## SINGLE-PHASE TRACK SYSTEM UNITY

MAYTONI

## SINGLE-PHASE LIGHTING TRACK SYSTEM

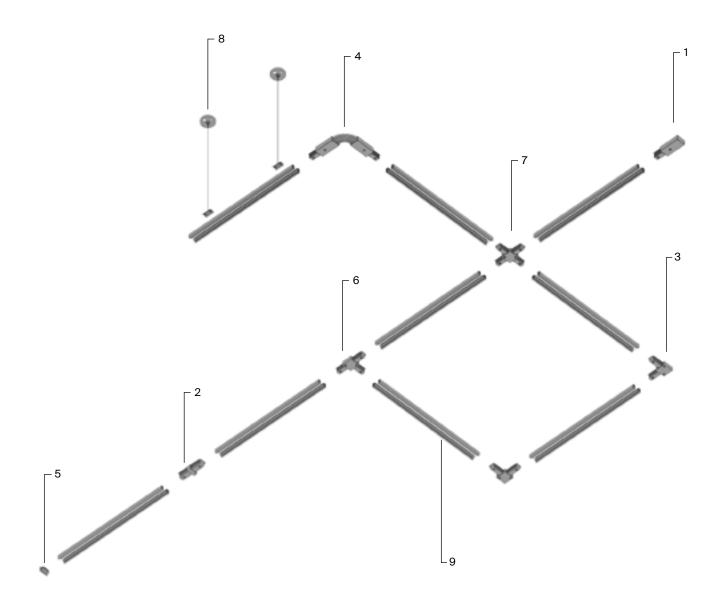
The track is the basis for the construction of track lighting systems and is intended for installation and supply of power lines to track lighting fixtures in AC networks with a rated voltage of 230V and a frequency of 50Hz. The track may be used indoors only in the absence of an aggressive environment and foreign aerosol particles at a temperature from 0 °C to +50 °C and a max. relative humidity of 80%. Options may be installed on walls and ceilings, in grooves, in specially prepared recesses made of normally flammable materials. There is also another installation option using rope suspensions. The track is supplied in segments with a length of 1 and 2 meters. It is allowed to cut off segments and build structures of various shapes using connectors.

#### **TECHNICAL DATA**

Article	TRX001-111B TRX001-111W TRX004-111B	TRX001-112B TRX001-112W TRX004-112B TRX004-112W
	TRX004-111W	
Supply voltage and frequency	~230V 50Hz	
Rated current	10A	
Electrical shock protection class	III	
Mounting method	Surface-mounted/suspended/built-in	
Ingress Protection Code	IP20	
Climatic version	Boreal climate(4)	
Operating temperature	0°C - +50°C	
Material	Aluminium	
Colour	Black	
Track length	1m	2m

## SINGLE-PHASE UNITY TRACK SYSTEM

#### DIAGRAM OF SURFACE AND SUSPENDED MOUNTING SINGLE-PHASE TRACK SYSTEM



- power input TRA001B-11B TRA001B-11W
- 2 straight connector TRA001C-11B TRA001C-11W
- 3 L-shaped connector
  - TRA001CL-11B TRA001CL-11W
- 4 flexible connector
- 5 plug TRA001EC-11B TRA001EC-11W
- 6 T-shaped connector TRA001CT-11B TRA001CT-11W

- 7 X-shaped connector TRA001CX-11B TRA001CX-11W
- 8 cable suspension TRA001CW-11B TRA001CW-11W
- 9 track

## ELEMENTS OF A SINGLE-PHASE TRACK SYSTEM UNITY FOR SURFACE AND SUSPENDED MOUNTING

#### SURFACE AND SUSPENDED MOUNTING SINGLE-PHASE TRACK



single-phase track 20 × 33 × 1000 mm TRX001-111B

TRX001-111W



single-phase track 20 × 33 × 2000 mm TRX001-112B

TRX001-112W



single-phase track/track adapter 17,5 x 100 x 100





#### ACCESSORIES FOR SURFACE AND SUSPENDED MOUNTING SINGLE-PHASE TRACK



plug

TRA001EC-11B TRA001EC-11W



power input

TRA001B-11B TRA001B-11W



straight connector

TRA001C-11B TRA001C-11W



flexible connector

TRA001CF-11B TRA001CF-11W



L-shaped connector

TRA001CL-11B



T-shaped connector

TRA001CT-11B



X-shaped connector

TRA001CX-11B TRA001CX-11W



cable suspension

TRA001CW-11B TRA001CW-11W

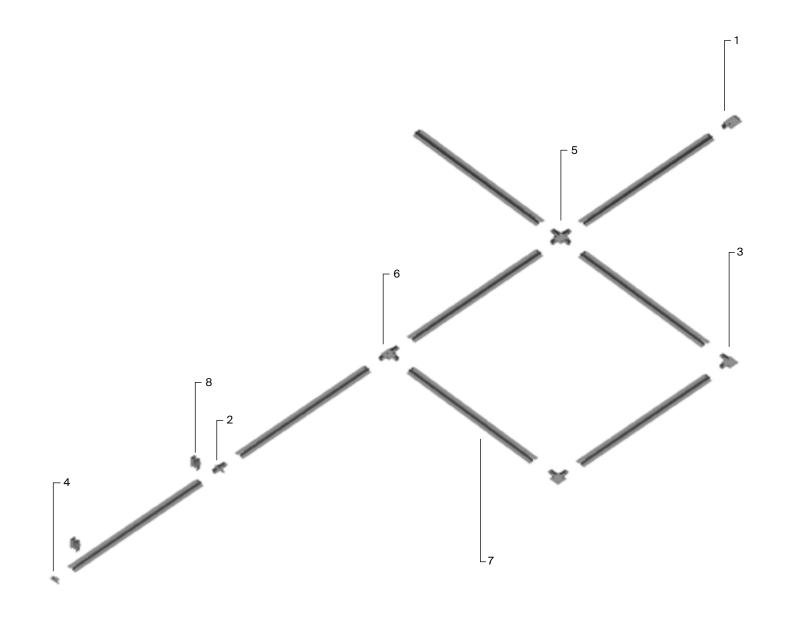


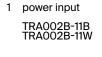
connectors for pendant mounting of lamps in a track

TRA011-1-A-B TRA011-1-A-W

## SINGLE-PHASE UNITY TRACK SYSTEM

**DIAGRAM OF BUILT-IN** SINGLE-PHASE TRACK





2 straight connector TRA002C-11B TRA002C-11W

3 L-shaped connector TRA002CL-11B TRA002CL-11W

4 plug

X-shaped connector

6 T-shaped connector

7 track

8 spring holder TRA002HR-11B TRA002EC-11B TRA002EC-11W

TRA002CX-11B TRA002CX-11W

TRAOO2CT-11B TRAOO2CT-11W

# SINGLE-PHASE UNITY TRACK SYSTEM

#### **BUILT-IN MOUNTING SINGLE-PHASE TRACK**



single-phase track 20 × 60 × 1000 mm

TRX004-111B TRX004-111W



single-phase track 20 × 60 × 2000 mm

TRX004-112B TRX004-112W

#### ACCESSORIES FOR BUILT-IN MOUNTING SINGLE-PHASE TRACK



sealing plug 20 × 60 × 37 mm

TRA002EC-11B TRA002EC-11W



power input

TRA002B-11B TRA002B-11W



straight connector

TRA002C-11B TRA002C-11W



L-shaped connector

TRA002CL-11B TRA002CL-11W



T-shaped connector

TRAOO2CT-11B TRAOO2CT-11W



X-shaped connector 20 x 130 x 130 mm

TRA002CX-11B TRA002CX-11W

spring holder 37 x 45 x 32 mm

TRA002HR-11B



connectors for suspended mounting

of lamps in a track

TRA011-1-A-B

TRA011-1-A-W

## GENERAL RECOMMENDATIONS AND PRECAUTIONS



All installation and mounting services must be rendered by persons having 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.

The track may not be used without a protective grounding wire.

When building a tracking system, make sure not to exceed the total load of electric consumers of 10A (total power of lighting fixtures is not more than 2300 W).

Do not install the track at a height below 2.5 meters, or in places where people may accidentally touch the track.

Do not use the product with a damaged housing and damaged insulation of the supply cable.

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.

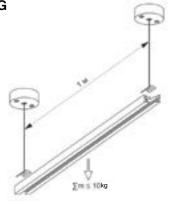
Make sure to install lighting fixtures on a 1m track segment with a spacing of no more than 25 cm.

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

## GENERAL RECOMMENDATIONS AND PRECAUTIONS

### PERMISSIBLE LOADS AND POSITIONS OF FASTENING ELEMENTS



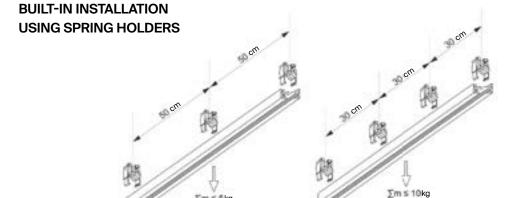


The max. distance between suspension mounts is 1 m. The recommended distance between lamps is 25 cm. The maximum permissible load on the surface-mounted track installed using suspension fasteners is 10 kg per 1 meter.

**SURFACE MOUNTING** 



The max. distance between fasteners to the surface is 80 cm. The recommended distance between lamps is 25 cm. The maximum permissible load on the surface-mounted track installed on a rough surface is 10 kg per 1 meter. In order to create closed continuous contours, please use TRAO01CF-11 and arrange power input through them.

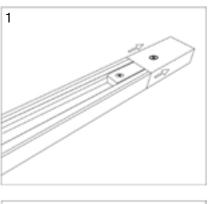


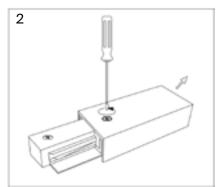
The distance between the holders is selected based on the weight of installed lamps. The lamp weight at 1 meter  $\leq 5$  kg - the distance between holders is 50 cm. The lamp weight at 1 meter  $\leq 10$  kg — the distance between holders is 30 cm. The recommended distance between lamps is 25 cm. The max. permissible load on the built-in track installed using holders is 10 kg per 1 meter.

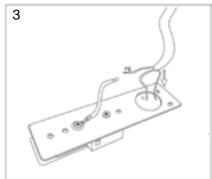
## CONNECTION OF A SINGLE-PHASE TRACK TO POWER SUPPLY

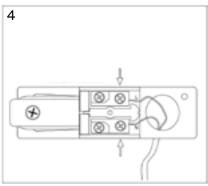
A single-phase track of all types is connected to a 230V 50Hz AC mains through a power lead-in. The relevant end power lead-in is included with delivery of each track segment.

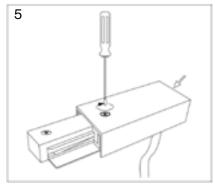
- Before connecting the track, make sure to de-energize the supply cable. Remove the track from the
  packaging, make sure that the housing and current-carrying parts are not damaged. Disconnect the power
  lead-in from the track.
- 2. Remove the screw on the front side of the power lead-in using a screwdriver and remove the plastic cover.
- 3. Lay the three-core cable to the track installation site. Connect the protective ground wire to the yellow-green wire on the power lead-in housing. Pull the phase and neutral wires through the hole in the back side of the power lead-in.
- 4. Fasten the phase and neutral conductors on the contact plates using clamping screws.
- 5. Close the power lead-in by taking steps stated in clause 2 in a reverse order.
- 6. Insert the connected power lead-in into the track. Install the track in the most relevant way.

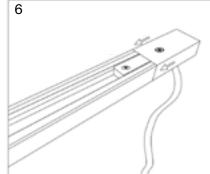










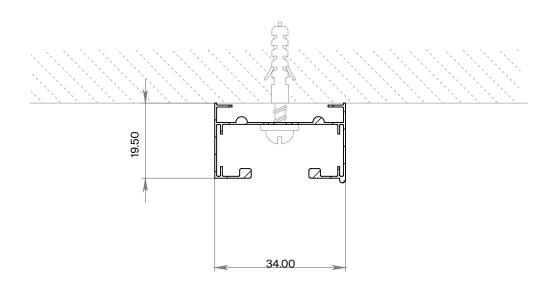


## INSTALLATION PLAN FOR SURFACE-MOUNTED SINGLE-PHASE TRACK

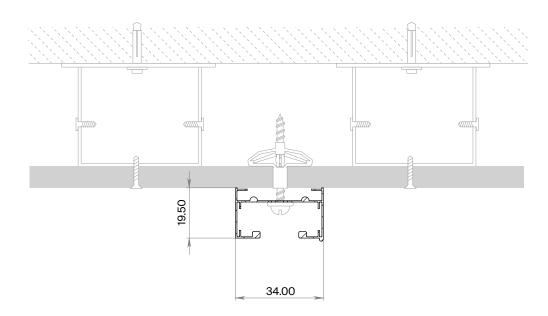
The surface-mounted single-phase track may be installed on any hard surface made of normally flammable materials. During the installation, carefully prepare and correctly mark the mounting surface to avoid bending moments that may cause deformation of the track.

When installing the surface-mounted track, select the appropriate fasteners based on the material of the mounting surface.

### TRACK INSTALLED ON A CONCRETE CEILING



### TRACK INSTALLED ON A GYPSUM BOARD CEILING



#### CAUTION

Do not tighten the screws at high screwdriver speed and do not tighten until it stops to avoid deformation of the track. The rules for installation of fasteners are given in the section "General recommendations and precautions".

## INSTALLATION PLAN FOR SURFACE-MOUNTED SINGLE-PHASE TRACK IN SUSPENDED WAY

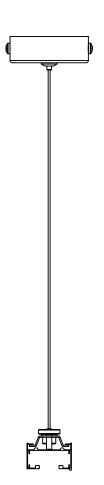
The surface-mounted single-phase track can be installed in a suspended way on a concrete ceiling and plasterboard suspended ceiling as well as other types of ceiling provided that necessary embedded parts are available and sufficient firmness of construction materials is secured.

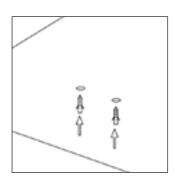
When suspending the surface-mounted track, select fasteners that suit to the ceiling material.

For the suspended mounting of the track, use special suspension kits TRA001CW-11B/TRA001CW-11W, consisting of a rope with an end locking element to adjust its length, the bracket and ceiling bowl.

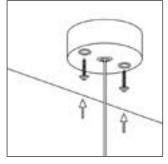
## INSTALLATION OF SUSPENDED MOUNTED SINGLE-PHASE TRACK USING A SUSPENSION MOUNT

- 1. Unpack the track and visually check for possible defects.
- 2. Mark the installation locations and prepare the mounting brackets for their subsequent fixation on the track.
- 3. Fix the ceiling bowl on the ceiling.
- 4. Insert the rope into the collet on the mounting bracket and adjust the length.
- 5. Cut off the unnecessary part of the rope.
- 6. Fix the bracket on the track with the screws located on top.
- 7. Use the carpenter level to check the levelness, if necessary, adjust the length of the ropes.

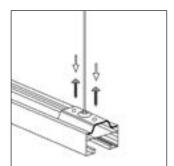




prepare the mounting surface mark and drill the holes insert the dowels into the holes



attach the ceiling bowl fix it with screws



adjust the installation height using the collet fixtures

push the plate into the groove on the back side of the track

fix the plate with screws

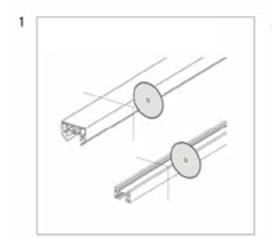
#### **CAUTION**

When mounting several connected track segments in a suspended way, place them strictly horizontally, avoid skewness and uneven tension of ropes.

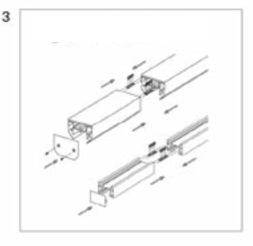
## INSTALLATION DIAGRAM FOR SURFACE-MOUNTED SINGLE-PHASE TRACK WITH A PROFILE FOR STRETCHED CEILING

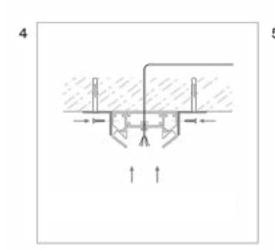
INSTALLATION OF SURFACE-MOUNTED SINGLE-PHASE TRACK WITH A PROFILE FOR STRETCHED CEILING In order to implement this option, you need to purchase the profile not in the assortment, sold separately in addition to the surface-mounted track and perform installation as follows:

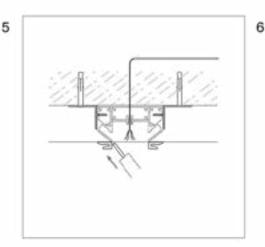
- 1. Cut the profile and track in the required length.
- 2. Drill the mounting holes and cable entry holes.
- 3. Assemble all parts of the profile and track if required, and insert the plugs.
- 4. Fix the profile to the surface using the mounting angles.
- 5. Stretch the ceiling cloth and glue the edges of the harpoons along the entire profile length.
- 6. Leave a slot between the harpoons.

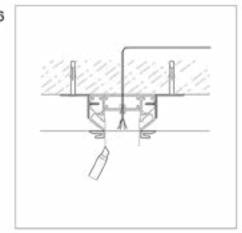








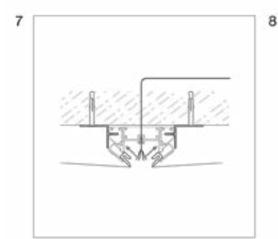


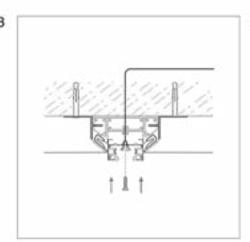


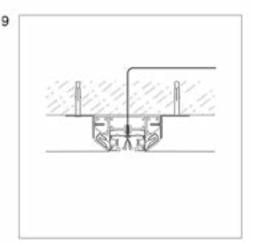
## INSTALLATION DIAGRAM FOR SURFACE-MOUNTED SINGLE-PHASE TRACK WITH A PROFILE FOR STRETCHED CEILING

INSTALLATION OF SURFACE-MOUNTED SINGLE-PHASE TRACK WITH A PROFILE FOR STRETCHED CEILING

- 7. Put the harpoons into the profile grooves and glue the end faces.
- 8. Install the track and fix it inside the profile.
- 9. The track is ready for operation and installation of lamps on it.





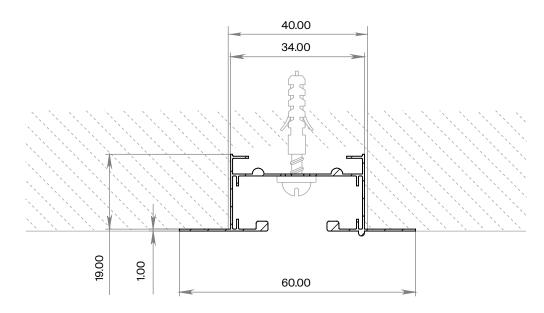


# INSTALLATION DIAGRAM FOR BUILT-IN SINGLE-PHASE TRACK

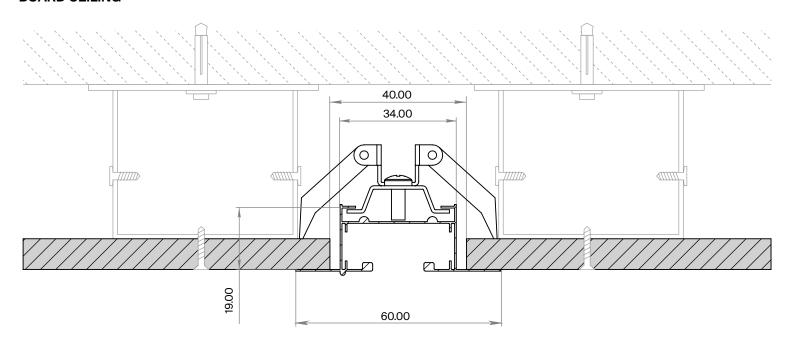
The built-in single-phase track may be installed in a groove or a specially prepared recess and in a suspended ceiling made of gypsum boards.

When installing a built-in track, select fasteners with due regard for the ceiling design.

### TRACK INSTALLED IN A GROOVE OR RECESS



### TRUCK INSTALLED IN A GYPSUM BOARD CEILING



#### **CAUTION**

If you wish to install a built-in track in the gypsum board ceiling, use an additional accessory — holder TRA002HR-11B. The rules for installation of fasteners are given in the section "General recommendations and precautions".

Fault description	Cause	Remedy	
The lighting fixture does not operate	Loose connection of current-carrying parts	Install the lighting fixture on the track until full contact between the adapter and current-carrying wires is reached	
		Check the contacts of the lead-in cable, connection of the lead-in contacts to the track, and other connections.	
	Contact the seller to replace it under a warranty	Contact the seller for a warranty replacement	
	Malfunction of lighting fixture		
The lighting fixture flashes or glows dimly in switched-off state	A switch with illuminated keys is installed, or a motion (light) sensor is used to control the lighting circuit	Replace the switch with a model without backlit keys, or with auxiliary incorporated resistor. Use the motion (light) sensor with a relay output only	
Unstable glowing, flickering, unusual sound	Brightness control (dimmer switch) is installed in the power supply circuit	Remove the brightness control from the circuit, replace it with a switch	
	Defective power supply source / lamp driver	Contact the seller for a warranty maintenance or replacement	
	I	1	
STORAGE	Store the product indoors, in the original		
0.0.0.01	aggressive environment. Store at a temperature in the range from -20 °C to +7 C and relative humidity not exceeding 95%. Direct exposure to moisture is not		

C and relative humidity not exceeding 95%. Direct exposure to moisture is not allowed.

#### **TRANSPORTATION**

The product is shipped in a package which is suitable for transportation by sea, rail, road and air.

#### **DISPOSAL**

Do not dispose the product with the regular household waste! Products must be disposed according to the directive on electrical and electronic devices at local collection points for such devices!

#### WARRANTY

The warranty is granted for a period of 24 months from the date of sale which is determined on the basis of documents serving as proof of purchase.

This warranty covers defects in workmanship provided that all rules of operation, transportation and storage given in this manual are complied with.

The warranty is not valid in following cases: if the product has been used for the purposes other than it is intended for; the malfunction occurred after the handover of goods to the consumer and was caused by improper or negligent handling, failure to observe the requirements set forth in these instructions. And in force majeure circumstances as well, in particular in the following events: fire, flood, high-voltage discharges, and other natural disasters, accidents and wilful acts of third parties that caused the product to malfunction.

**MANUFACTURER** 

Maytoni GmbH, Feldstiege 98, Münster, Germany, 48161

**IMPORTER** 

Maytoni GmbH, Feldstiege 98, Münster, Germany, 48161

Developed in Germany. Made in China. Shelf life is not limited.

