

# SCON<sup>®</sup>

## XTB106

### Dimmable or Non-Dimmable Recessed Magnetic Track Lighting System User Manual



**Notice** Read the user manual carefully before using

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UL1574:2004

<b>Lighting Facts</b> Per Bulb	
<b>Brightness</b>	800 lumens
<b>Estimated Yearly Energy Cost</b>	\$0.48
Based on 3 hrs/day, 11 ¢ /kWh Cost depends on rates and use	
<b>Life</b>	18 years
Based on 3 hrs/day	
<b>Light Appearance</b>	5000K
Warm <span style="display: inline-block; width: 100px; border-bottom: 1px solid black; position: relative; top: -10px;"> <span style="position: absolute; left: 0; top: -5px;">Warm</span> <span style="position: absolute; right: 0; top: -5px;">Cool</span> </span>	
<b>Energy Used</b>	4.0watts

# 1

## Important Safety Information

### WARNING



Be sure the electricity to the wires you are working on is shut off; either the fuse is removed or the circuit breaker is turned off.



Do NOT install or use the light fixture if any part is missing or damaged. Contact your dealer for replacement or missing parts.






### IMPORTANT SAFETY INSTRUCTIONS






Do NOT install this track system in damp or wet locations











Do NOT install any part of a track system less than 5 feet above the floor.

-  Do NOT install any luminaire assembly closer than 6 inches from any curtain, or similar combustible material.
-  Shut off the electrical power before adding to or changing the configuration of the track system.
-  Do NOT attempt to energize anything other model's track lighting luminaires 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.
-  **Due to the complexity of the lighting system, a qualified electrician is needed.** Although the track lighting system may seem to operate acceptably, a dangerous overload of the neutral may occur and result in a risk of fire

## CAUTION

-  HOT SURFACE! The track luminaire is hot when the power is on, wait at least 5 min to touch it after the power is off.
-  SCON XTB106 track is only available for SCON XTB106 lights and vice versa.
-  A driver can power 12 meters connected tracks at most, and the total wattage of connected tracks in group can't exceed 300W.

## ATTRIBUTION

-  Main Material: Aluminium
-  Surface treatment: Anodizing Aluminium
-  Working Temperature:  $t_a$ :  $-20\sim 50^{\circ}\text{C}$ ;  $t_c$ :  $75^{\circ}\text{C}$
-  Environmental Relative Humidity: 20%~85%
-  Waterproof Class: IP20(Track)/IP40(Light)
-  Output Voltage of Track: 48Vdc
-  Input Voltage of Track Lighting Head: 48Vdc
-  3 dimming methods: 0-10 V (only dimming), DALI with dimming, DALI with dimming and adjusting CCT (2700K-5700K)

**SCON XTB106 recessed magnetic track lighting system must have these components:**

### **2.1 Power Driver / Transformer**

You must have at least one You must have at least one power driver supplied by SCON.

### **2.2 Track & Rail**

To link the tracks with the power driver, you must have at least one track .Tracks can be easily connected to each other to make your favorite scheme of lighting.

### **2.3 Corner Joint**

With corner joints, the tracks can be formed into various routes.

### **2.4 Track Lighting Head**

Once the track is installed, you can choose from a wide variety of lamp heads to design your own lighting system.

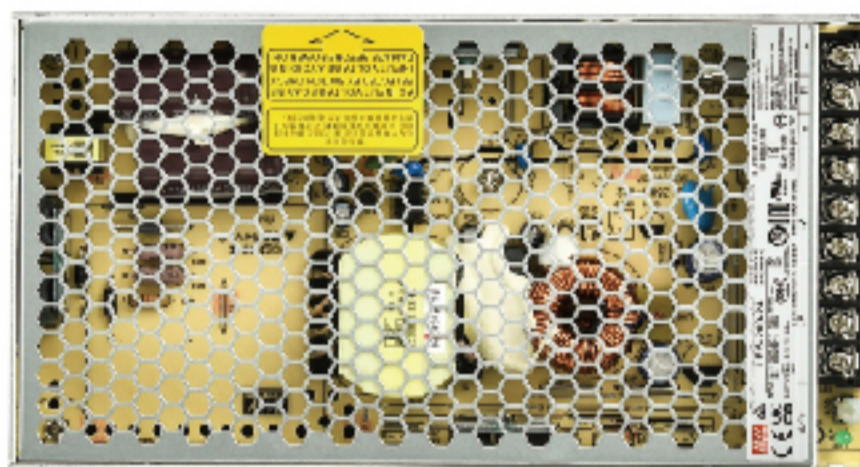
### **2.5 Dimmer Switch and Related**

If you need a dimmable system, selecting the corresponding LED driver and dimmer switch is necessary. DALI dimming method needs DALI bus power supply, and DALI with multi-CCT method needs the corresponding track lighting heads specially.

# 3

## Components of the System

### 3.1 Power Driver




LED Driver A for Non-Dimmable System or DALI with Multi-CCT System



LED Driver B for TRIAC/ELV System or 0-10V System

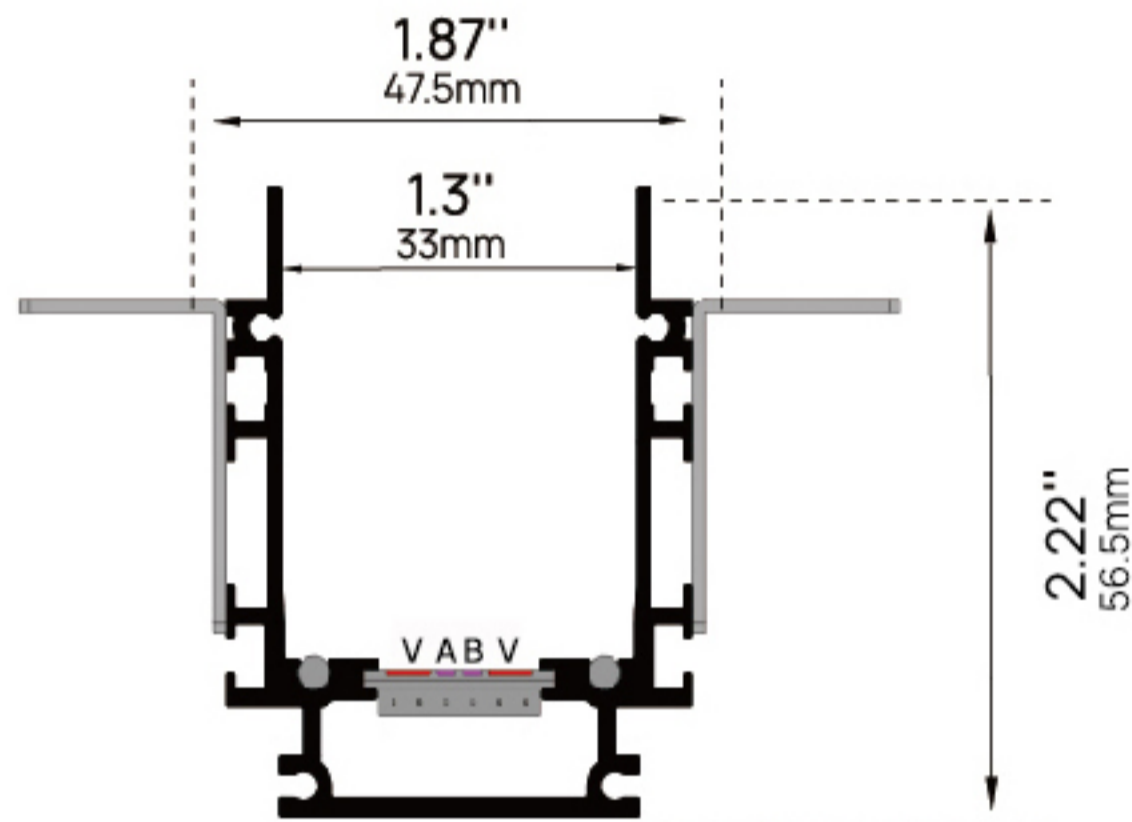


LED Driver C for DALI with Mono-CCT System

 \* Driver B and C is special designed for SCON XTB106 system, and the other driver can't be compatible with SCON XTB106 TRIAC/ELV, 0-10V, DALI with Mono-CCT system.

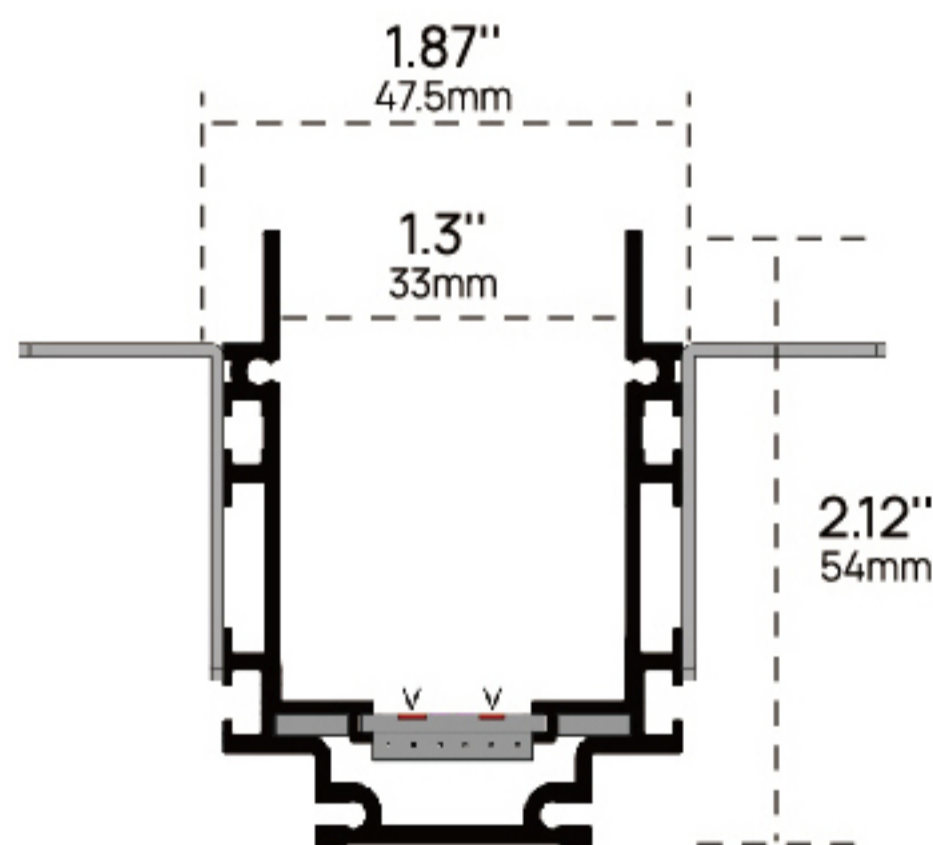
# Track Sectional Drawing

\*The two are both Suitable for gypsum board with thickness of 9 to 24 mm



**XTB106 Track (4 Wires)**

\* Supports both non-dimmable and dimmable system – TRIAC/ELV, 0-10V, DALI (Mono-CCT or Multi-CCT) dimming methods; but different dimming methods can not be mixed in one system.



**XTB028 Track (2 Wires)**

\* Supports only non-dimmable system.

## 3.2

## Track & Rail

### DC Input Connector



A. Track(100cm/39.4inch)\*1. B. Side holder\*4. C. Side Connection Holder\*2. D. Endcap\*1 (Another end cap is already on track) E. Screw(black)\*5(Used on end cap). F. Circuit connector\*2. G. Screws for B\*14 (Used on ins tailing on wall/ceiling). H. Tool for C\*2. I. DC input connector\*1. J.Screwdriver for I \*1.

### 3.3 Track Lighting Heads

**Comments:** **A)** 3000K-Warm White; 4000K-Natural White; 5000K-Daylight. **B)** The bold font value in beam angle is the default. **C)** Two types of XTB106 track lighting heads: 1) No built-in dimmable driver but is compatible with non-dimmable system, TRIAC/ELV system, 0-10V system, DALI Mono-CCT system. 2) with built-in dimmable driver and is compatible with DALI Multi-CCT system.

#### Linear Floodlight



Power	L*W*H(mm)	Beam Angle	CCT	Color
10W	324*33.5*40	90°	2700K 3000K 4000K	Black
15W	424*33.5*40		5000K 2700K-6500K	

# Linear Spotlight



**CRI**  
Ra ≥ 85

**Chip**  
OSRAM

Power	L*W*H(mm)	Beam Angle	CCT	Color
10W	291*33.5*40	15°	2700K	Black
		30°	3000K	
15W	424*33.5*40	45°	4000K	
			5000K	
			2700K-6500K	

# Anti-Glare Floodlight

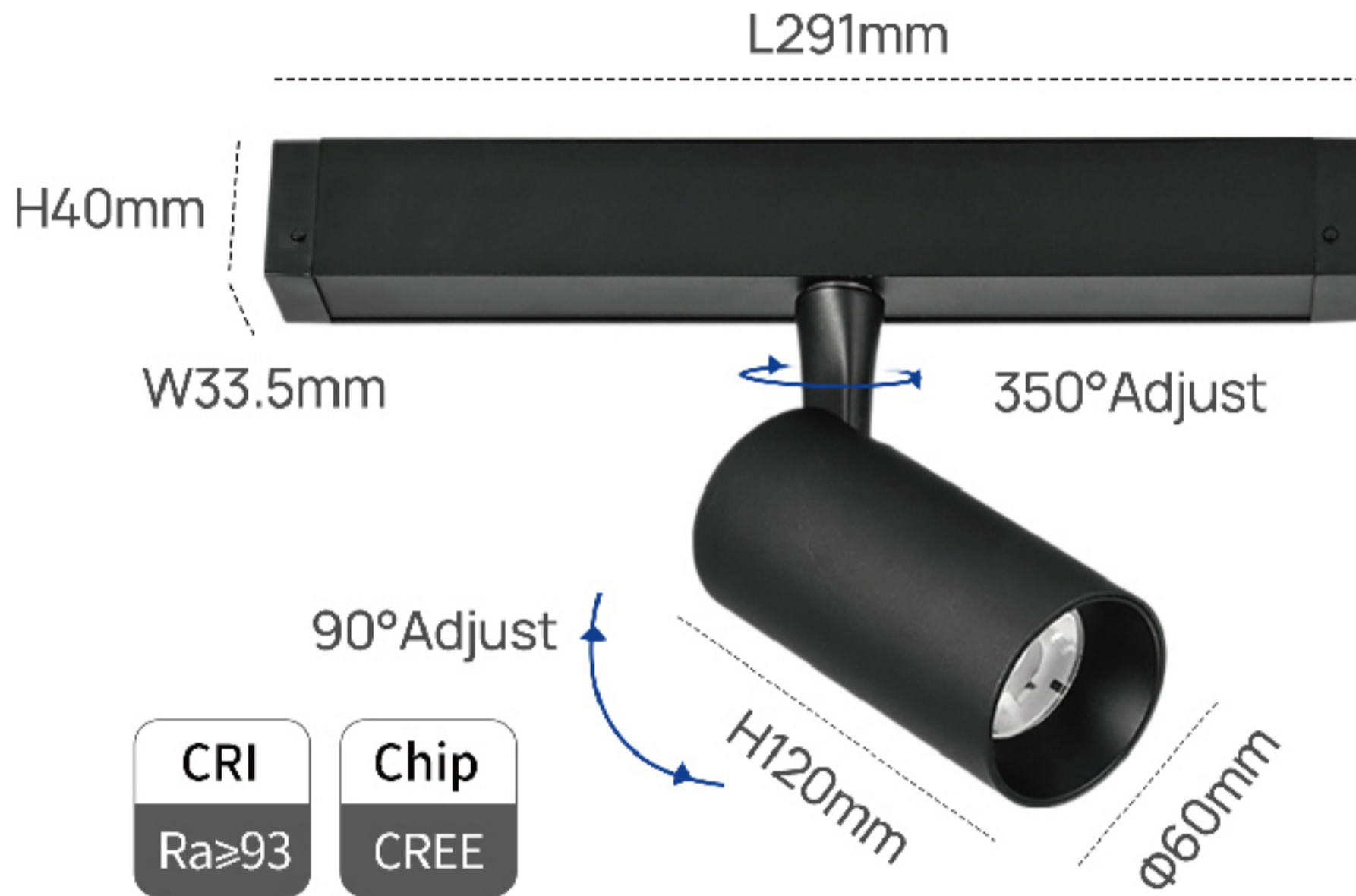


**CRI**  
Ra ≥ 85

**Chip**  
OSRAM

Power	L*W*H(mm)	Beam Angle	CCT	Color
10W	302*33.5*40	90°	2700K	Black
15W	402*33.5*40		3000K	
		4000K		
			5000K	
			2700K-6500K	

# Downlight



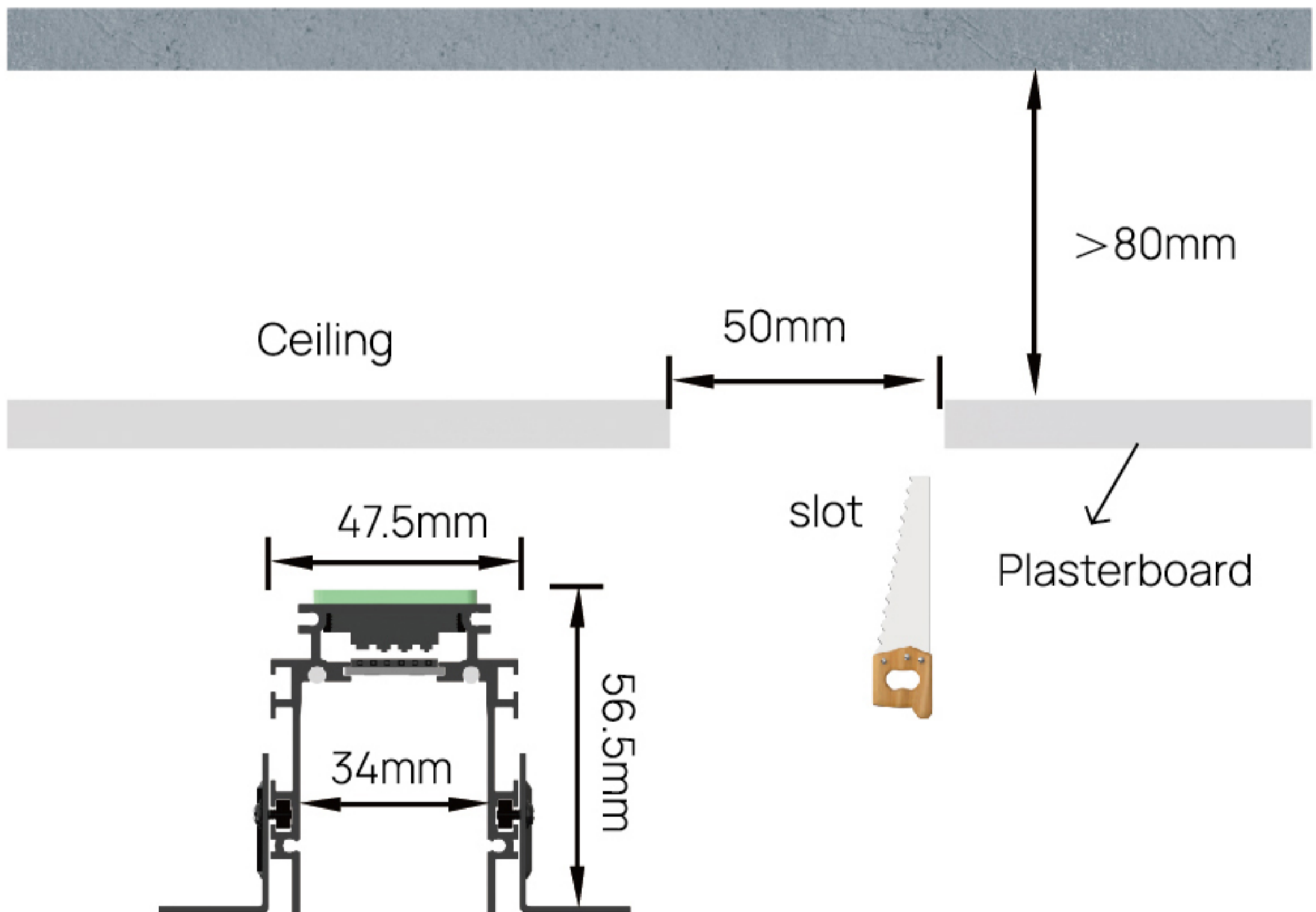
Power	L*W*H(mm)	Beam Angle	CCT	Color
18W	291*33.5*40	15°	2700K	Black
		24°	3000K	
		40°	4000K	
			5000K	
			2700K-6500K	

\*XTB106 track lighting heads can't be compatible with XTB028; vice versa.

\*\* More types of XTB106 track lighting heads are listed in SCON store.

## 4 Steps of Installation

### 4.1 Make the Slot for Tracks



## 4.2

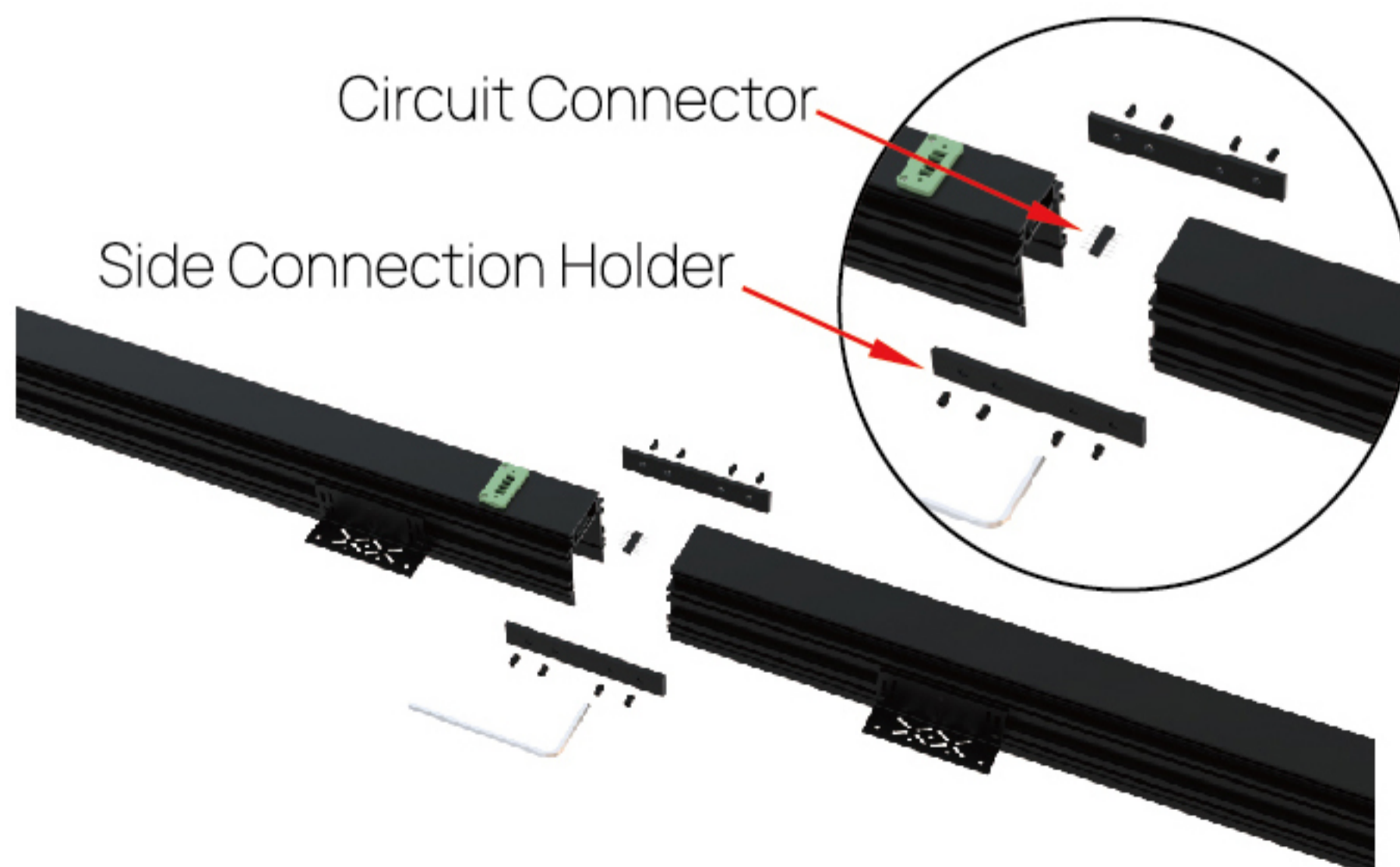
## Connect Tracks

### 4.2.1 Install the Side Mount

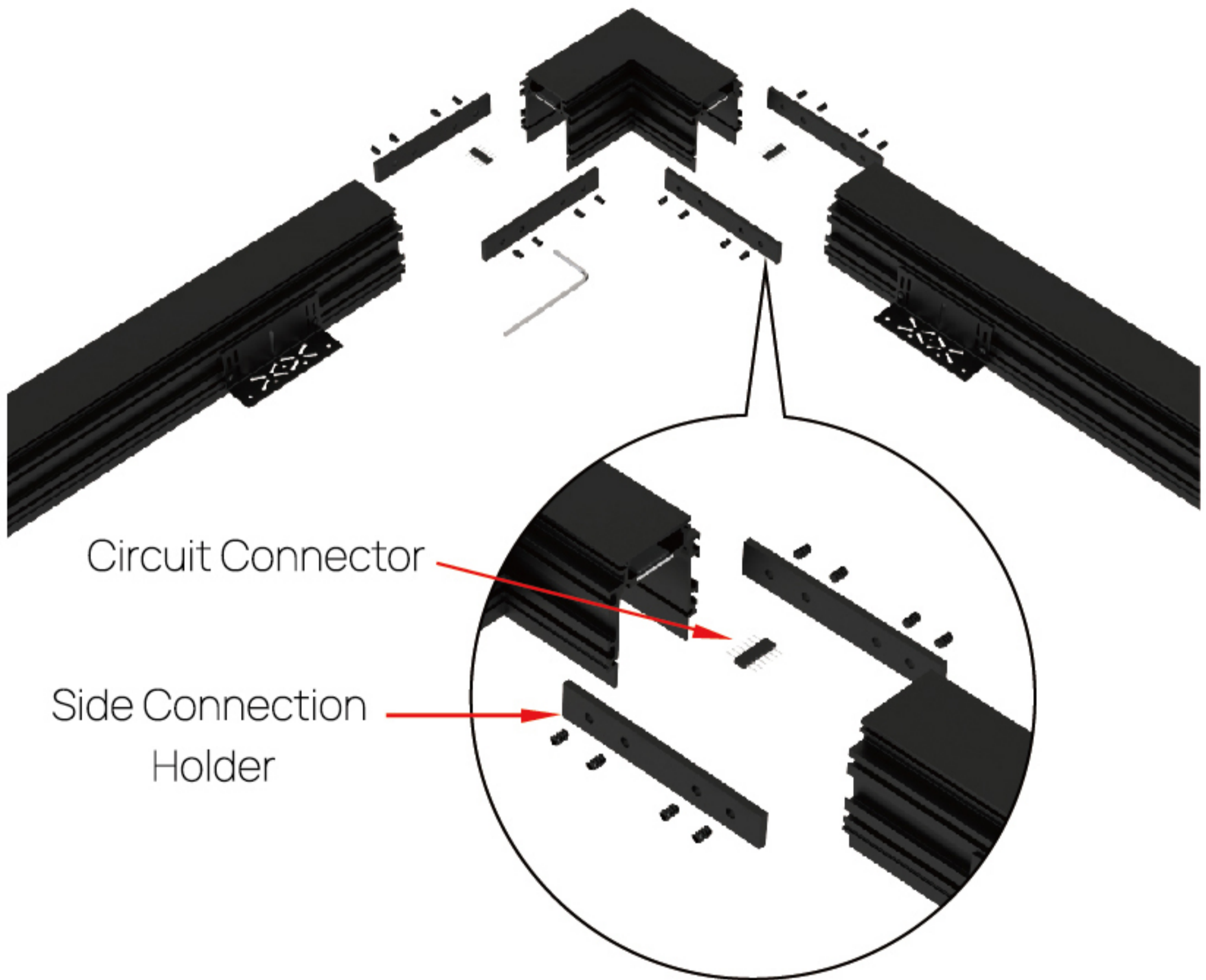


\*It's applied to plasterboard with thickness of 9-24mm.

### 4.2.2 Install the Side Connection Holder




### 4.2.3 Install the Corner Joint

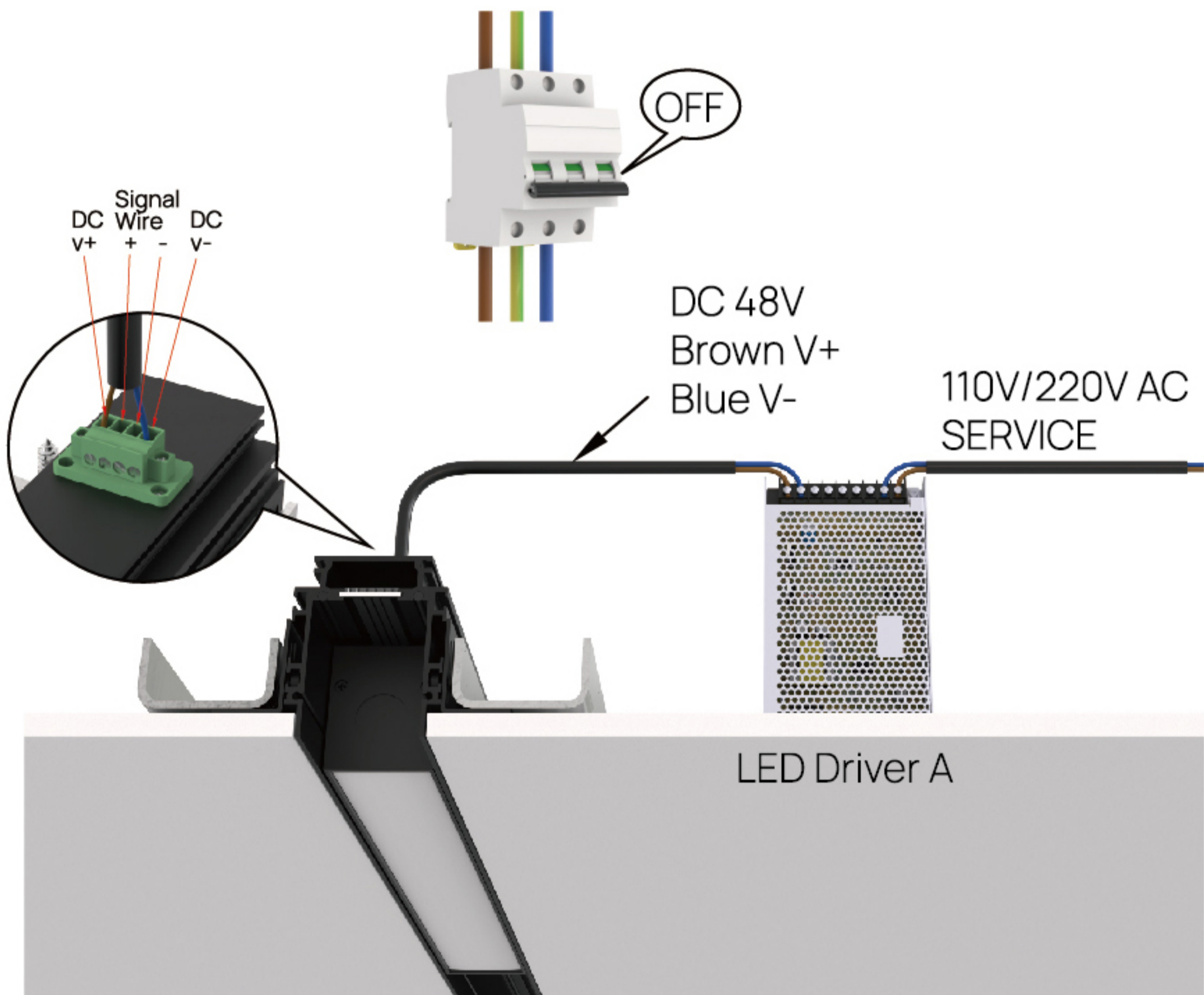


## 4.3

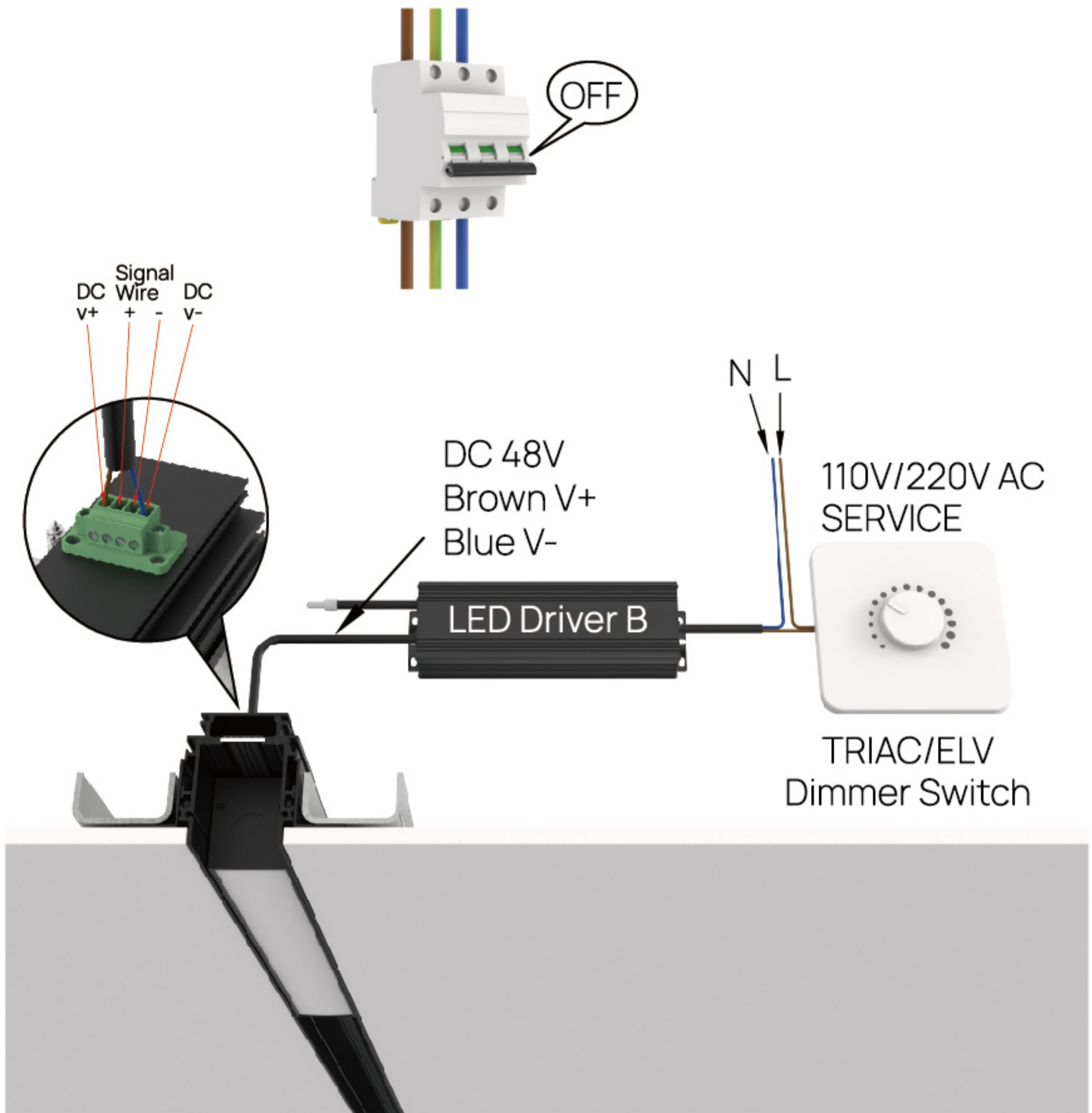
## Power Off and Connect the Driver

 Different dimming methods and different dimming control programs will lead to different installation methods. A professional electrician for the installation of intelligent lighting systems is a necessity.

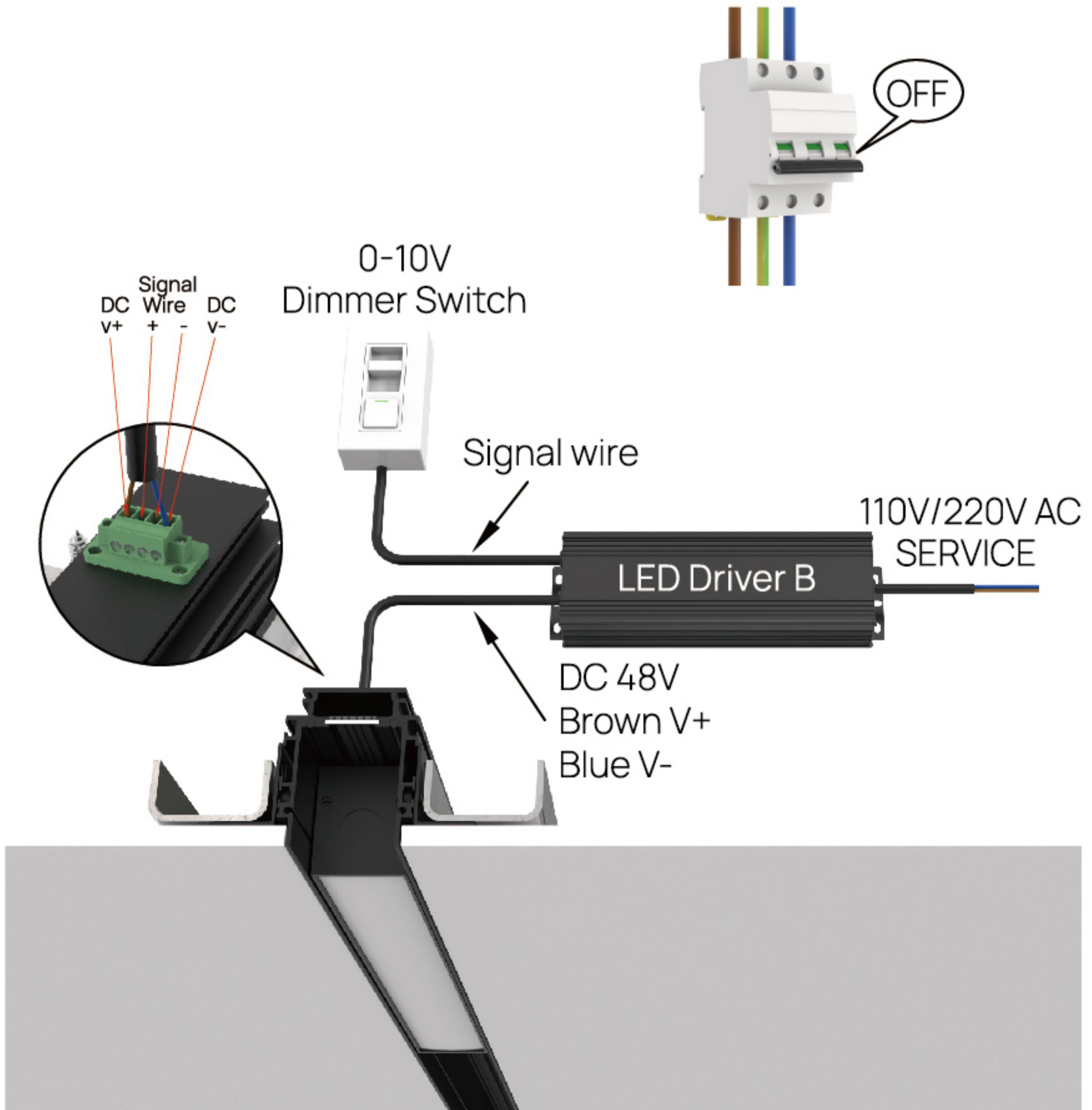
### 4.3.1 No Dimming Wiring Diagram



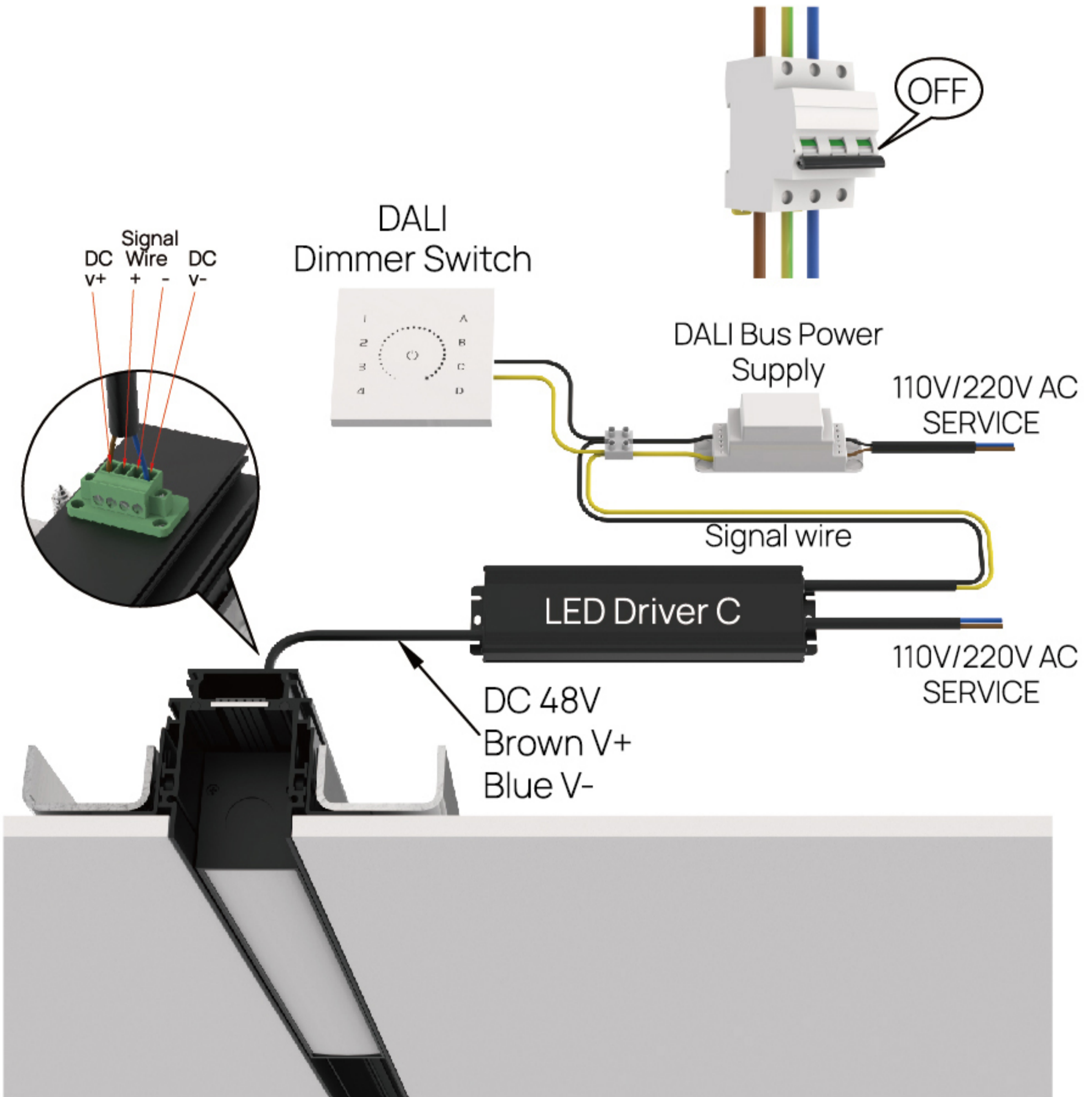
### 4.3.2 TRIAC/ELV Wiring Diagram



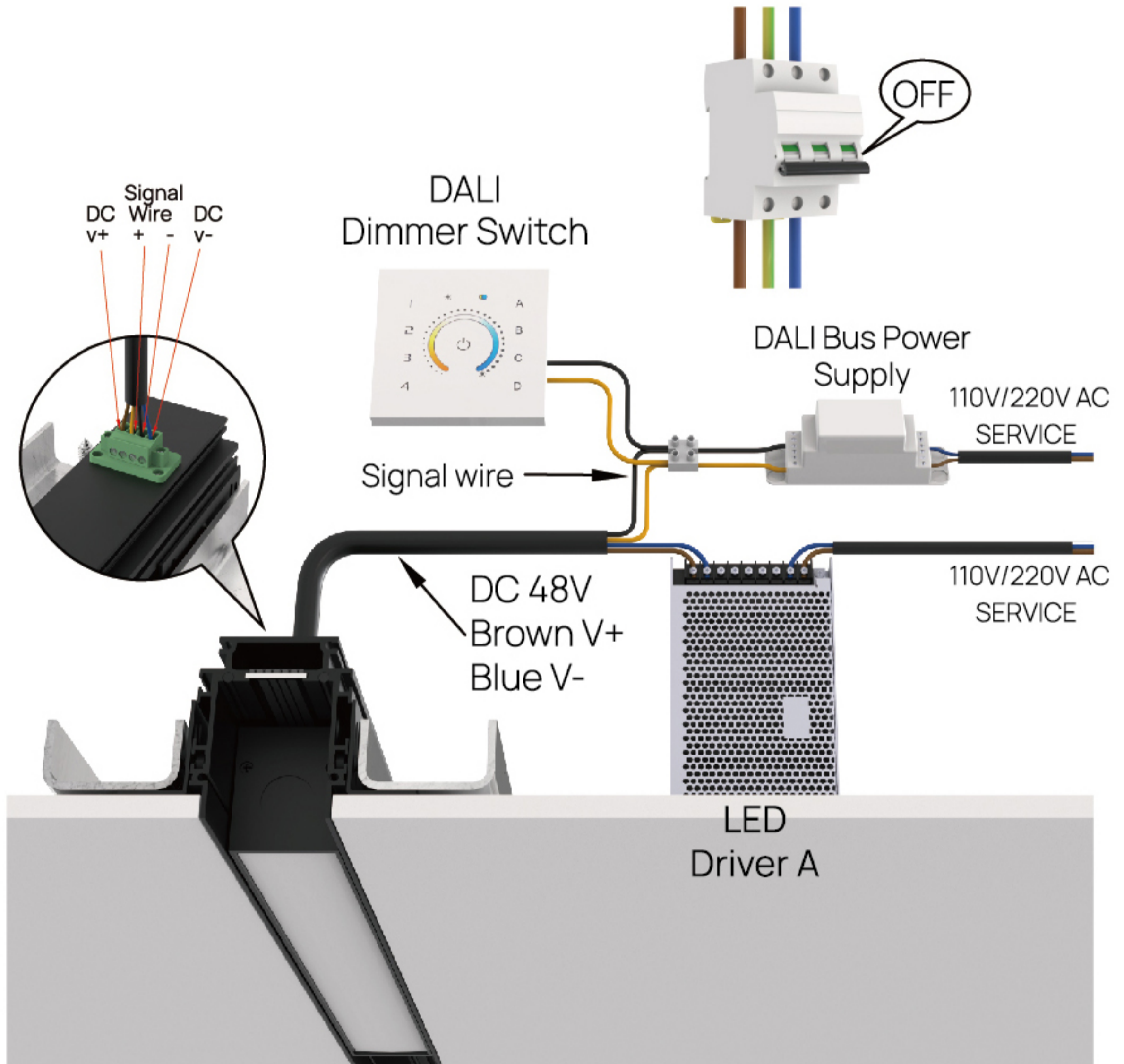
### 4.3.3 0-10V Wiring Diagram



### 4.3.4 DALI (Mono-CCT) Wiring Diagram



### 4.3.5 DALI (Multi-CCT) Wiring Diagram

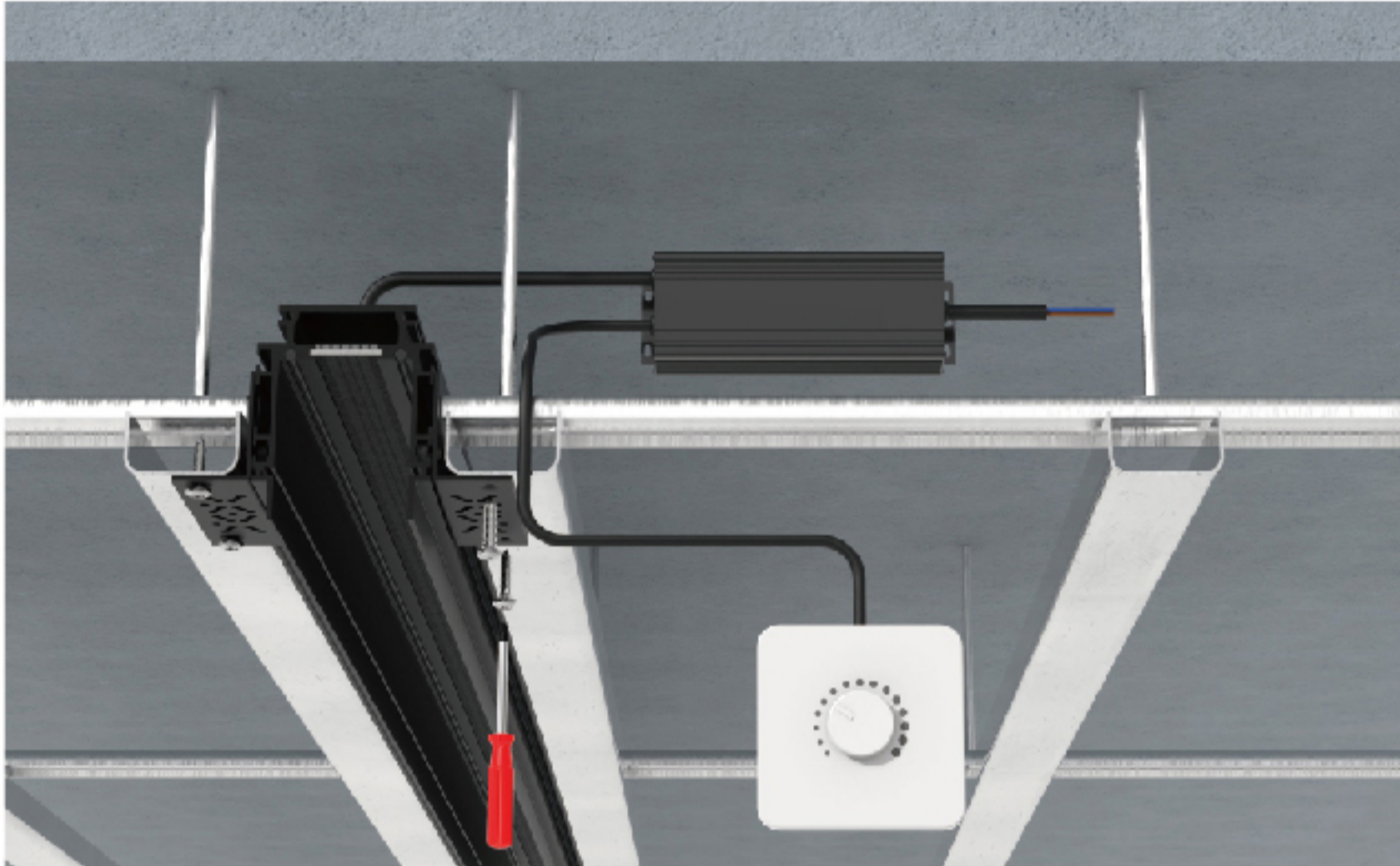


\*Needs 2700K-5700K track lighting head.

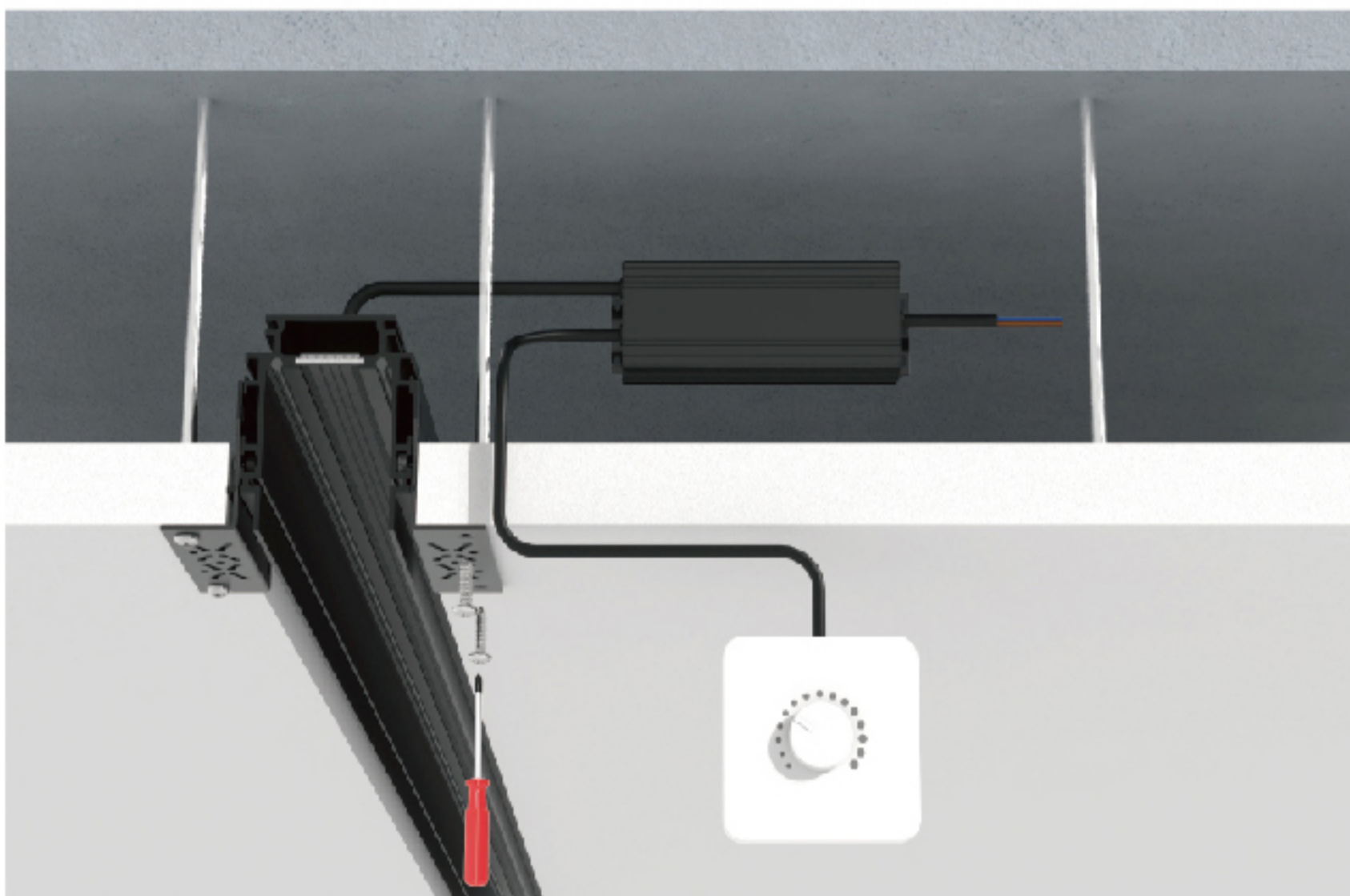
## 4.4

## Fix the Track to the Main Runner etc.

### Method A (Recommended)



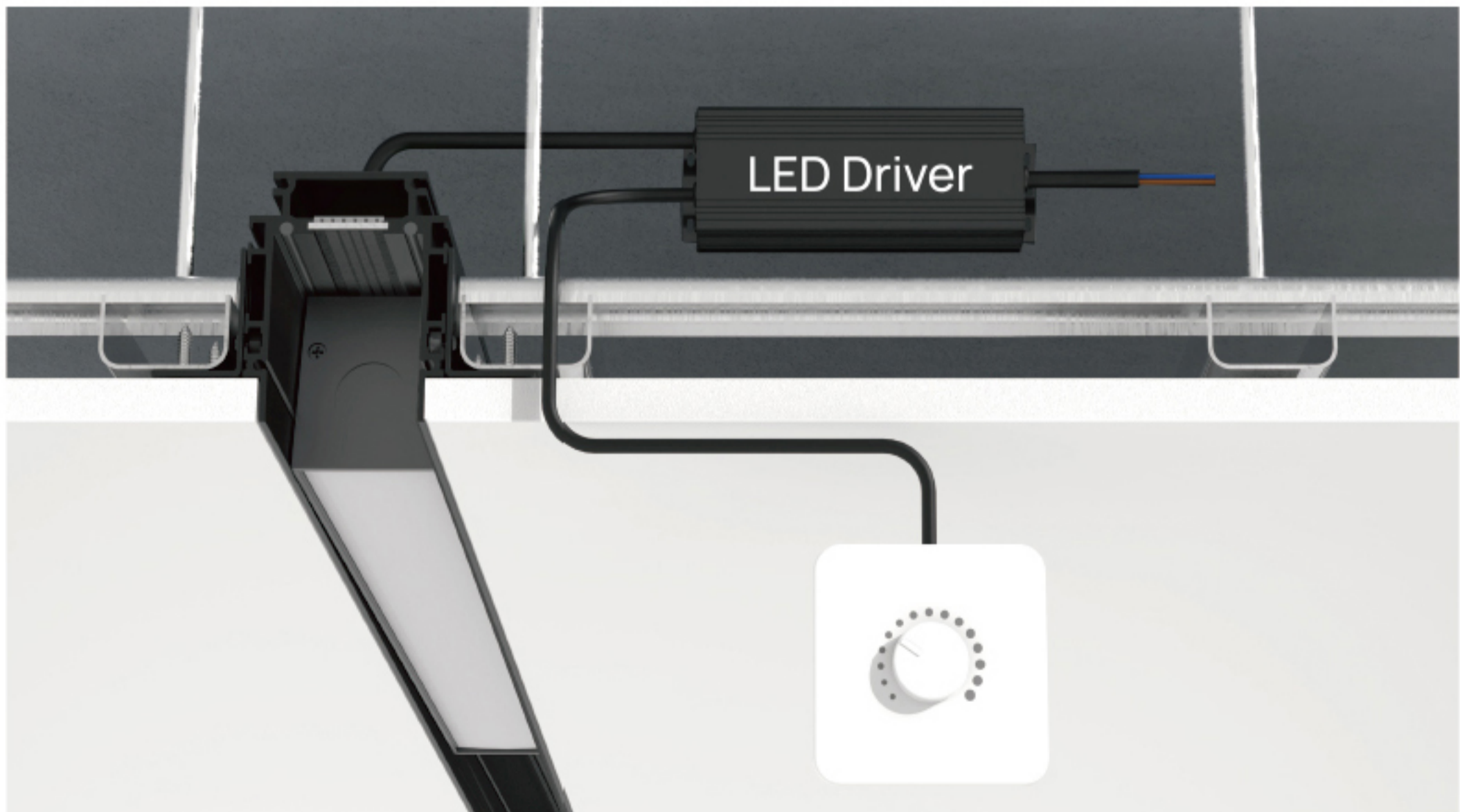
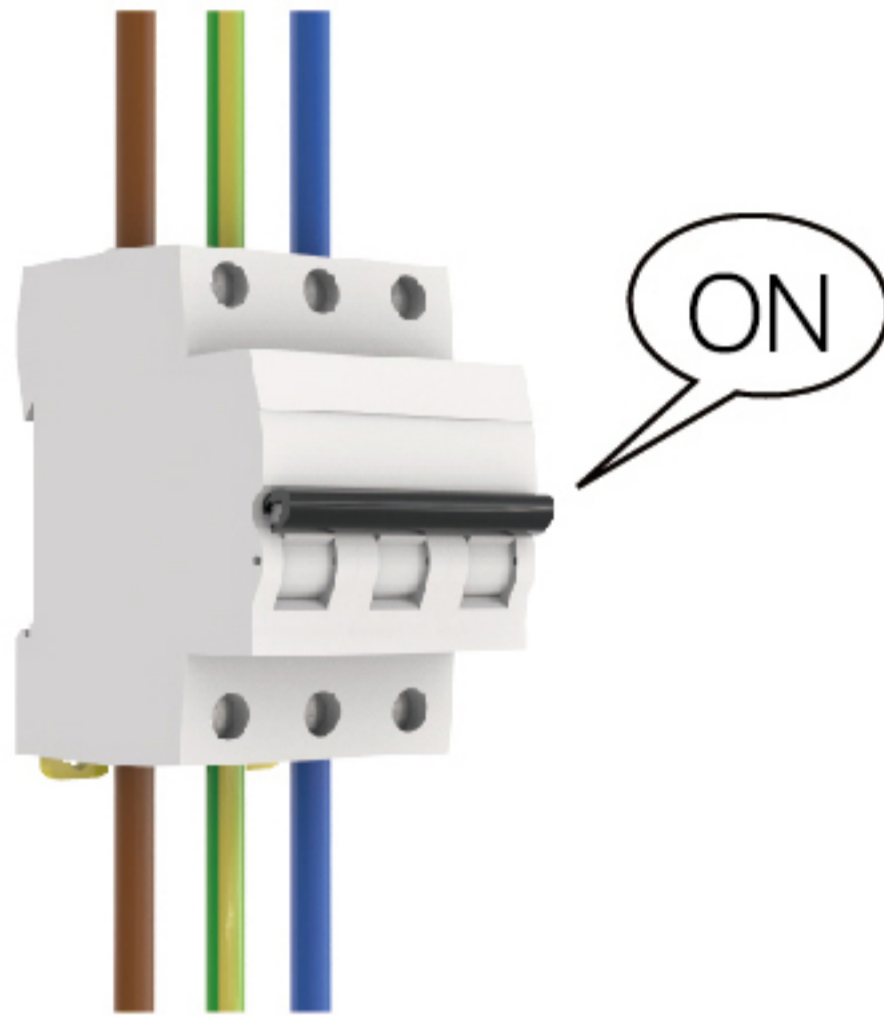
### Method B



\*Place the LED driver near the ceiling manhole.

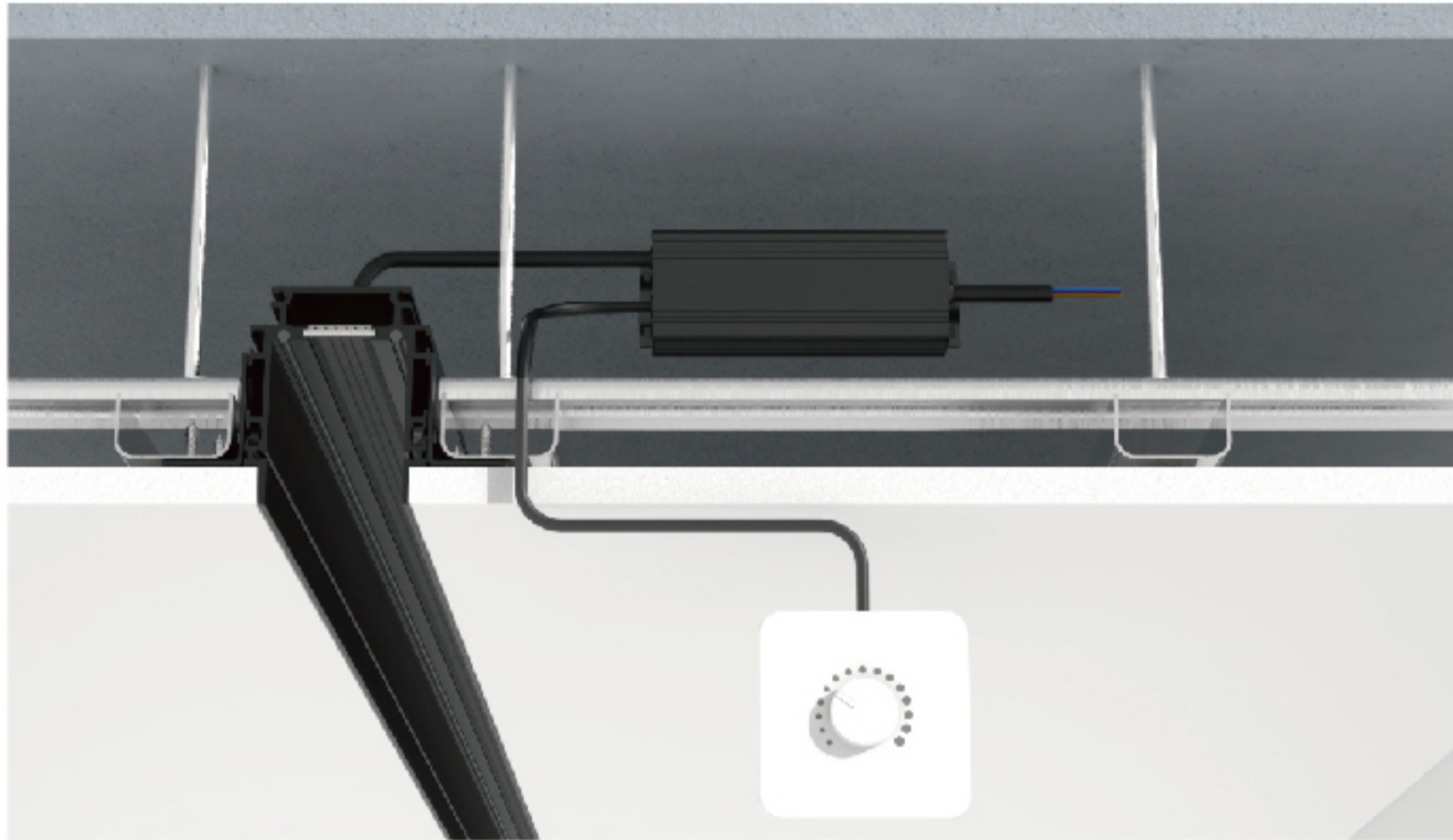
## 4.5

## Power On and Test the Track



## 4.6

## Ceiling Plastering & Install Lighting Heads



\*The inside of the Magnetic Track needs to be kept clean.

Magnetic track



Magnetic track



\*If there are recessed buttons at the track lighting head's both ends, press the 2 buttons with both hands at the same time and put the light into the track.

5

Ref. of Recessed Track Lighting Scheme



L type vertically



L type horizontally



Long linear type



Double linear type



Hallway L type



Rectangular type in living room



Rectangular type in bedroom



Open rectangular type

**Q: Can I use the driver provided by other sellers?**

**A:** If you do not choose to use the driver provided by SCON, then you must ensure that another driver of your own choice provides the compatible parameters with SCON driver. But we strongly recommend that using the driver provided by SCON, otherwise the system may not work, especially for the dimming system.

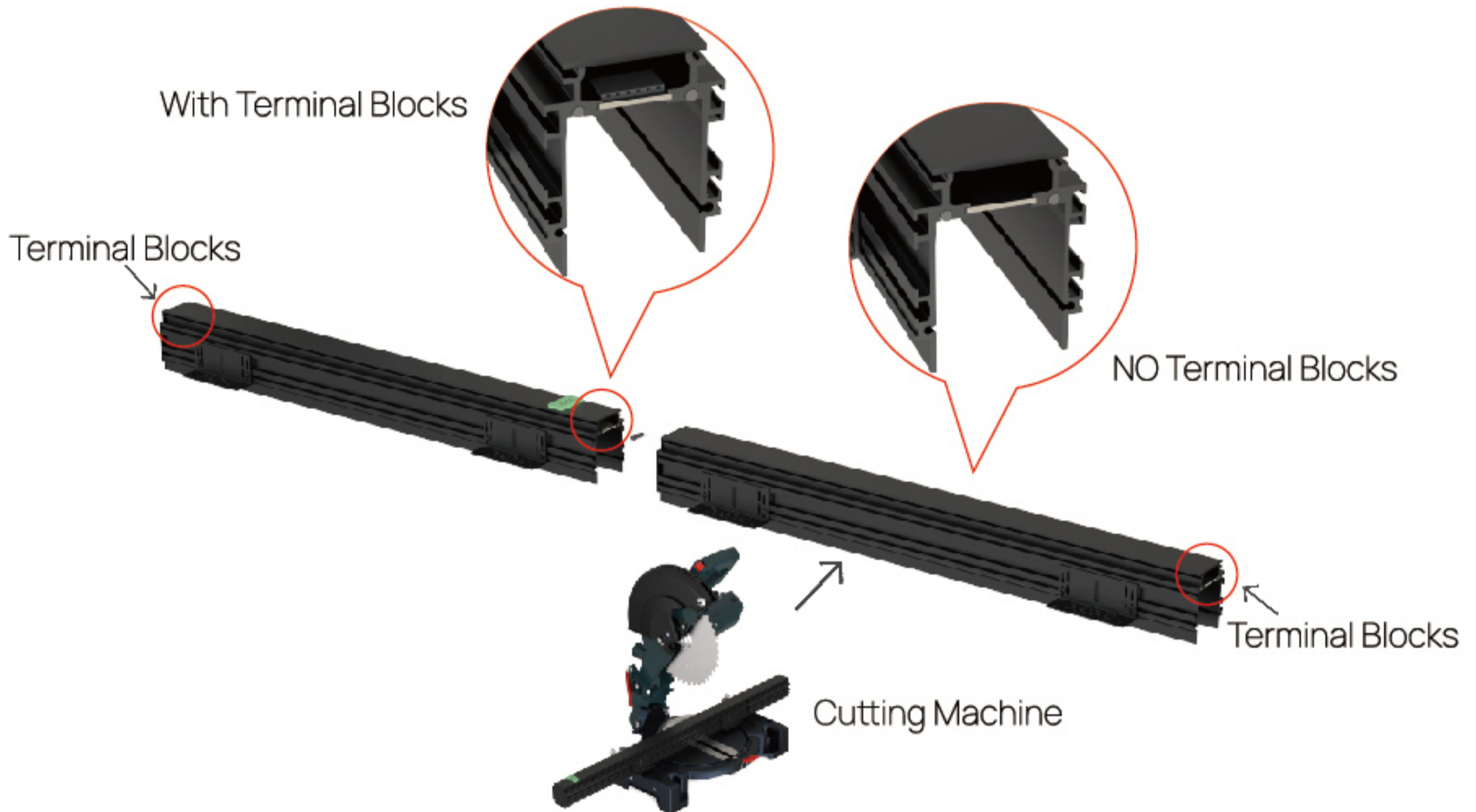
**Q: Is the new version XTB106 track compatible with the old version?**

**A:** Yes. The new version no longer distinguishes between with cable and no cable, making it easier for you to order tracks, and the 4 wires cable is easy to get on common market. An important reminder is that 80mm (3.15") of height space needs to be reserved for the installation of the track. Under the new track lighting system solution, the non-dimmable lamp head can be dimmed through the TRIAC, 0-10V, or DALI (mono-CCT) dimming driver, which is more convenient. However, the multi-CCT dimming system needs to choose the lamp head with built-in DALI dimming driver, and the external driver connected to the system does not need to have dimming features.

**Q: Can I cut the track to meet my needs of track length?**

**A:** You can cut the track to match the designed length. It is recommended to cut to a maximum of two sections. If cut in three or more sections, only the head and tail sections can be used, as only the head and tail sections have connectors for inserting pins to connect to other tracks.

There is no terminal blocks in the middle of the track, so when the track is cut from the middle, the new formed track tail or head cannot be connected and energized again, but can only be used as the tail of the new track system.



\*The terminal blocks only be fixed in the tail and head of the track, so the tracks can be connected by pin header connector.

### **Q: How to assure the warranty of tracks?**

**A:** 3 years manufacturer warranty for all SCON products. After many years, if the track fails to power up, we can provide special bridging lights to connect the track circuit without dismantling the track.

### **Q: How to solve the problem of lighting flickering?**

**A:** If the light is flickering, it is most likely because there is a problem with the driver or its connection. If there is a problem with the light, the light will only come on or not.



Founded in 2013, SCON has always been committed to provide customers with a better lighting experience. It is located in the Lighting Capital of China (Sun Yat-sen's hometown) - a place with a well-established lighting industry chain resource, ensuring that SCON can manufacture high-quality products. SCON has been continuously improving product quality and customer experience, so that users around the world can enjoy a better lighting life.