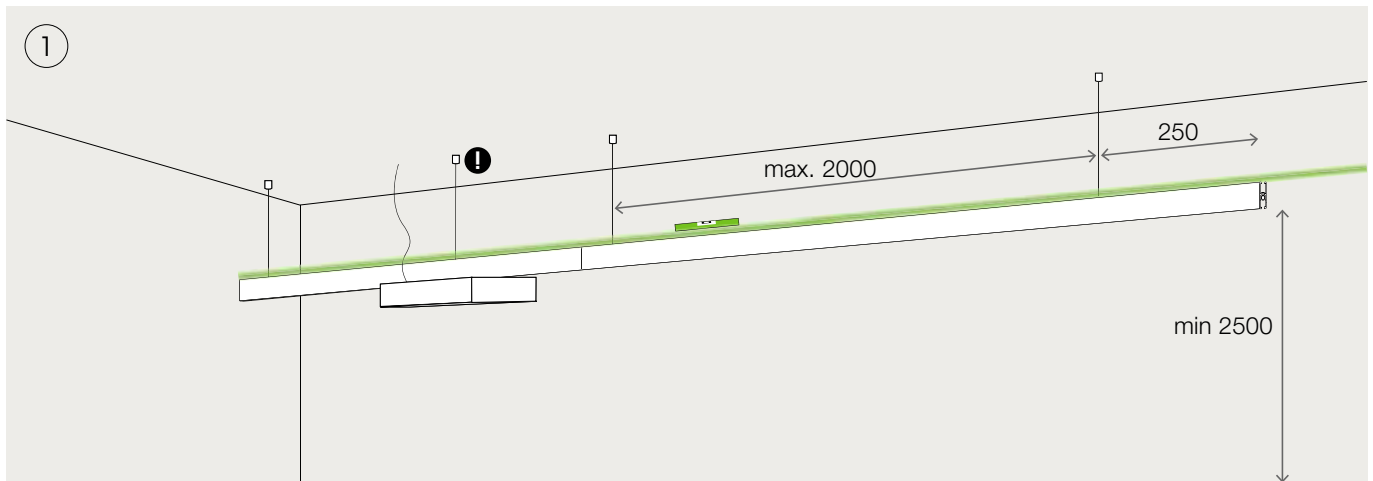


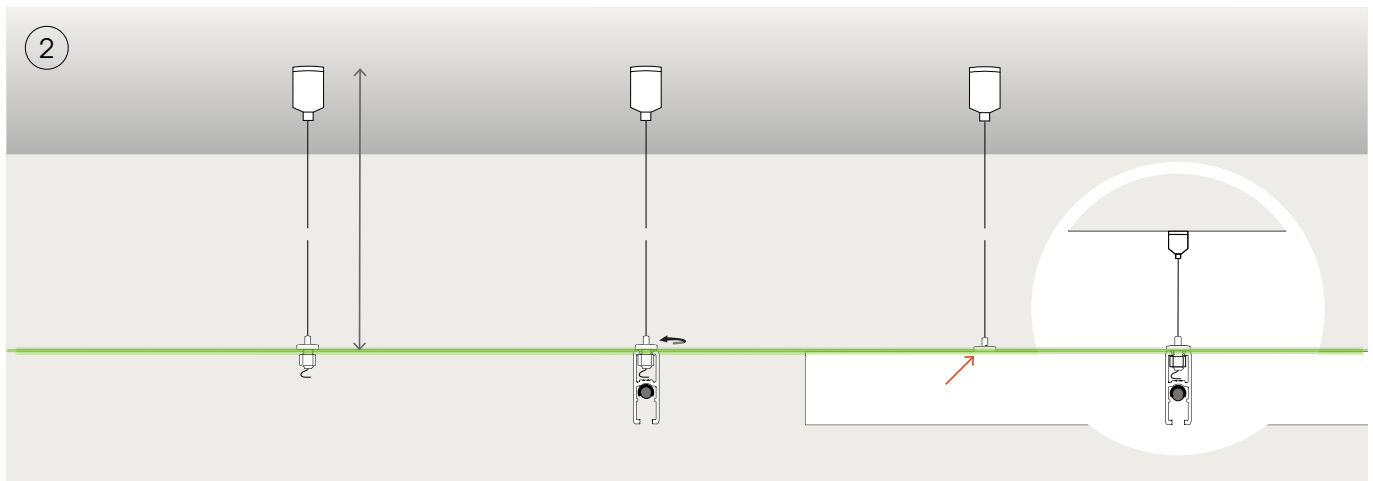
Installation of the systems

pend48 & pend

The installation of the tracks is initially the same for the LightLight and Sense System. However, please note the instructions when connecting the Buschfeld light track.



Fix the cable suspension system on the ceiling, spacing between the cables 2000 mm maximum. Cable suspension 250 mm max. from the end of the track.



Bring all wire rope holders to the desired height, align them with a laser spirit level. Secure heavy control gear such as Cube, Bigbox and Bigbox48 (at track level) with an additional rope suspension. Insert the wire rope holder into the upper rail channel and screw in place.

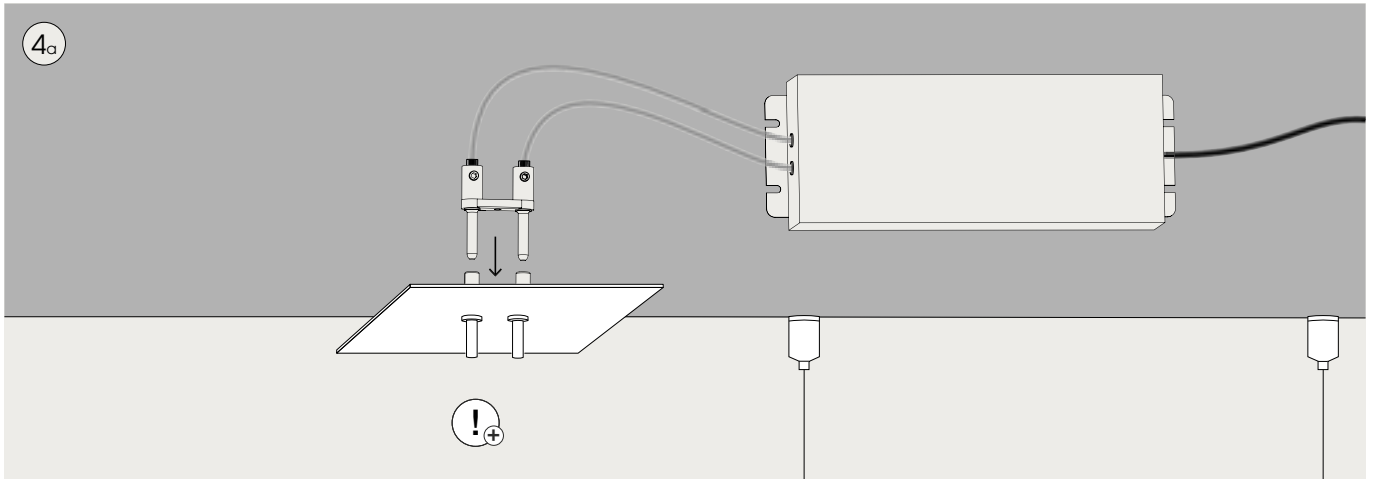
Align the tracks with a spirit level and readjust the rope lengths on the wire rope holder if necessary. Place protruding rope ends in the upper rail channel or cut to length.

Installation of the systems

pend48 & pend

power feeds with power rods

Installation to be carried out by qualified personale only! Disconnect the system!



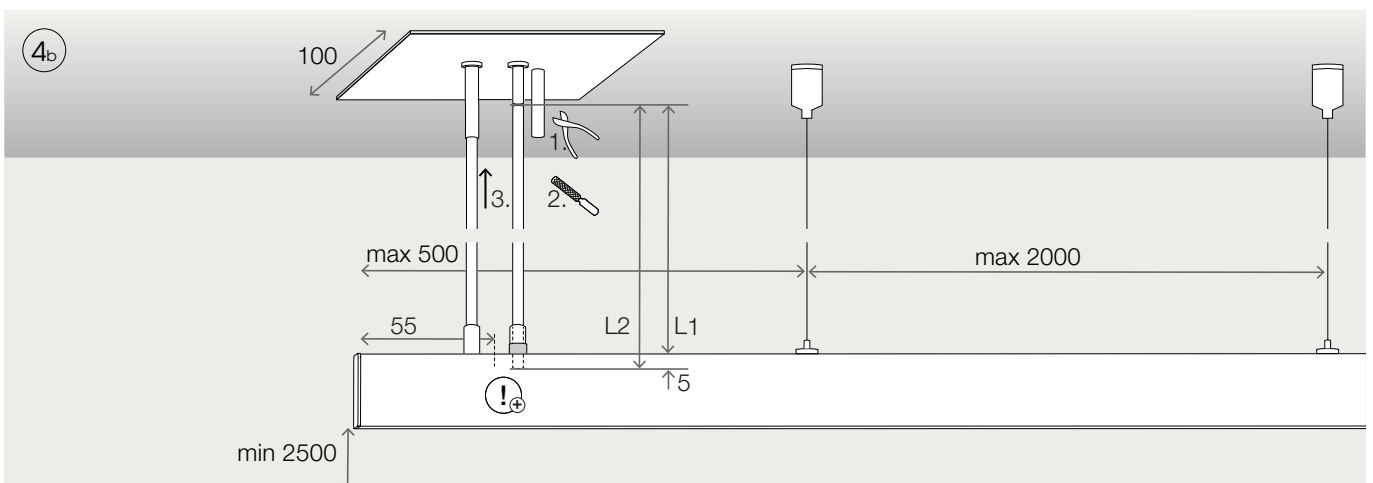
Lighting tracks Sense System or LightLight:

When connecting the power feed and the control gear, the + / - polarity must be observed!

+ Brass inner conductor of the track

- track itself

The polarity is usually also marked with a sticker on the power feed.



Shorten the feeder rods

1st Length L2 = upper edge of track to the round end of the plug, L1 + 5 mm (tolerance +0/-1 mm)

2nd trim carefully (taper) so as not to damage the contact inter- faces in the connectors

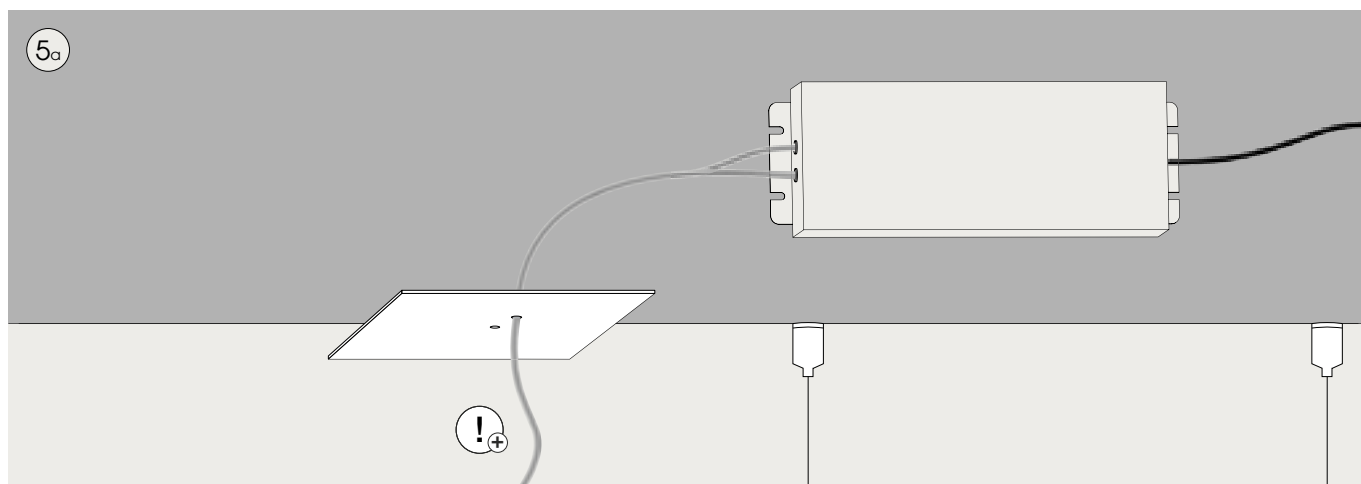
3rd connect the feeder rod and the plug by pushing the coupling bushing upwards

Installation of the systems

pend48 & pend

power feed for cable

Installation to be carried out by qualified personale only! Disconnect the system!



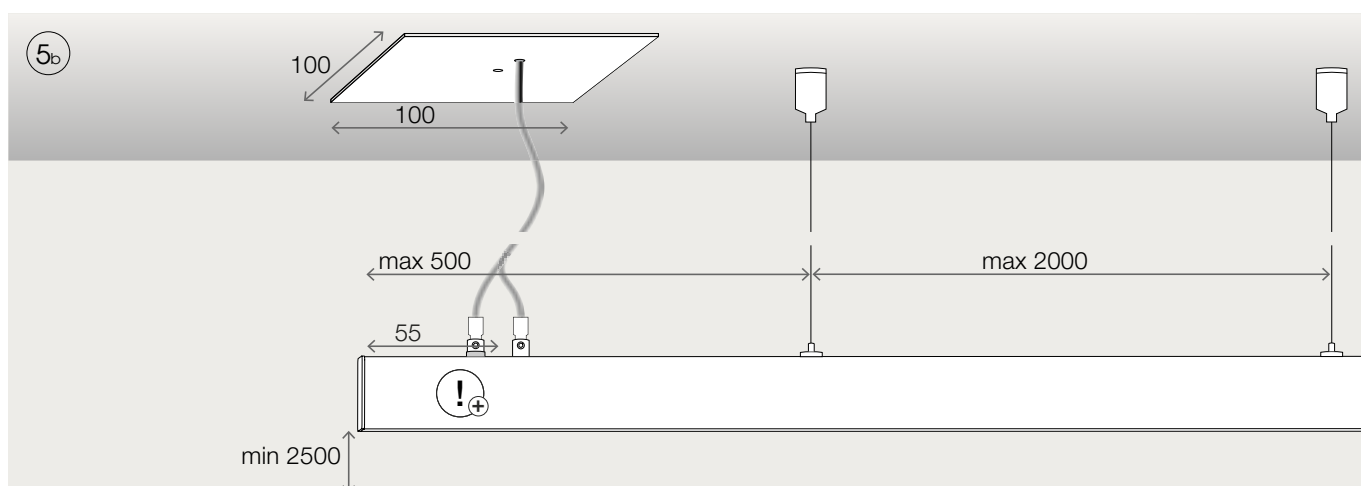
Lighting tracks Sense System or LightLight:

When connecting the power feed and the control gear, the + / - polarity must be observed!

+ Brass inner conductor of the track

- track itself

The polarity is usually also marked with a sticker on the power feed.

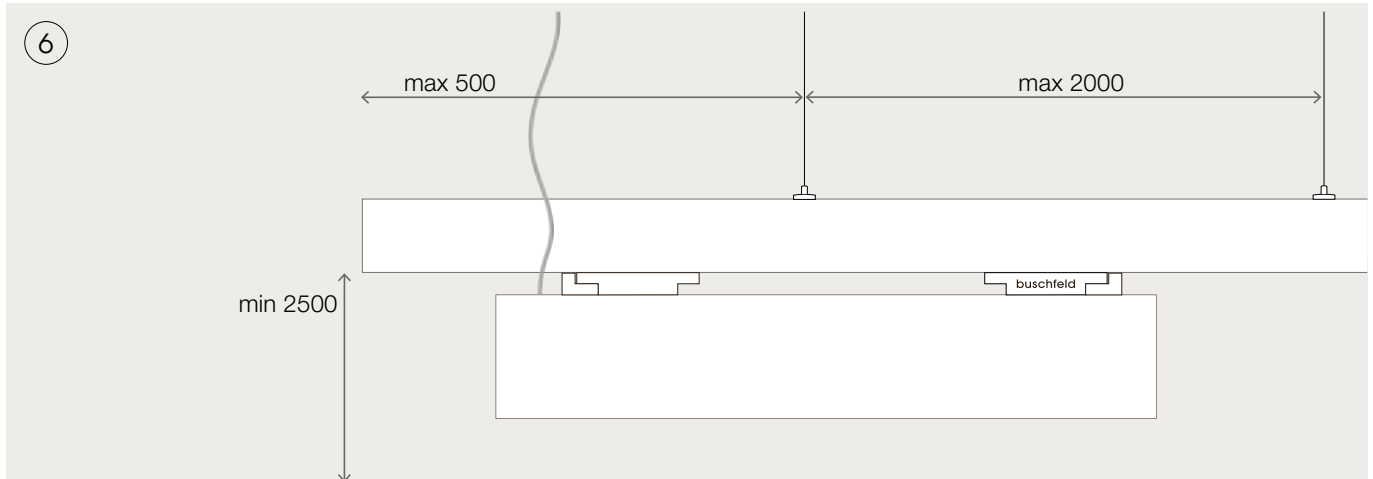


Use only stranded cables with wire end sleeves in the screw contacts of the pendant track. No rigid lines! Please note the marking (+) for the connection of the live conductor.

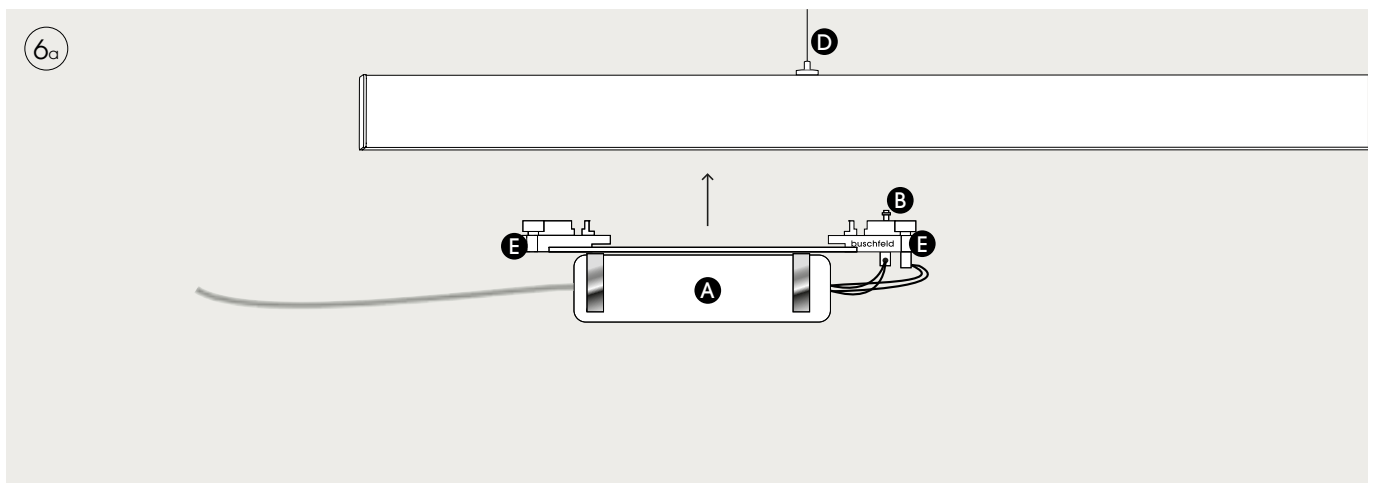
Installation of the systems pend48 & pend

Installation of the control gear for visual mounting

Installation to be carried out by qualified personale only! Disconnect the system!



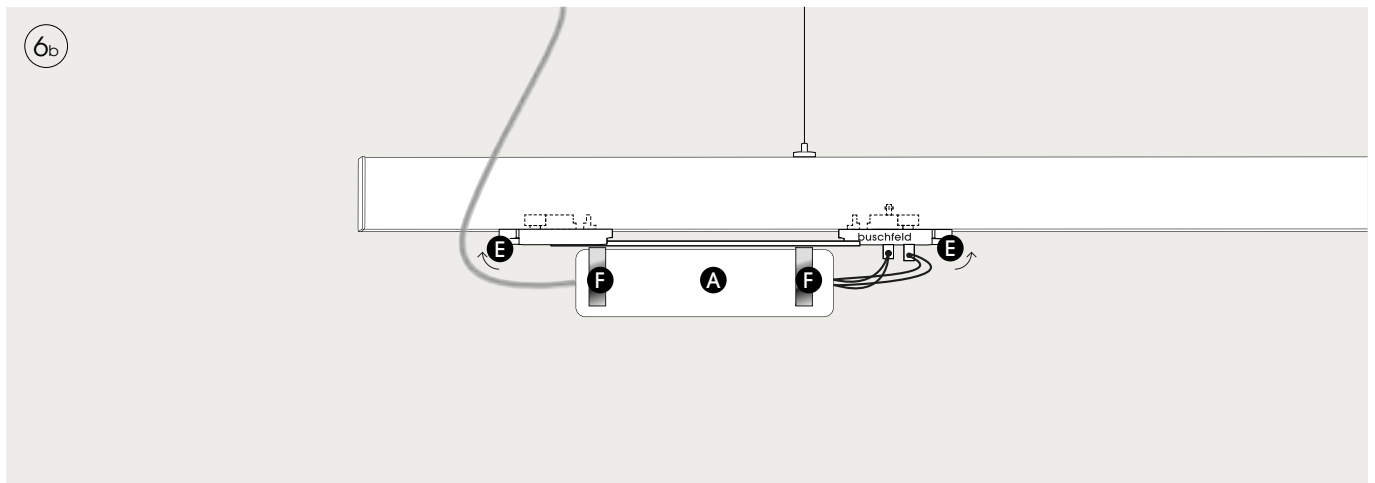
Secure heavy control gear **(A)** such as Cube, Bigbox and Bigbox48 in the designer housing (on track level) for visible mounting with an additional cable suspension **(D)**. Insert the cord holder into the upper track channel and screw in place.



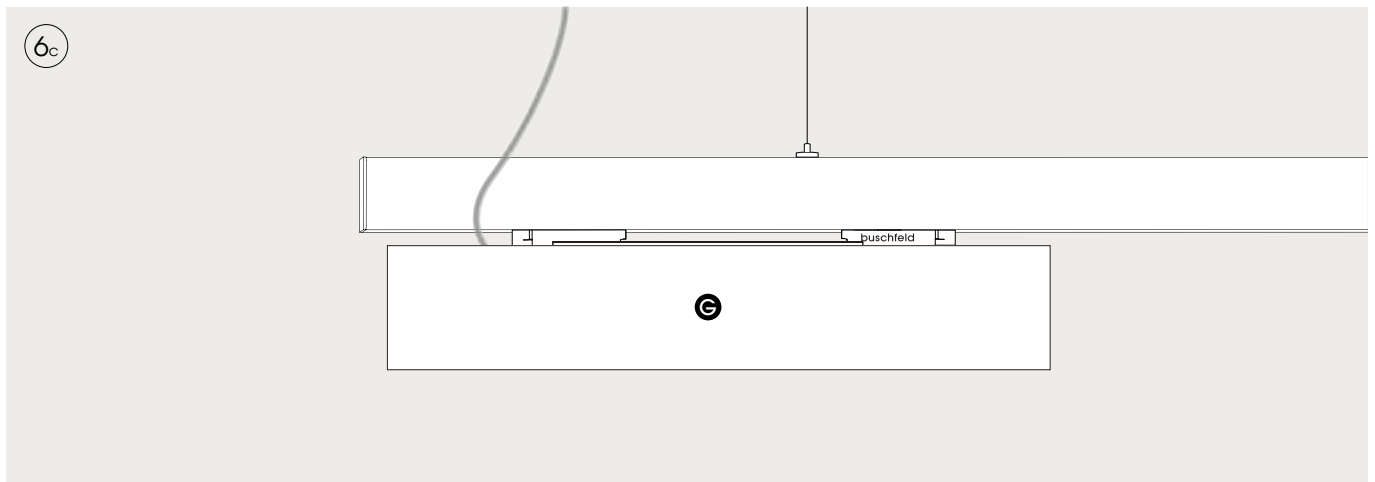
Remove the design housing carefully from the base plate, turn the locking bolts **(E)** on the side of the adapter to 90°. One adapter has a golden contact pin **(B)**, this adapter must be in contact with the inner conductor of the track. If necessary, turn the base plate by 180°.

Installation of the systems

pend48 & pend



Insert both adapters into the rail channel, pressing firmly into the track; turn back the side latches **(E)** of the adapter by 90 °. Establish a connection on the primary side. With Bigbox, plug the earth cable onto the earth lug on the housing cover.

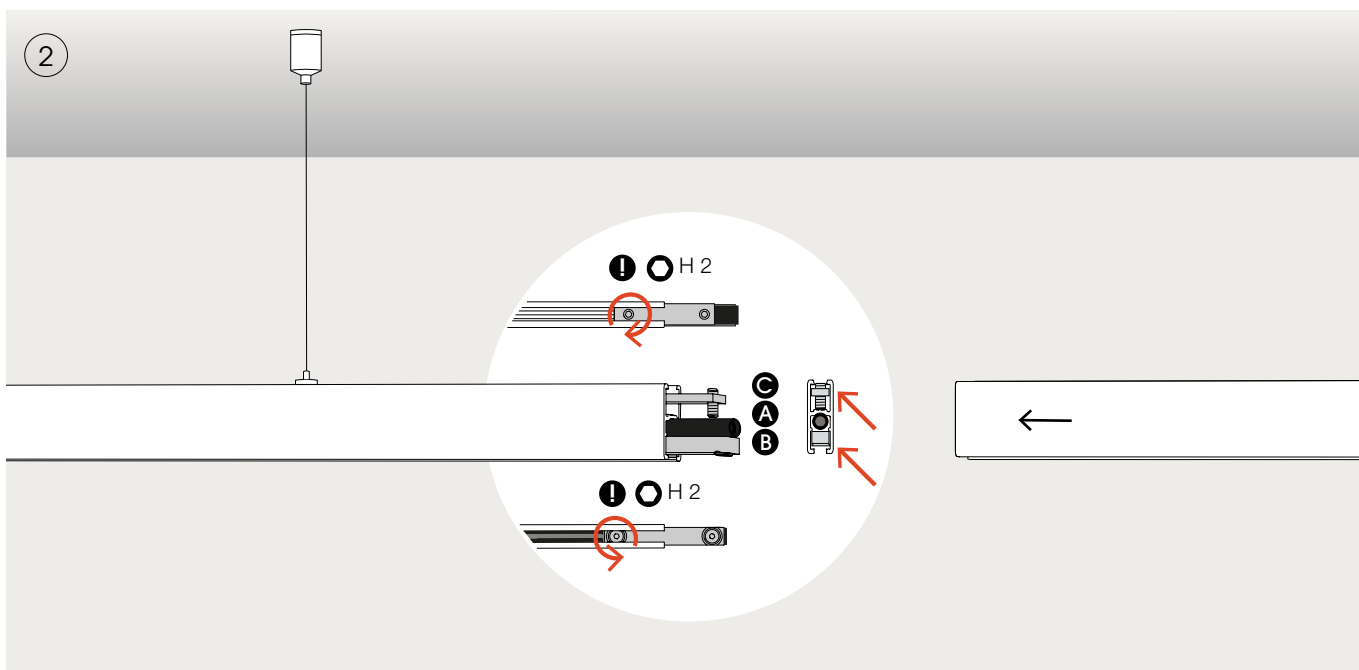
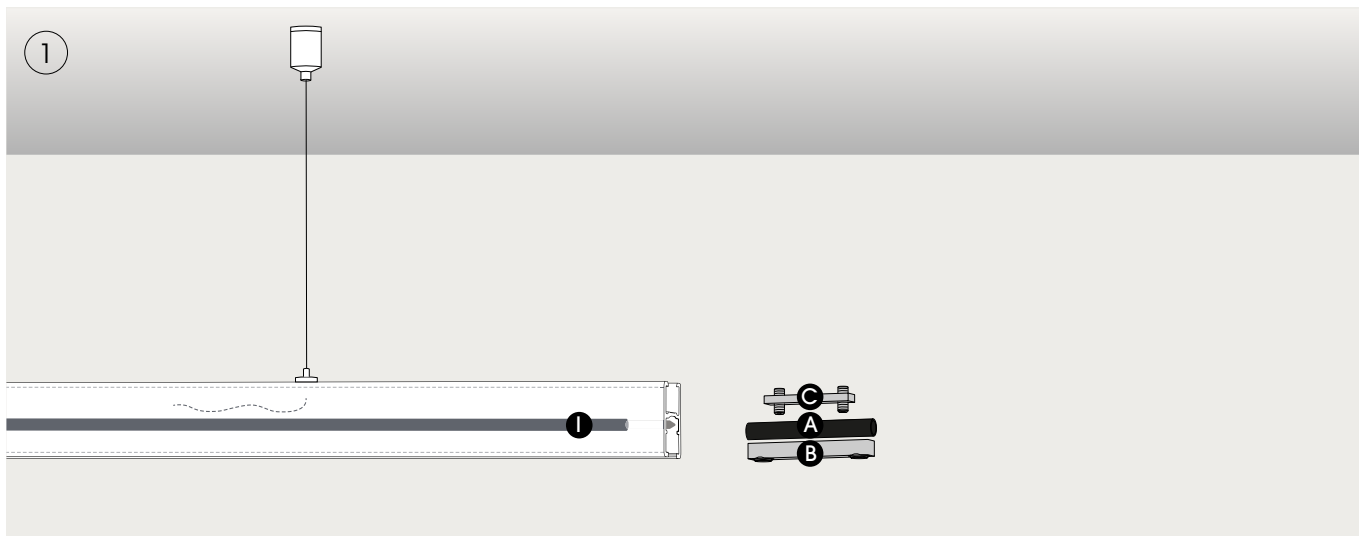


Carefully put on the housing cover, to do this, gently press all springs together and slide the housing **(G)** on.

Connecting Tracks

pend48 & pend

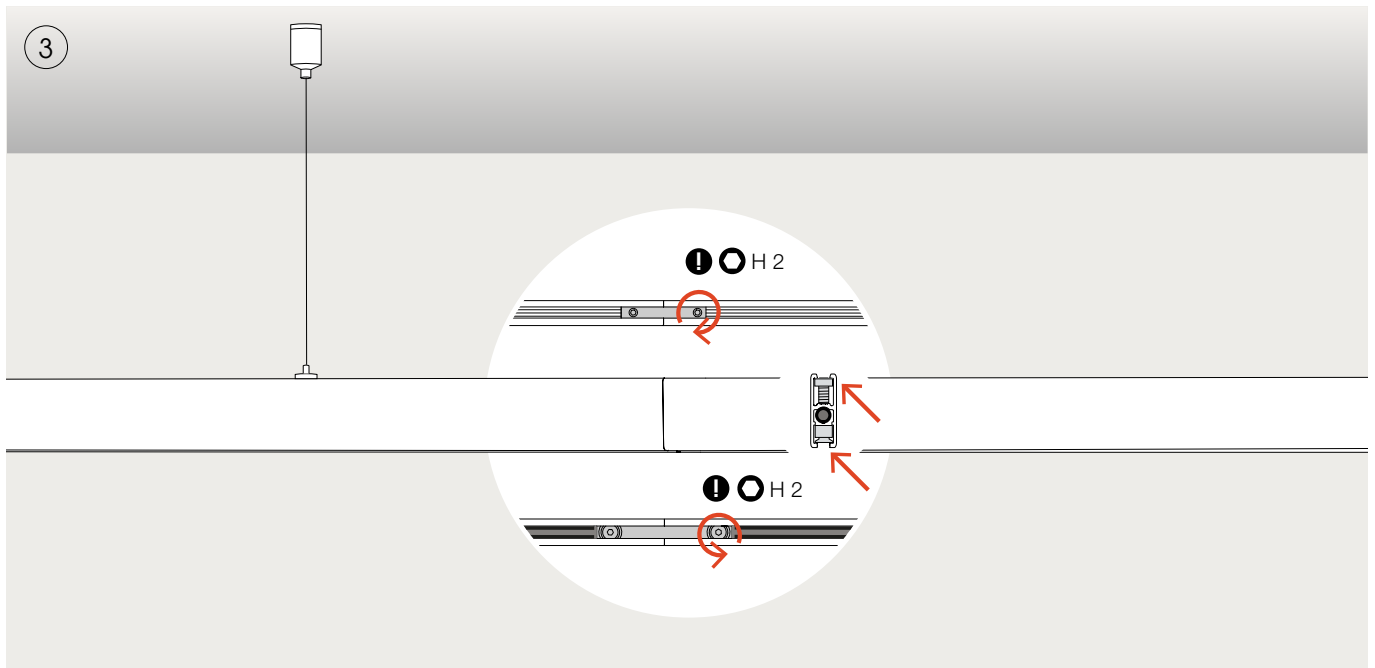
PLEASE READ THE GENERAL INFORMATION ON THE SENSE SYSTEM!



Slide the electrical connector (A) onto the inner conductor (1) of the first section of track. Insert the mechanical connector (B) into the track, as indicated, and screw firmly into place. Connector part (C) is intended for the upper channel (only necessary for pendant tracks).

Attention!

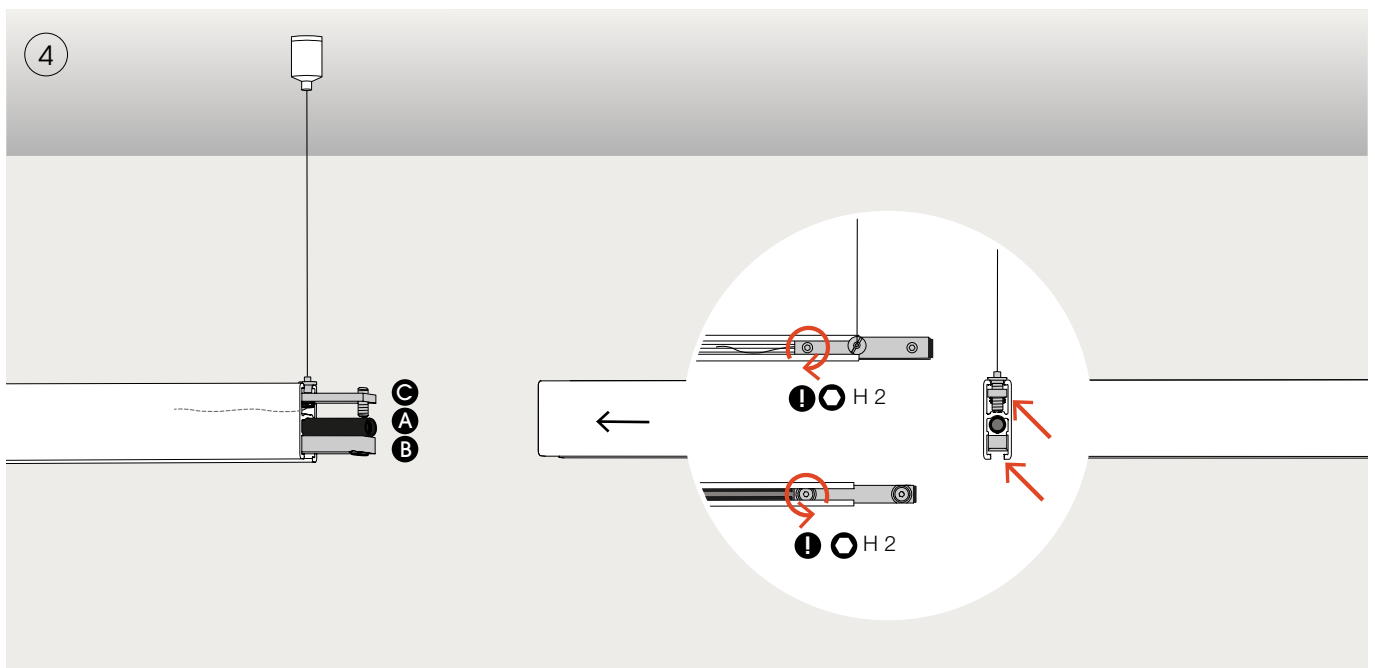
The screws of the connector part (B) must be guided in the track channel. Make sure you tighten the screws by turning them in the right direction! The countersunk screws in connector are screwed into place by turning them in an anti-clockwise direction and press from the inside into the profile of the track. Connector part (C): To tighten the threaded pins in connector part (C) are screwed clockwise inwards.



Press the sections of track together. Screw the other side of the track into place.

Attention! Make sure you tighten the screws by turning them in the right direction!

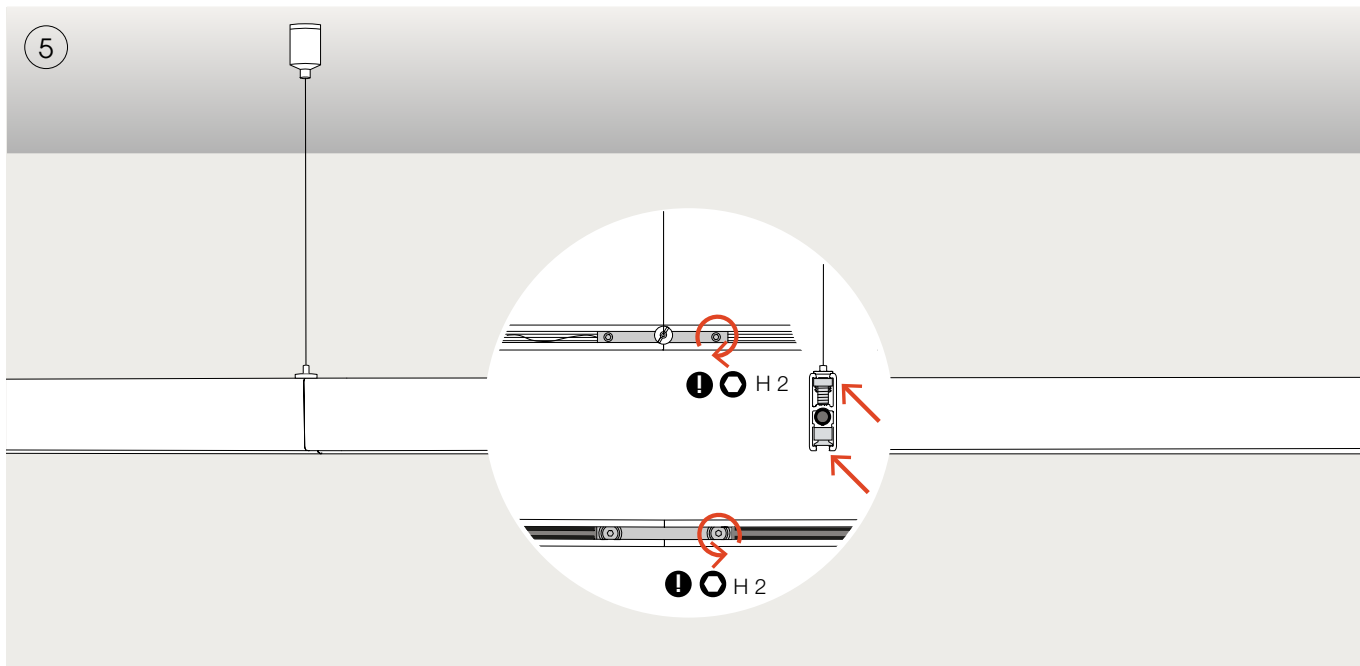
The countersunk screws in connector (B) are screwed into place by turning them in an anti-clockwise direction and press from the inside into the profile of the track.



Connectors with wire suspension (C) are mounted the same way as in picture 1. Pay attention to the position of the wire rope holders and the routing of the suspension rope. Slide the electrical connector (A) onto the inner conductor (I) of the first section of track. Insert the mechanical connector (B) into the track, as indicated, and screw firmly into place.

Attention!

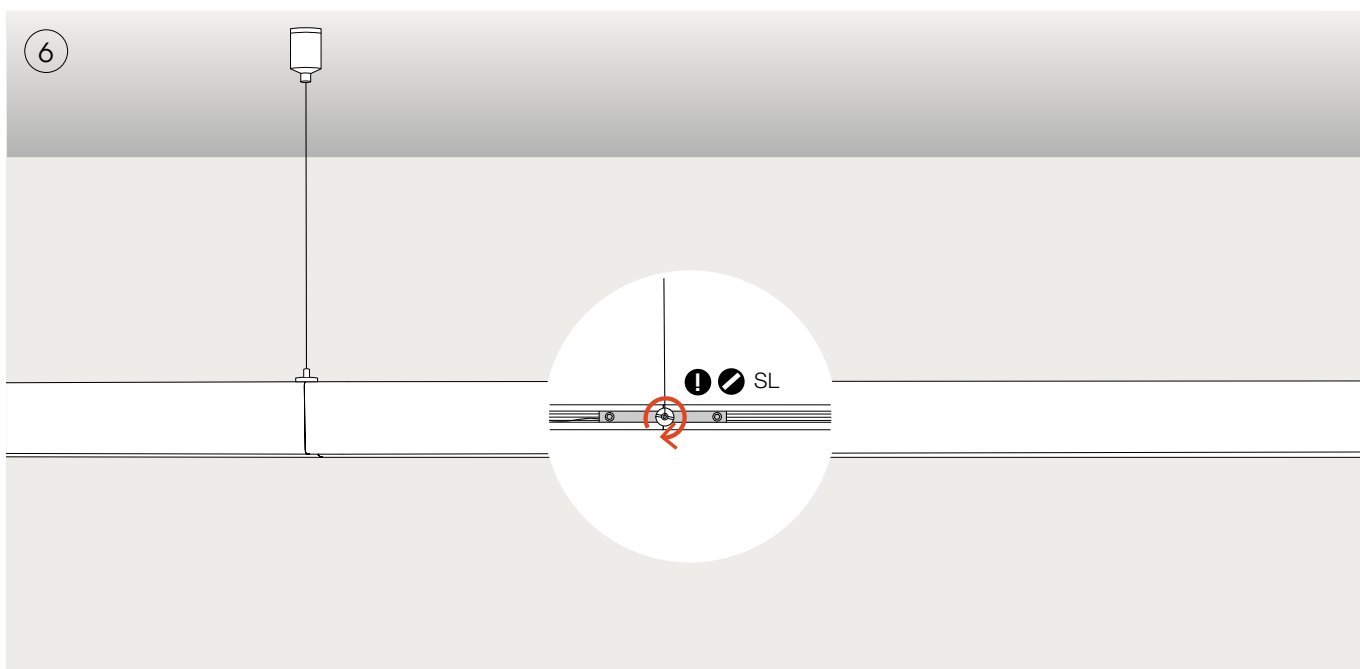
The screws of the connector part (B) must be guided in the track channel. Make sure you tighten the screws by turning them in the right direction! The countersunk screws in connector are screwed into place by turning them in an anti-clockwise direction and press from the inside into the profile of the track. Connector part (C) is intended for the upper channel (only necessary for pendant tracks). To tighten the threaded pins in connector part (C) are screwed clockwise inwards.



Press the sections of track together. Screw the other side of the track into place.

Attention! Make sure you tighten the screws by turning them in the right direction!

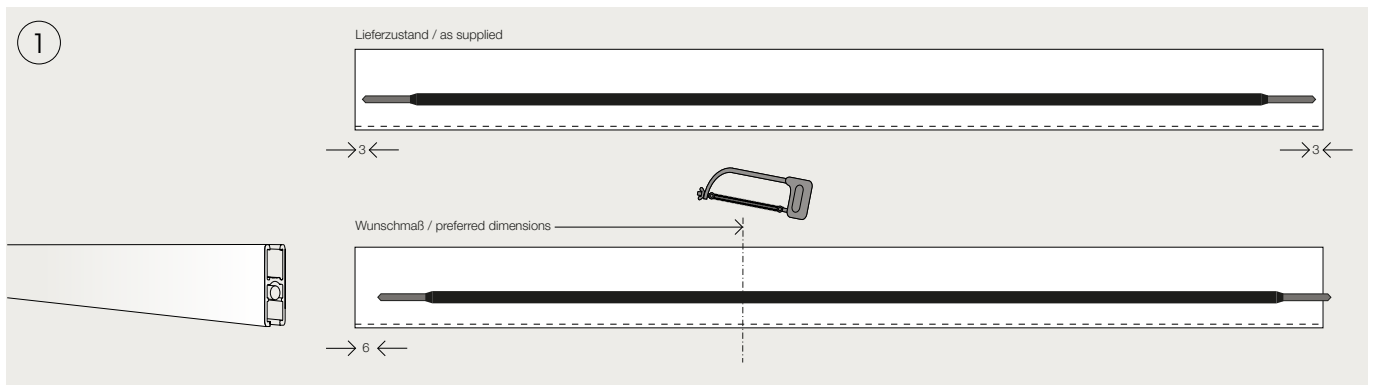
The countersunk screws in connector (B) are screwed into place by turning them in an anti-clockwise direction and press from the inside into the profile of the track.



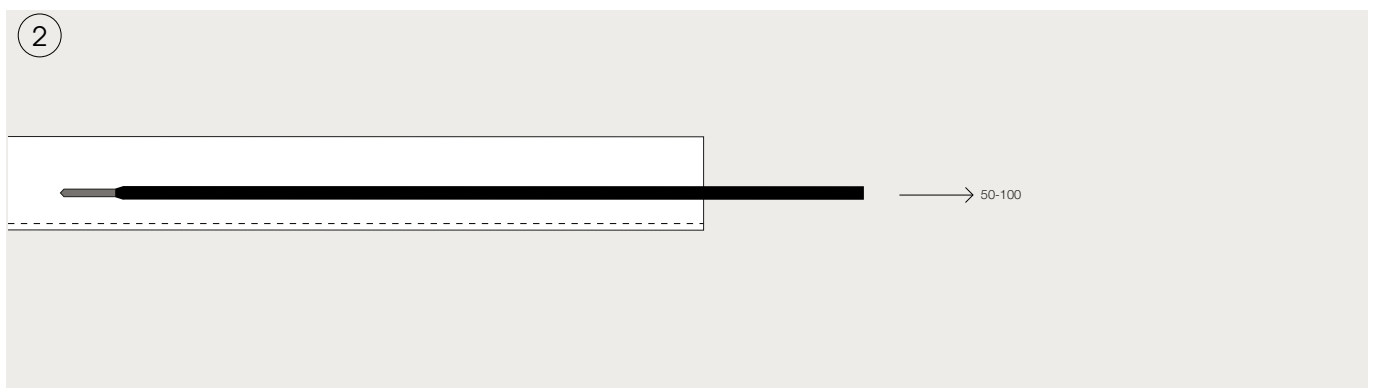
Wire rope holders are slightly tightened clockwise.

Cutting track to length on site

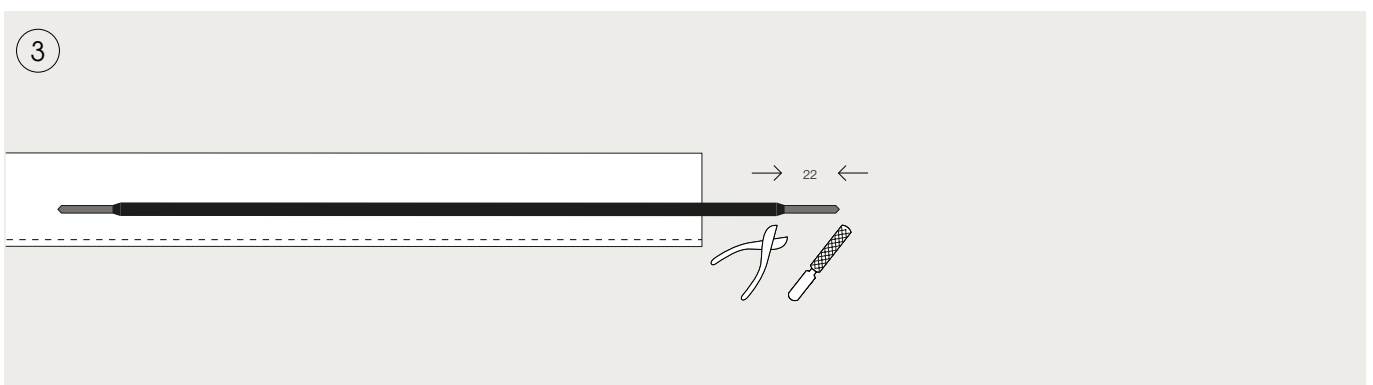
pend48 & pend



Position the inner conductor on the side not to be sawn so that it ends 6 mm short of the end of the track profile. Saw the track and the inner conductor together. Use a mitre saw to ensure a straight cut.

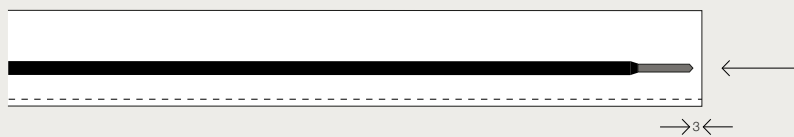


Push the inner conductor with the protective insulation approx. 50 to 100 mm out of the profile.



Strip 22 mm, trim carefully (taper) so as not to damage the contact interfaces in the electrical connectors.

4



Push the inner conductor back into the track profile. The inner conductor ends 3 mm inwards on each side of the track.

buschfeld Sense System (48V)

DE

Allgemeine wichtige Hinweise. Bitte sorgfältig lesen.



Gerät darf nicht im Hausmüll entsorgt werden.



Konformitätserklärung gemäß EU-Verordnung.



Betriebsspannung des Sense System ist 48 V Schutzkleinspannung. Die Systemleuchten können auch unter Spannung eingeriegelt werden. Die Leuchten sind Hot Plug** fähig. Es wird empfohlen, das Einriegeln oder Tauschen von Leuchten erst nach vorheriger Unterweisung durch eine Fachkraft durchzuführen.



Leuchte / System darf nur in trockenen Innenräumen eingesetzt.



Die Installation der System-Lichtschienen muss durch Fachpersonal erfolgen. Spannungsfrei arbeiten.



Die Angaben der technischen Daten beziehen sich auf den Tag der Erstellung. Abweichungen, sowie Änderungen im Zuge des technischen Fortschritts bleiben vorbehalten. Projektbezogene Produkte und Sonderanfertigungen werden individuell gefertigt, daher können Werte und Maße abweichen.

Fotos und Zeichnungen zeigen die Leuchte und Systembauteile zu Imagezwecken. Anpassungen in Elektronik, Ausstattung und Design bleiben vorbehalten.



Externe Dimmer sind nicht zulässig. Die Lichtsteuerung erfolgt ausschließlich über spezifizierte wireless Schnittstellen Bluetooth via Casambi oder Xicato.

buschfeld

Das Original LightLight® Lichtschienensystem wird seit 1989 von uns produziert. 2016 ist das Sense System® (48 V) entstanden. Es basiert auf dem LightLight System und bietet alle Möglichkeiten einer digitalen Lichtsteuerung über Bluetooth Funkstandard.

Die Fixierung aller Leuchten am System und deren elektrische Versorgung erfolgt durch die Systemadapter. Buschfeld® Lichtsysteme sind in sich geschlossene Einleiter-Systeme. Ohne Anpassung und Prüfung können KEINE Leuchten und Komponenten anderer Hersteller in Buschfeld Lichtsystemen betrieben werden. Die Leuchten aus dem LightLight® System (12 V) können nicht im Sense System® (48 V) betrieben werden. LightLight Systeme können jedoch nach Prüfung durch eine Elektro-Fachkraft auf 48 V, Sense System umgebaut werden. Bitte kontaktieren Sie uns. Zusammen prüfen wir welche Schritte für eine Umrüstung notwendig sind.

Die Maximallast beachten! Maximallast des Systems ist durch den maximalen Strom 12,5 A bei 48 V begrenzt, dies entspricht einer Belastung von 600 W.

Sense System
48 V DC

Innerhalb des Sense Systems® bietet Buschfeld Design zwei Lichtsteuerungs Protokolle an. Für die Erstellung von Lichtszenen, -gruppen oder anderen Einstellungen sind die App/Programme von Casambi oder Xicato unbedingt notwendig. Die Sense System Leuchten sind bei Auslieferung sofort Einsatz bereit. Buschfeld Design nimmt jedoch keine Ersteinstellung oder Programmierungen vor, wenn nicht anders vereinbart.

EN

General important information. Please read carefully.

Product must be eliminated differently from the rest of the urban waste.

Technical conformity in accordance with EN directives

Sense System has a protective low operating voltage of 48 V. System luminaires can also be mounted when the track is connected to the power supply. That is to say, the luminaires can be hot-plugged**. Mounting or removing luminaires should only be undertaken after being initially instructed by a qualified professional.

Luminaires / track systems only be used in interior spaces.

Installation to be carried out by qualified personale only! Disconnect the system!

All technical data refer to the status quo when the data sheet was put together. Given that developments are part of a continuing process, all data provided is also subject to change. Custom-made products are manufactured individually, so values and dimensions may vary.

Photos and drawings show the luminaires and system components for image purposes. We reserve the right to make adjustments to the electronics, equipment and design.

External dimmers are not permitted. The lighting is controlled exclusively via specified wireless Bluetooth interfaces via Casambi or Xicato.

We have been producing our highly original track system LightLight® since 1989. The trend towards digital lighting control gave rise to the development of Sense System® (48 V) in 2016. Sense System is based on the LightLight system and enables all aspects of digital lighting control using Bluetooth wireless technology. The luminaires and other devices applied on the track are operated via the system-relevant adapters. Buschfeld® lighting systems are self-sufficient single-wire systems. Without comparison and testing, NO lights and components from other manufacturers can be operated in Buschfeld lighting systems. LightLight® luminaires (12 V) cannot be operated on Sense System® (48 V) track. That said, LightLight systems can be converted to meet 48 V Sense System electronics, if inspected by a qualified electrician. Feel free to contact us: together we can determine what steps are required to convert your system.

Maximum load of the system. Given a maximum current of 12.5 A, this is limited to 48 V, thus corresponding to a load of 600 W.

Buschfeld Design offers two lighting control protocols within the Sense System®. The app/programs from Casambi or Xicato are absolutely necessary for the creation of light scenes, groups or other settings. The Sense System luminaires are ready for use upon delivery. However, Buschfeld Design does not carry out initial settings or programming unless otherwise agreed.

buschfeld Sense System (48V)

CASAMBI Buschfeld Leuchten mit Casambi Steuerung können mit Casambi kompatiblen Produkten (z.B. Schaltern/App) gesteuert werden.

www.buschfeld.de/how-it-works/48103

Xicato Die Leuchten mit Xicato Steuerung werden mit Desktop-, Browser- und mobilen Software gesteuert. Xicato hat seinen Quellcode und seine XIG-Gateway unter einer Standardlizenz MIT Free Open Source Software (FOSS) veröffentlicht. Dies ermöglicht Systemintegratoren, Softwareentwicklern von Drittanbietern und Benutzern gleichermaßen mehr Möglichkeiten bei der Inbetriebnahme, Steuerung, Verwaltung und Neukonfiguration der Leuchten im Professional Set-up.

www.buschfeld.de/how-it-works/48104

Basic on/off Leuchten mit Basic on/off können NICHT gedimmt oder anderweitig gesteuert werden.

Buschfeld luminaires with Casambi control can be controlled with Casambi-compatible products (e.g. switches/app).

www.buschfeld.de/en/how-it-works/48103

Luminaires with Xicato control are controlled with desktop, browser and mobile software. Xicato has released its source code and XIG gateway under a standard MIT Free Open Source Software (FOSS) license. This gives system integrators, third-party software developers and users alike more options when commissioning, controlling, managing and reconfiguring the luminaires in the professional set-up.

<https://www.buschfeld.de/en/how-it-works/48104>

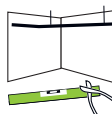
Luminaires with Basic on/off CANNOT be dimmed or otherwise controlled.

DE Installation und in Betriebnahme. Wichtige Information! Bitte sorgfältig lesen.



Übersicht aller Montageanleitungen

<https://bit.ly/3Jb4eiN>



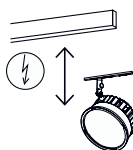
Die Montage der Schienensysteme ist für das LightLight® und Sense System® gleich. Bitte beachten Sie dabei die Hinweise beim Anschliessen der Buschfeld Lichtschienen.



Beim Anschluss der Einspeisung und des Betriebsgerätes muss zwingend die + / - Polung beachtet werden!

- + Messing-Innenleiter der Schiene
- Schiene selbst

Die Polung ist auch mit einem Aufkleber auf der Einspeisung markiert.



**Hot Plugging bezeichnen den Wechsel und die Wechselbarkeit von Systemkomponenten und Modulen im laufenden Betrieb des Systems. Bekannteste Beispiele für Hot-Plug-fähige Technologien sind allgemeine Computer-Schnittstellen wie USB, FireWire, PCMCIA oder auch Bluetooth zum Anschluss von Peripheriegeräten.



Verwenden Sie ausschliesslich die angegebenen Werkzeuge. Beachten Sie die angegebenen Schlüsselweiten und verschiedenen Drehrichtungen bei der Montage.



Energieeffizienzklasse der Light Engine

EN Instructions of Installation and Use. Important information! Please read carefully.

Overview of all assembly instructions

<https://bit.ly/3w3Hiy9>

The installation of the wall tracks is initially the same for the LightLight® and Sense System®. However, please note the instructions when connecting the Buschfeld light tracks.

Lighting tracks Sense System or LightLight: When connecting the infeed and the control gear, the + / - polarity must be observed!

- + Brass inner conductor of the track
- track itself

The polarity is marked with a sticker on the feed.

**Hot Plugging describes the installation and/or removal of system components and modules while the system is connected to the power supply. The best known examples of hot-pluggable technologies are general computer interfaces such as USB, FireWire, PCMCIA or even Bluetooth for connecting peripheral devices, or more specific examples.

Only use the specified tools. Observe the specified wrench sizes and different directions of rotation during assembly.

Energy efficiency class of the Light Engine

Pflege und Reinigung

Lechtenschirm mit einem weichen Tuch trocken abwischen. Bei starken Verunreinigungen das Tuch leicht mit Wasser anfeuchten. Keine Lösungsmittel oder Reiniger verwenden.

Cleaning and maintenance

To clean the shade wipe with a dry, soft cloth. Heavier soiling can be removed with a damp cloth. Chemical cleaners or solvents are not to be used.

buschfeld Sense System (48V)

buschfeld × CASAMBI



Für die Erstinstallation der Casambi App und die Sicherung auf einem Casambi Server ist ein WLAN-Zugang Voraussetzung.



Leuchten und App arbeiten mit Bluetooth / Funkstandard.



Casambi im App-Store

<https://apple.co/3q5hHRL>



Casambi App bei Google Play

<https://bit.ly/3q24IjA>



Erste Schritte in der Casambi App

<https://www.buschfeld.de/how-it-works/48112>

buschfeld × CASAMBI

When installing the Casambi app for the first time, and to ensure the backup on a Casambi server, WLAN access is required.

Luminaires and app operate via Bluetooth Mesh Casambi.

<https://apple.co/3Jg6C7R>

<https://bit.ly/3JaEO4V>

Casambi App 1st steps

<https://www.buschfeld.de/en/how-it-works/48112>