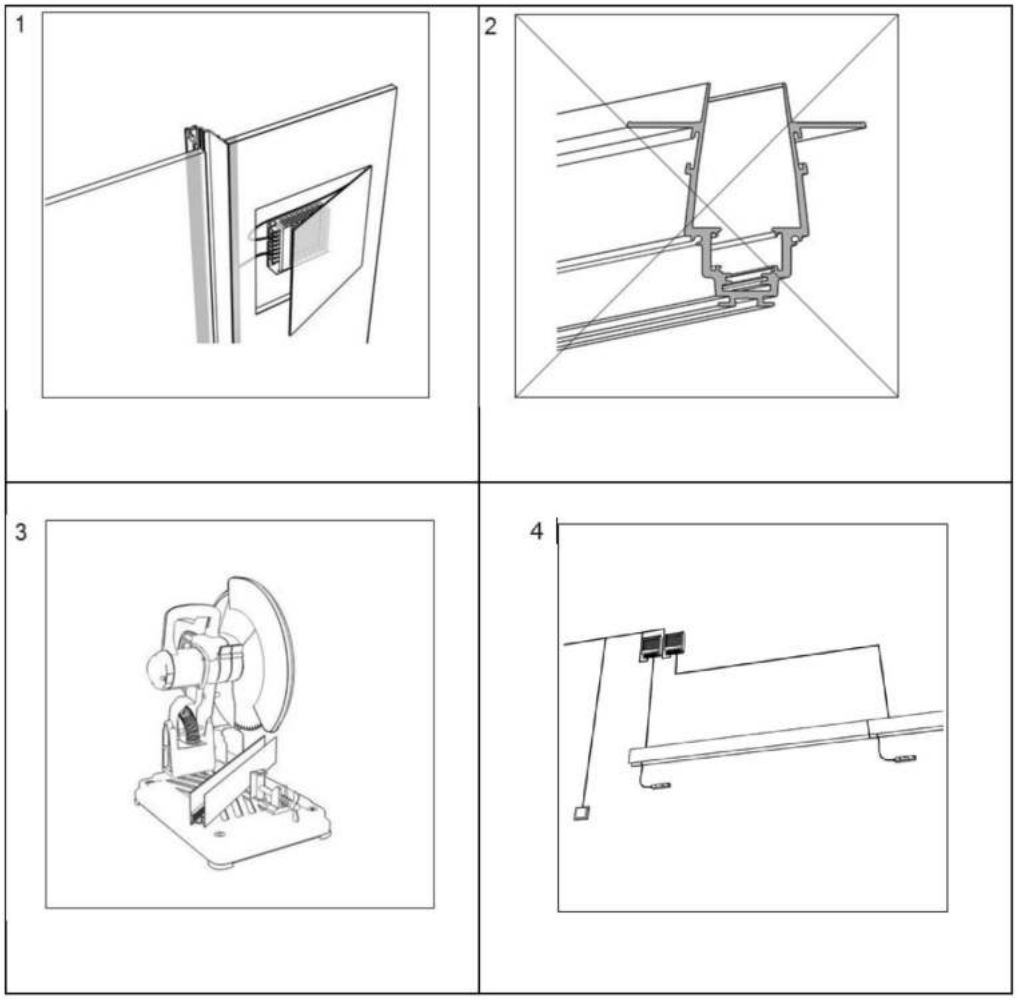
To connect the digital DALI protocol, connect the DALI bus wires to the yellow and green power input wires, as shown in the figure below:



Attention! TRX034DR4-100 / TRX034DR4- 200 recessed power supplies cannot be used to connect DALI luminaire, since these power supplies do not have additional contacts for connecting the digital DALI protocol. To connect the digital DALI protocol, use TRA004DR remote power supplies with power input.

11. Recommendations

1. When planning the placement of system elements, be sure to include an inspection hatch in the project to service the driver.
2. Do not deform the track during transport and installation.
3. When cutting track, use professional equipment, or use the services of an organization providing such services.
4. Through 1 power input, you can connect luminaire with a maximum total power of 400W and a track no longer than 20 meters. If the specified power or length is exceeded, it is necessary to connect subsequent sections through a new power input.



5. The power input can be installed in any section of the track, guided by rule, that one power input feeds no more than 20 meters of the track.
6. Be extremely precise when laying out and installing the wall brackets. If you move them out of the path of the truck, you may have difficulty installing it.

12. Additional information

12.1 Troubleshooting

Fault description	Cause	Troubleshooting
The luminaire does not work	Loose connection of current-carrying parts	Install the luminaire on the track until the adapter is in full contact with the current-carrying cores
		Check the input cable connection terminals, the connection of the power input terminals to the track,and other connections
	luminaire is defective	Contact the seller for a replacement under warranty
The lighting fixture flashes or glows dimly in switched-off state	To control the lighting circuit, a switch with key backlighting is installed, or a motion (light) detector is used	Replace the switch with a model without key backlighting, or which has an additional resistor in its design. Use motion (light) detector only with relay output
Unstable glow, flickering, extraneous sound	Brightness control (dimmer switch) is installed in the power supply circuit	Remove the dimmer from the circuit, replace it with a switch
	Faulty power supply	Contact the seller for a replacement under warranty

12.2 Storage

The goods are stored in packaging indoors in the absence of an aggressive environment. Storage temperature in the range from -20°C to +70°C and relative air humidity not more than 95%. Direct exposure to moisture is not allowed.

12.3 Transportation

The packaged product is suitable for transportation by sea, rail, road and air.

12.4 Disposal

The product in its design does not contain toxic and chemically hazardous compounds, therefore it is subject to the rules for the disposal of municipal solid waste.

12.5 Certification

Safety Standards, Regulations, Requirements EC is on the first place.

12.6 Warranty

The warranty for the product is 24 months from the date of sale, which is established per the sale documentation.

Warranty service is provided if the malfunction occurred due to the defect in workmanship, and also subject to all the rules of operation, transportation and storage given in this manual.

The warranty is not valid in the following cases: if the product has been used for purposes that do not correspond to its intended use; the defect arose after the transfer of the goods to the consumer and is caused by incorrect or careless handling, non-compliance with the requirements given in this manual. And also in cases of force majeure, including: fire, flood, high-voltage discharges and other natural disasters, accidents and deliberate actions of third parties that caused the product to malfunction.

12.7 Manufacturer

Maytoni GmbH, 98, Feldstiege, Münster, Germany, 48161

12.8 Importer

Maytoni GmbH, 98, Feldstiege, Münster, Germany, 48161

www.maytoni.de

Developed in Germany. Made in China.

No expiry date.