steinel COM1 Presence Detectors True Presence Installation Guide

Contents

steinel

steinel COM1 Presence Detectors True Presence

Specifications

- **Product Name:** True Presence COM1/COM2/BT IPD
- **Dimensions**: 50mm x 52mm x 103mm
- **Erfassungsbereich True Presence:** 2.8m – 15m

- **Erfassungsbereich Hallway:** 2m – 4m
- **Power Supply:** 220-240V, 50/60Hz
- **Power Consumption True Presence**: <1W
- **Power Consumption Hallway:** <0.5W
- **IP Rating**: IP54 (only for Aufputzvariante)
- **Frequency True Presence**: 7.2GHz
- **Frequency Bluetooth:** 2.4-2.48GHz
- **Frequency Hallway:** 5.8GHz

Product Usage Instructions

Safety Instructions
Before starting any work on the sensor, make sure to disconnect the power supply. The COM1 and COM2 variants control loads. Signals are processed and outputted.

Electrical Connection

- L = Phase (usually black or brown)
- N = Neutral wire (usually blue)
- S = Switch

Mounting
Refer to Figures 4.1, 4.2, and 4.3 for mounting instructions.

Function and Settings
Factory default settings:

- True Presence Detection: Radius 3.5m, Scenario 7
- Hallway Detection: Reichweite S 100%, Reichweite L 100%
- COM1/COM2: 500 Lux
- Hallway COM1: 5 min
- True Presence COM1: 40 s
- HLK: 15 min
- Voll-/Halbautomatik: Vollautomatik

Maintenance and Care
No specific maintenance or care instructions were provided.

Disposal
No specific disposal instructions were provided.

Manufacturer Warranty
No specific warranty information was provided.

FAQ

Why is the light not turning off?

- **Possible causes:**
  No power supply is connected.
  The lux value is set too low.
- **Possible solutions:**
  Make sure the power supply is connected.
  Adjust the lux value to a higher setting.

Why is the sensor turning off despite its presence?

- Possible causes: No motion detected.
- Possible solutions: Ensure there is a clear line of sight to the sensor.

Why is the sensor not connecting to the app?

- Possible causes: No connection to the app.
- Possible solutions: Ensure proper connection to the app.

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- Please read it carefully and keep it in a safe place.
- Under copyright. Reproduction either in whole or in part only with our consent.
- Subject to change in the interest of technical progress.

Symbols

- Hazard warning!
- Reference to other information in the document.

General safety precautions
Disconnect the power supply before attempting any work on the sensor.

- During installation, the electric power cable being connected must not be live. Therefore, switch off the power first and use a voltage tester to make sure the wiring is off-circuit.
- Installing the sensor involves work on the mains power supply. This work must therefore be carried out professionally by national wiring regulations and electrical operating conditions.
- Only use genuine replacement parts.
- Repairs may only be made by specialist workshops.
- Terminal B1/B0 is a switching contact for low-energy circuits, no more than 1 A. This must be protected by a fuse of the appropriate rating.

True Presence® COM1/COM2/BT IPD Hallway COM1/COM2/BT IPD

Proper use

- Sensor for ceiling mounting indoors.

Sensor-switched types

- True Presence
- Hallway

The True Presence sensor is a high-frequency sensor. It reliably identifies human presence and absence by detecting micro-movements. The detection zone can be defined with absolute precision via the app. This makes it ideal for use in offices and schools For specific applications, such as cruise ships or hotels, please contact us directly so we can work together on defining the best way to integrate the sensors.

The Hallway Sensor is a high-frequency sensor with a perfect detection zone for corridors. The detection zone can be adjusted in both directions via the app.

Interface types

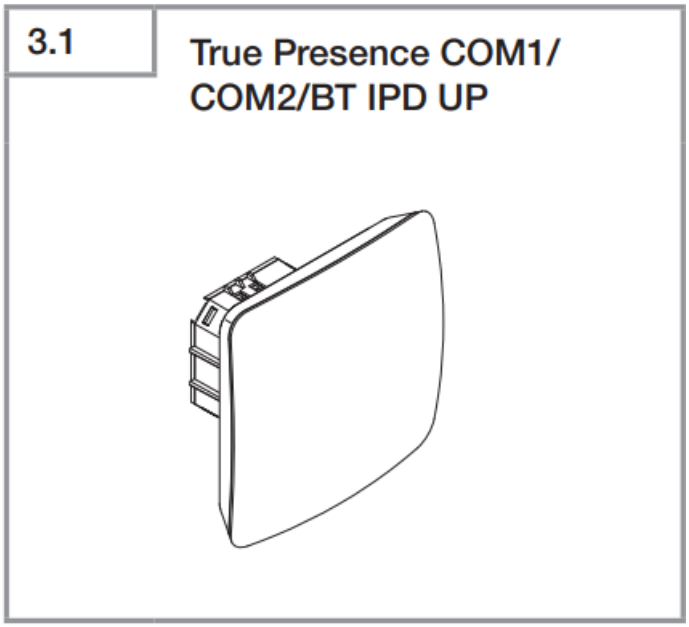
- **COM1**: relay 1
- **COM2**: relay 1 and relay 2 (for HVAC: heating/ventilation/ air-conditioning)
- **BT IPD:** no relay/no control

The COM1 and COM2 versions switch loads ON and OFF. Signals are processed and sent out. The BT IPD version can be interconnected with other sensors via Bluetooth to extend the detection zone. It passes on the detected signals (presence and light level) via Bluetooth. This is controlled in the sensor interconnected with another interface

UP: concealed version
AP: surface-mounted version

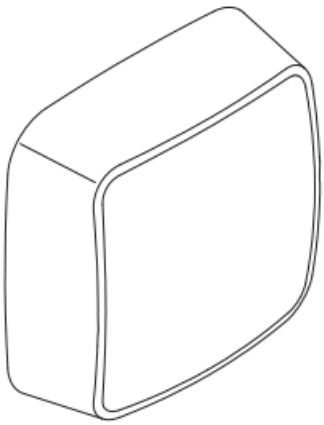
Cable length between sensor and button < 50 m.

Package contents
(Fig. 3.1, Fig. 3.4, Fig. 3.7, Fig. 3.10)



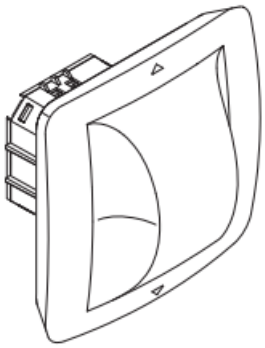
3.4

True Presence COM1/
COM2/BT IPD AP



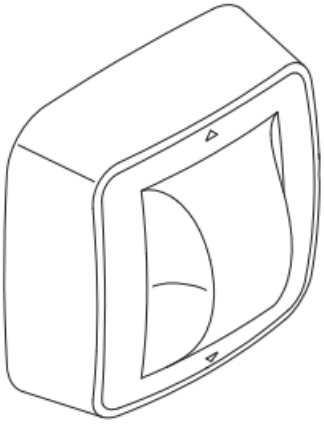
3.7

Hallway COM1/COM2/
BT IPD UP



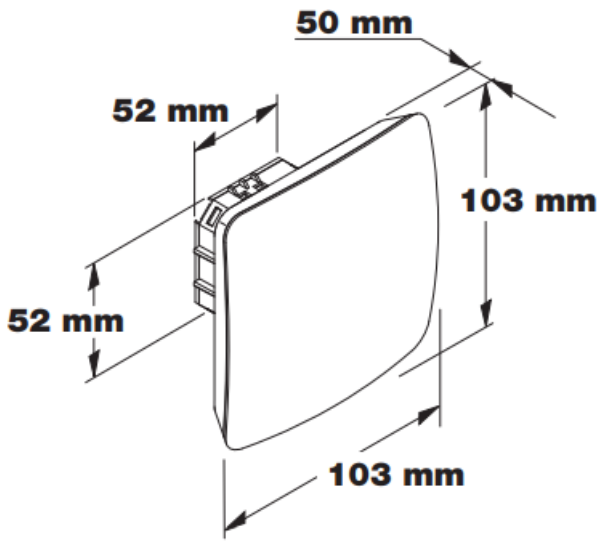
3.10

Hallway COM1/COM2/
BT IPD AP



Product dimensions
(Fig. 3.2, Fig. 3.5, Fig. 3.8, Fig. 3.11)

3.2



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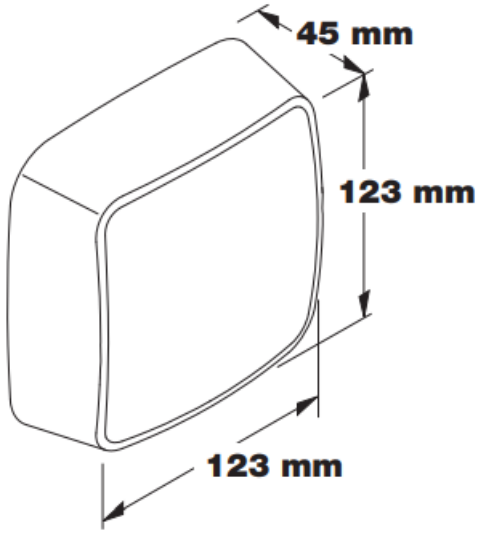
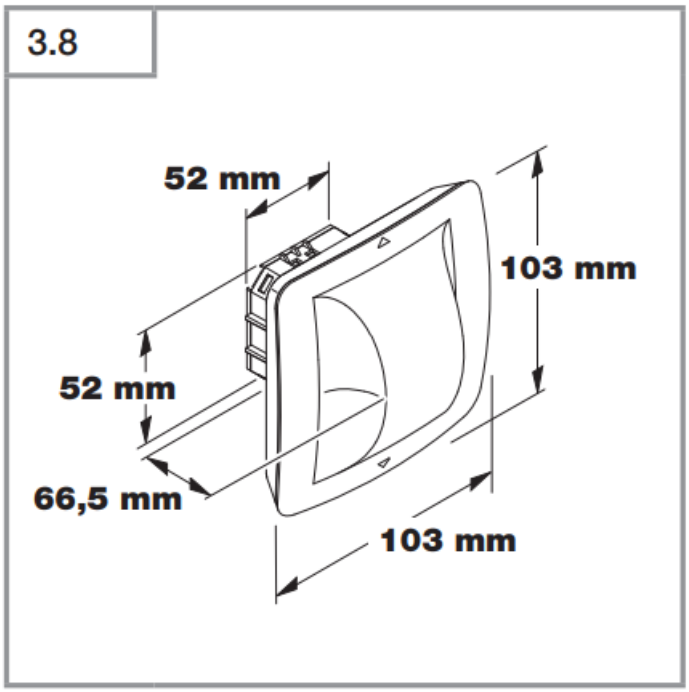
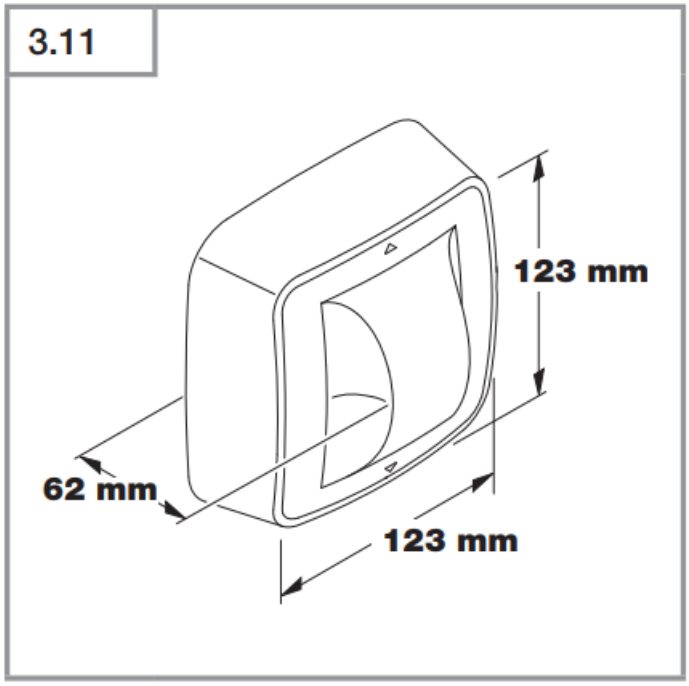
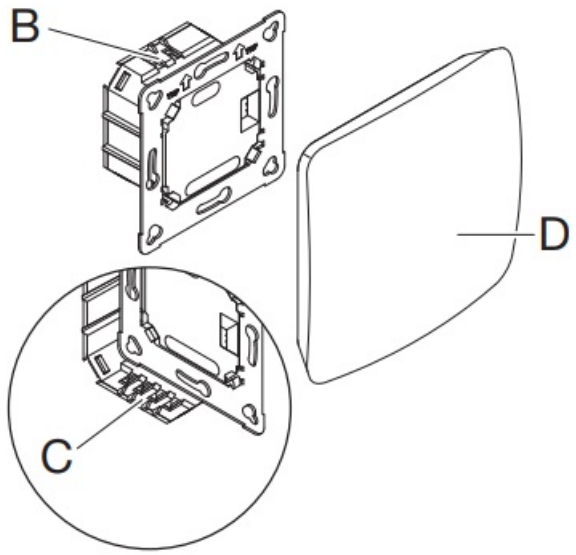






Product Components
(Fig. 3.3, Fig. 3.6, Fig. 3.9, Fig. 3.12)

3.3



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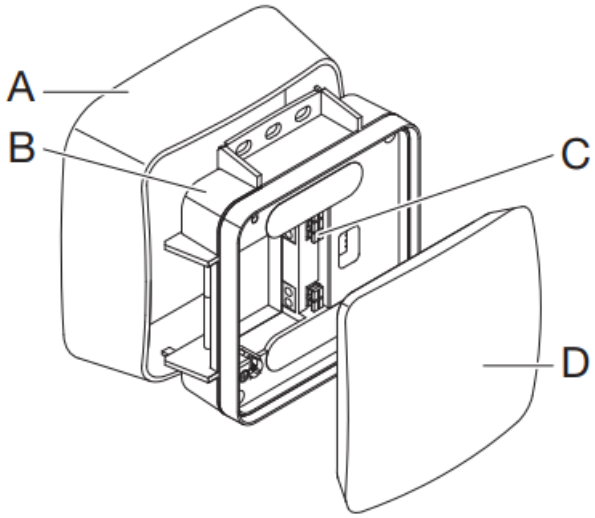

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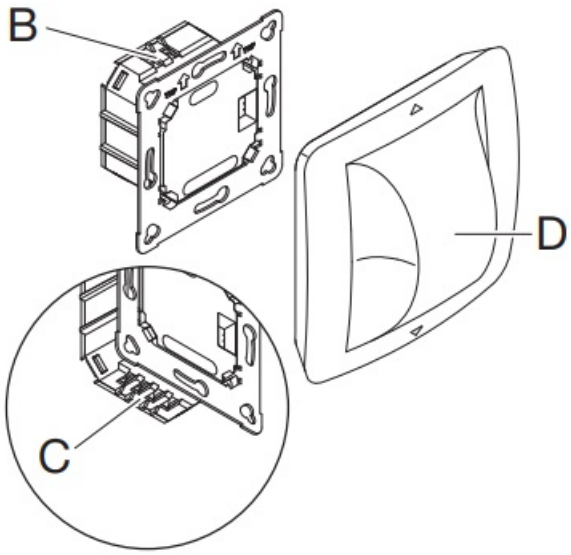
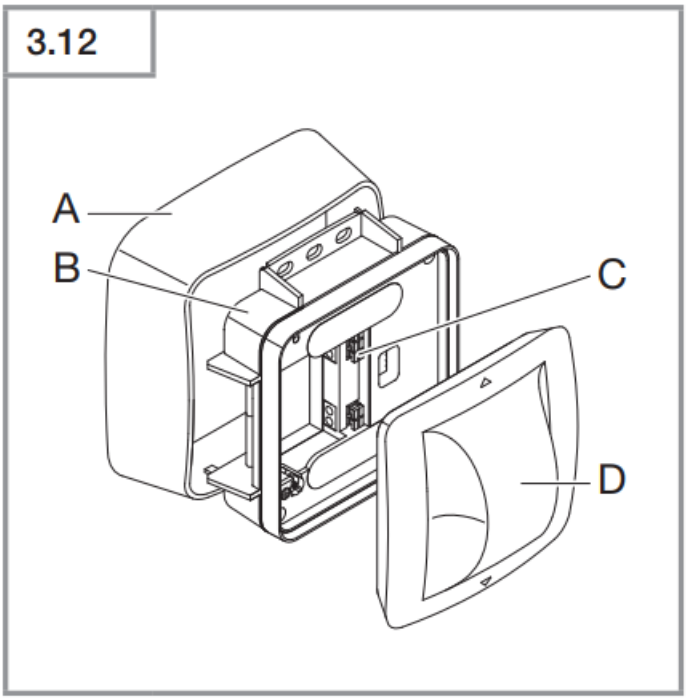
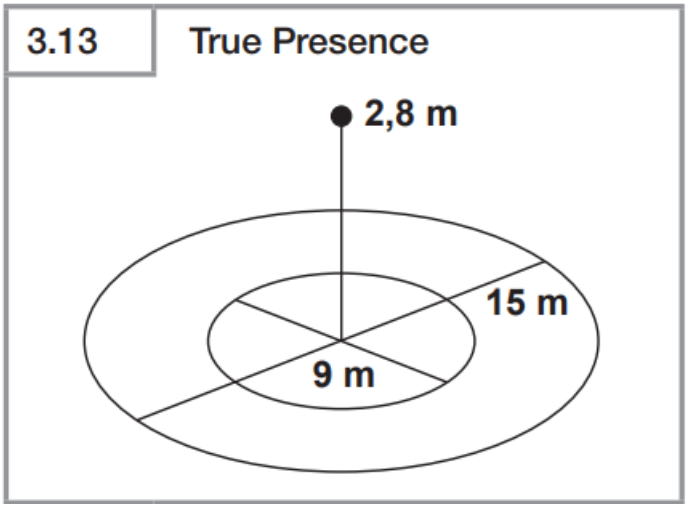


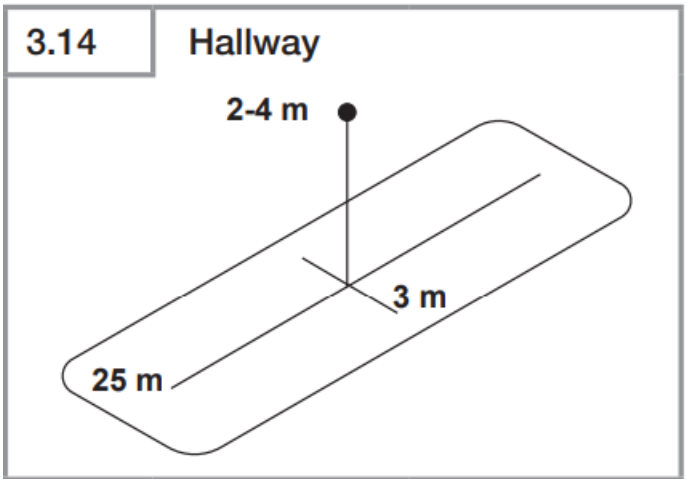


- **A** Surface-mounting adapter
- **B** Load module
- **C** Connecting terminal
- **D** Sensor module

True Presence detection zone
(Fig. 3.13)



Hallway detection zone
(Fig. 3.14)

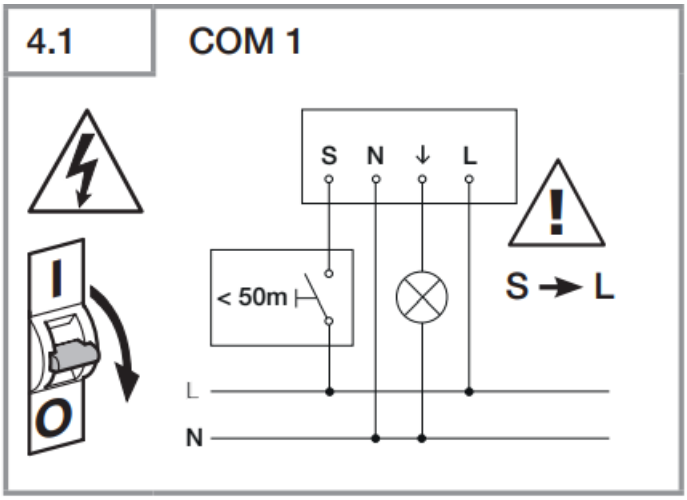


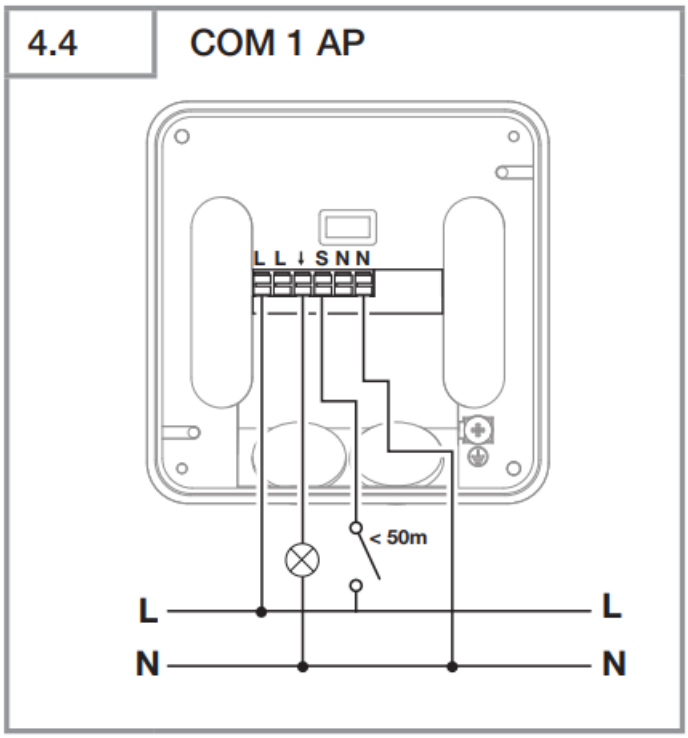
Electrical connection
The mains supply lead is a multiple-core cable (max. conductor Ø 2.5 mm):

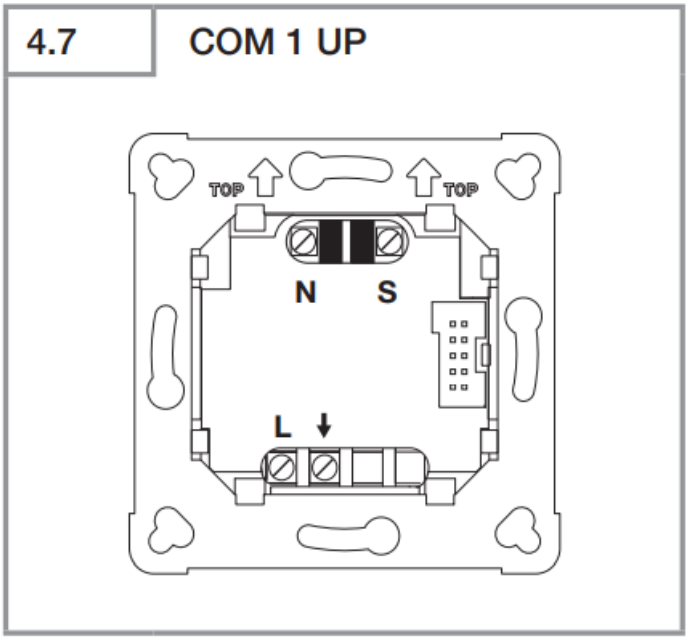
- **L** = Phase conductor (usually black or brown)
- **N** = Neutral conductor (usually blue)
- **PE** = Protective-earth conductor (usually green/yellow)
- ↓ = Switched phase conductor (usually black, brown or grey)
- **S** = Switch B0/B1 = Floating relay for controlling HVAC

Important: Incorrectly wired connections will produce a short circuit later on in the product or fuse box. In this case, you must identify the individual cables and re-connect them.

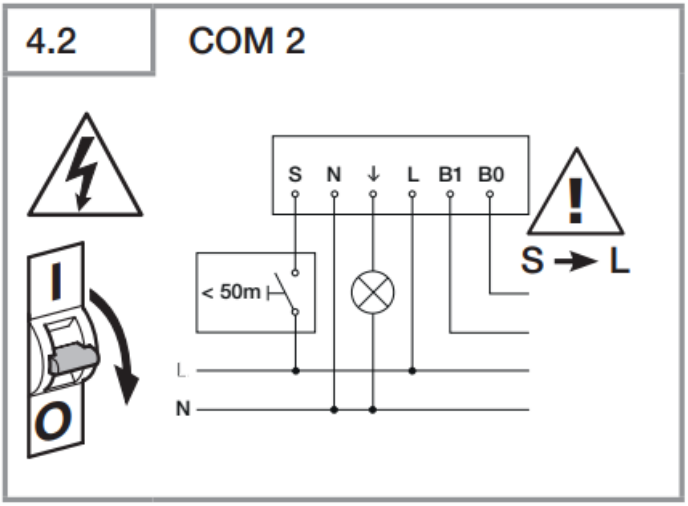
- Connect the mains power supply lead COM1 (Fig. 4.1/4.4/4.7)

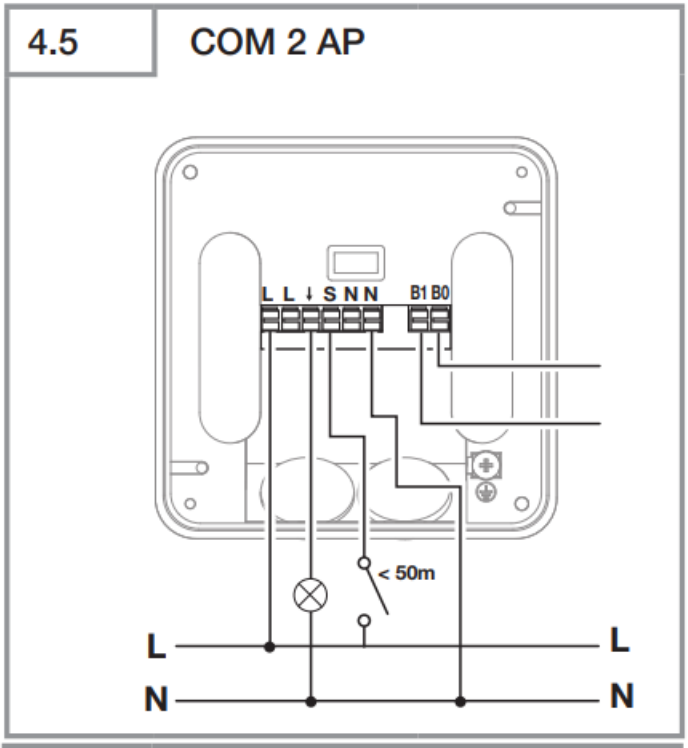


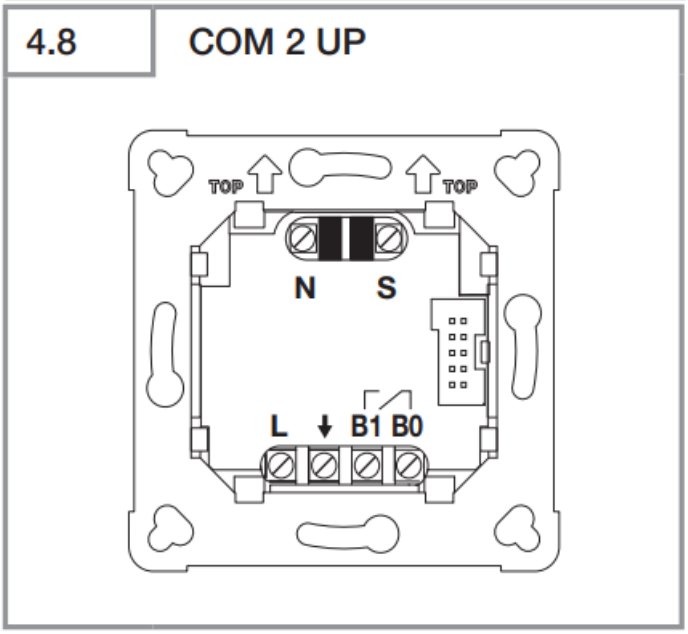




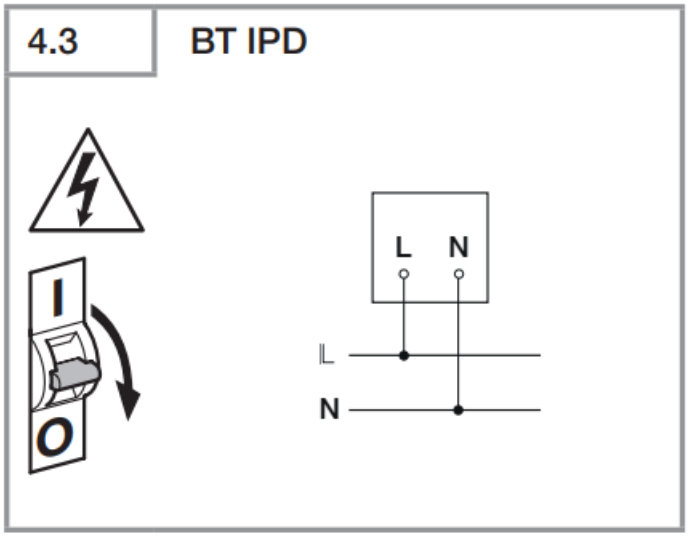
- Connect the mains power supply lead COM2 (Fig. 4.2/4.5/4.8)

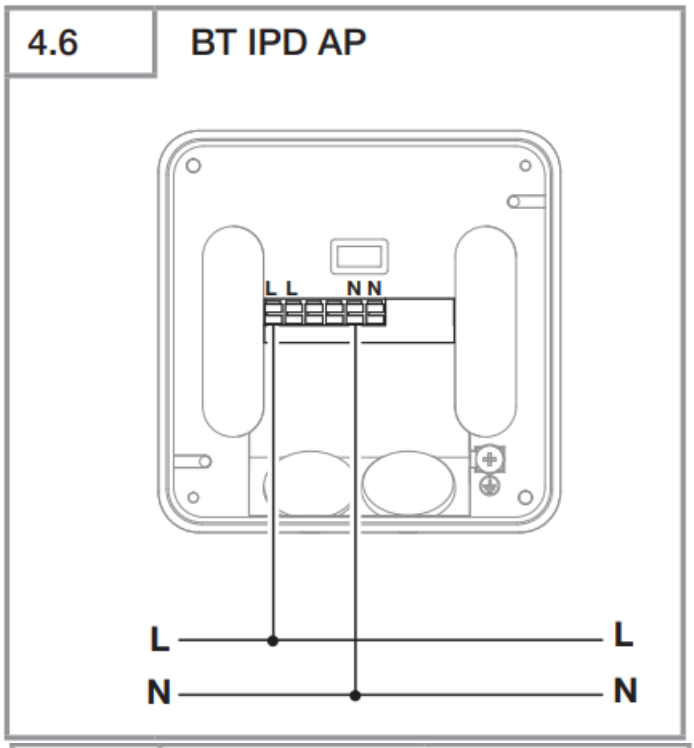


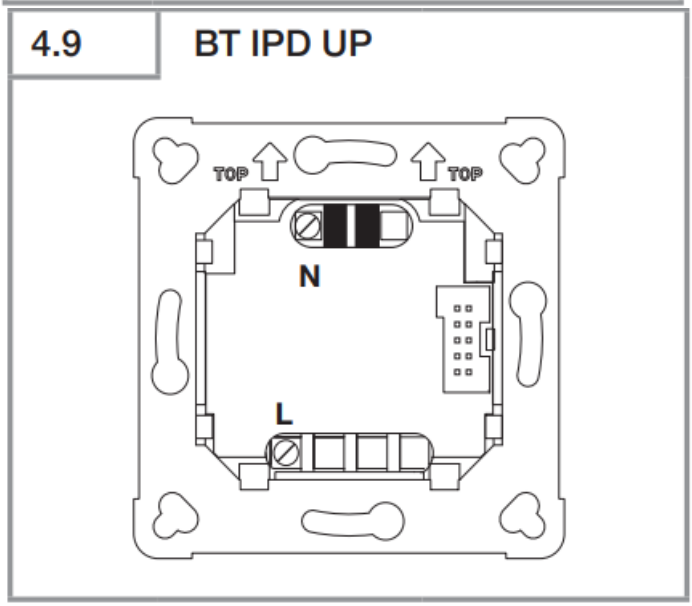




- Connecting the BT IPD mains power supply lead (Fig. 4.3/4.6/4.9)





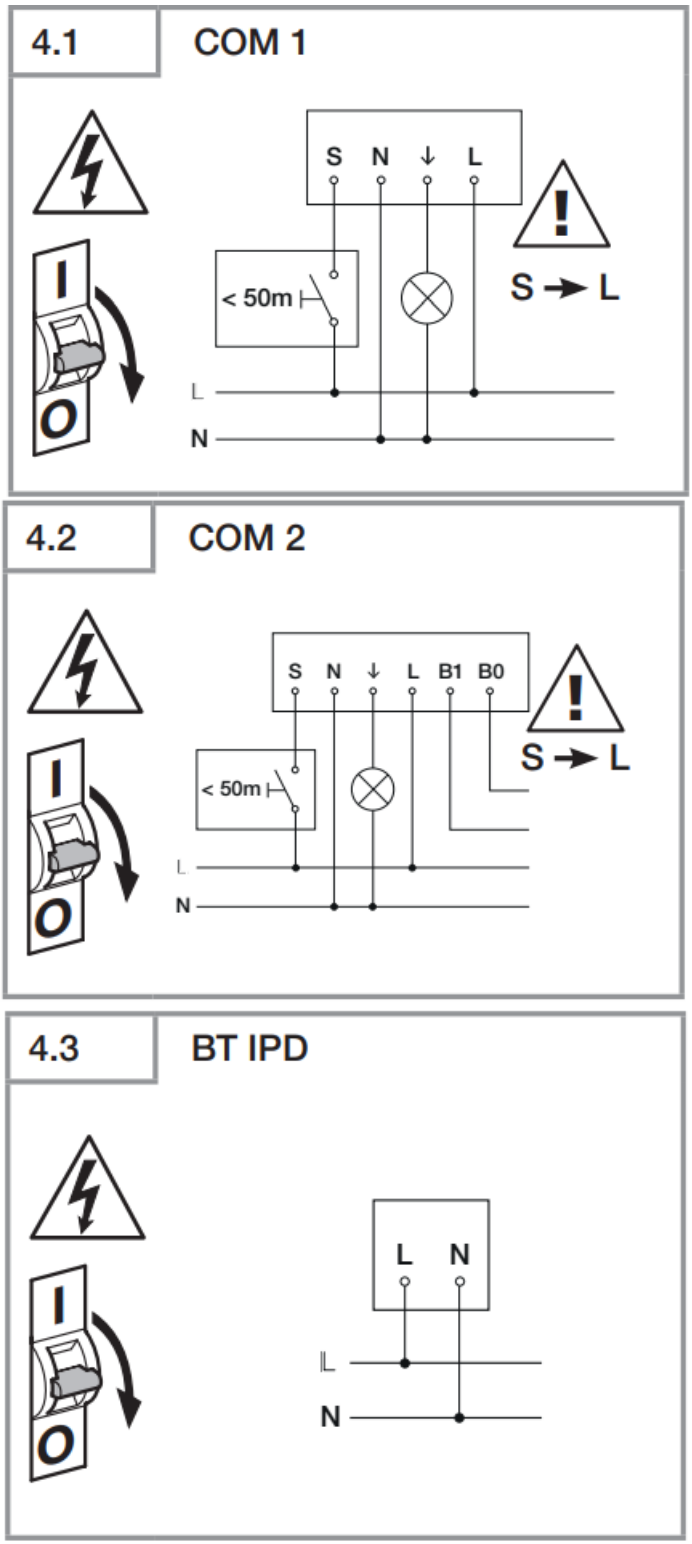


Installation

- Check all components for damage.
- Do not use the product if it is damaged.
- Select an appropriate mounting location, considering the reach and presence detection.

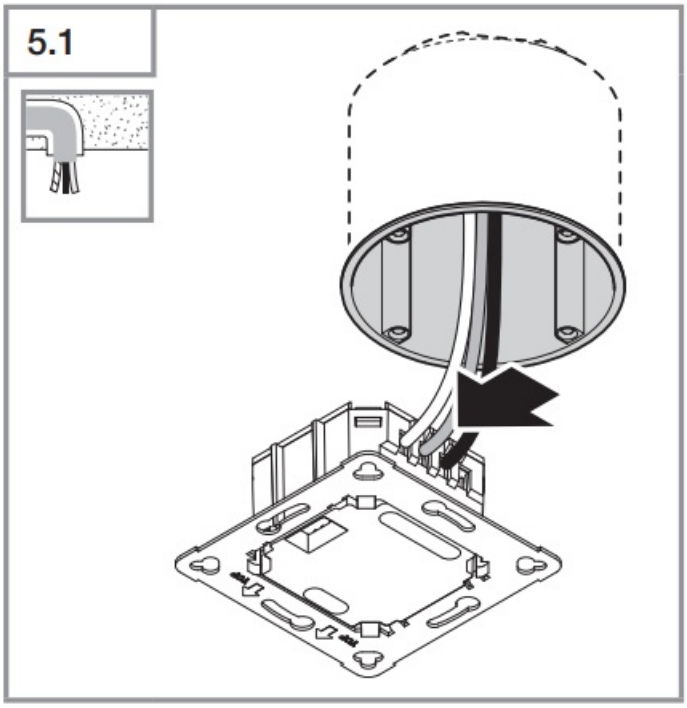
Mounting procedure

- Switch off the power supply (Fig. 4.1/4.2/4.3)

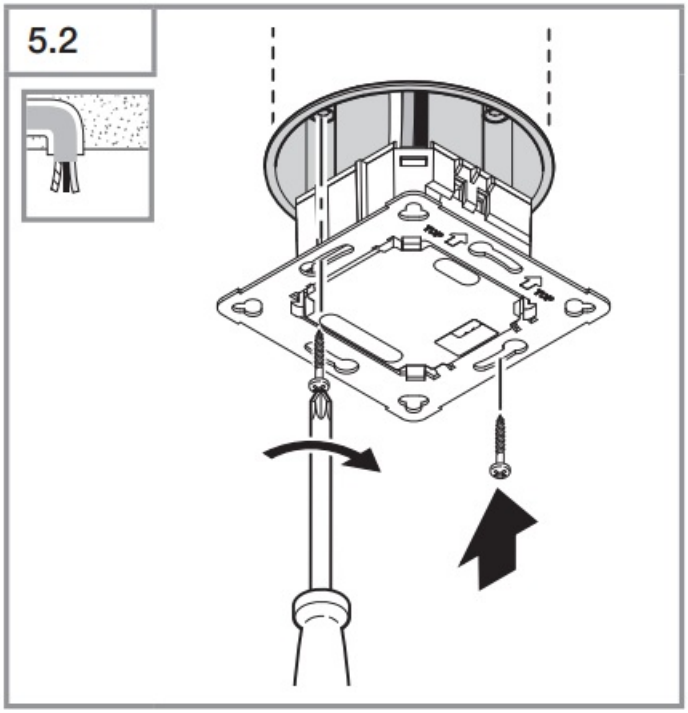


Concealed mounting

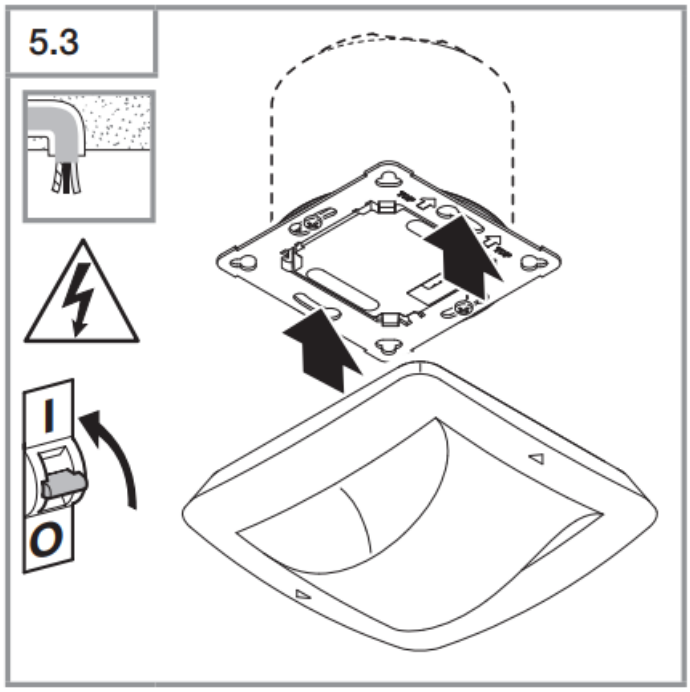
- Connect to the mains power supply. (Fig. 5.1)



- Fit the load module and screw it into place. (Fig. 5.2)



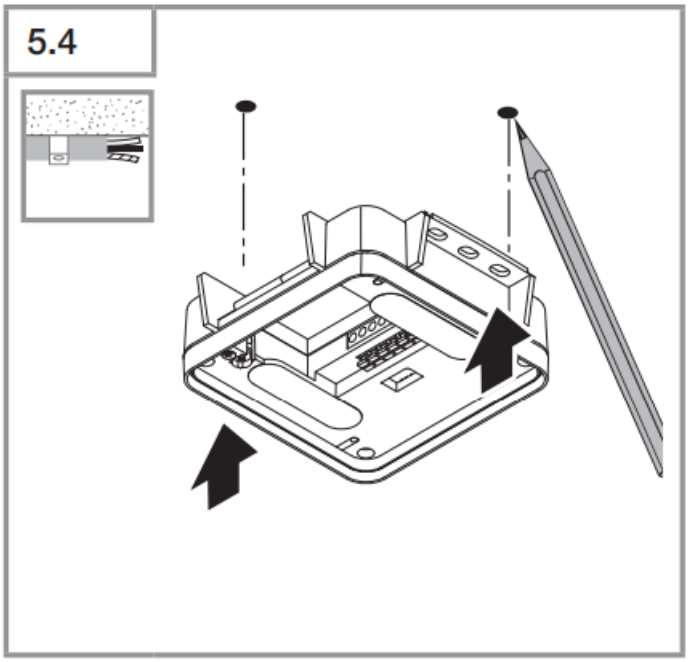
- Fit magnetic sensor module. (Fig. 5.3)



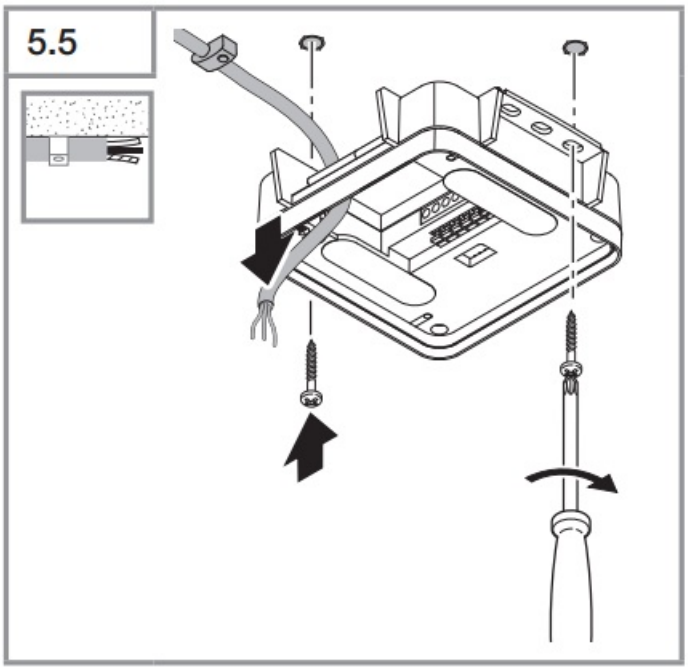
- Switch ON the power supply.

Surface mounting

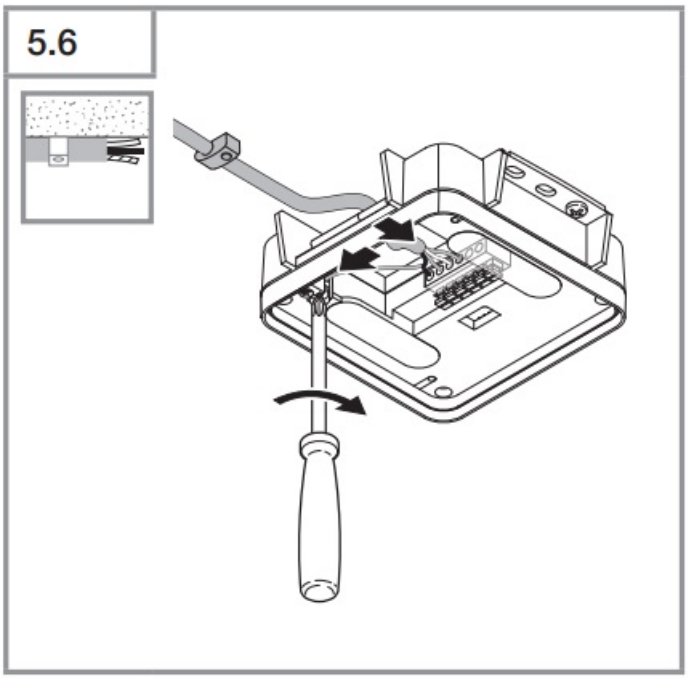
- Mark drill holes and drill. (Fig. 5.4)



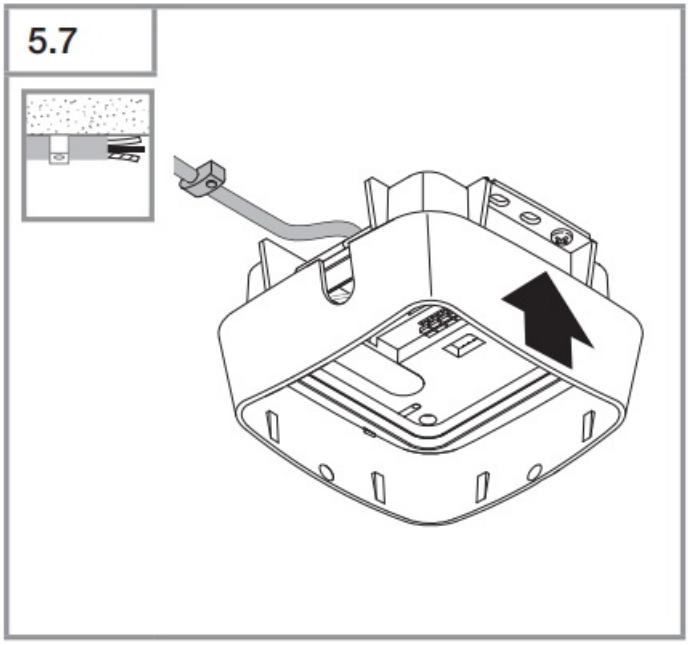
- Screw the load module into place. (Fig. 5.5)



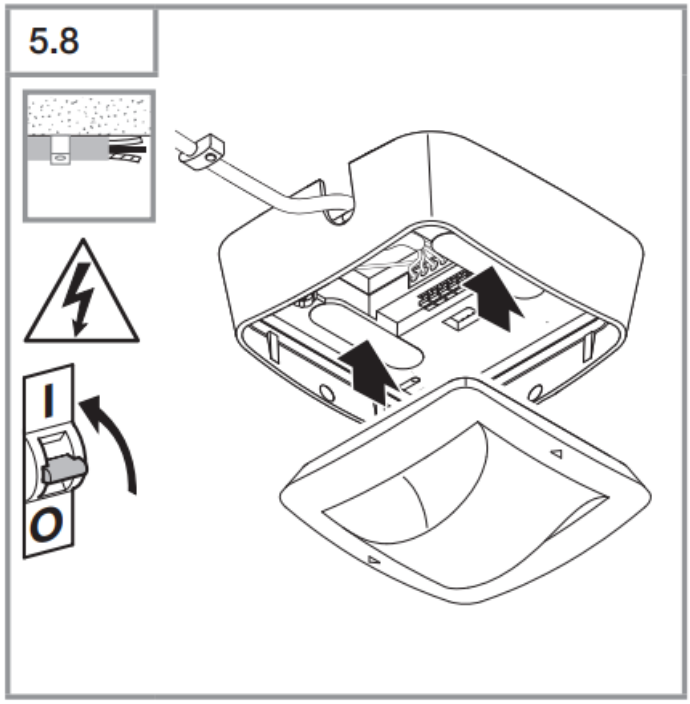
- Connect to the mains power supply. (Fig. 5.6)



- Fit surface-mounting adapter. (Fig. 5.7)



- Fit magnetic sensor module. (Fig. 5.8)



- Switch ON the power supply.
- Make settings. (➜ “6. Function and settings”)

Function and settings

Factory settings
The factory settings are activated when the presence detector is put into operation for the first time as well as after resetting by the app. The following factory settings are provided:

Setting True Presence detection:

- **True Presence height**: 2.6 m
- **True Presence radius:** 3.5 m
- **True Presence Scenario:** Scenario 7
- **Setting Hallway detection:**

- **Reach S, Hallway:** 100 %
- **Reach L, Hallway**: 100 %
- **Sensitivity S, Hallway**: 100 %
- **Sensitivity L, Hallway:** 100 %

COM1/COM2 only:

- **Twilight setting**: 500 lux
- **Time setting, Hallway COM1**: 5 min
- **Time setting, True Presence COM1**: 40 s
- **Time setting, HVAC**: 15 min
- **Fully** / **semi-automatic mode:** fully automatic
- **Switch-ON delays, HVAC:** OFF

First time using True Presence
During initial commissioning, the presence detector creates a room image. The room must be free of movement for 2 to 2.5 minutes for this. The process is completed when the white LED goes out. Setting True Presence Detection The reach can be set via the mounting height, radius, and scenario parameters.

- **Scenario 9:**
  Small office, quiet workplace
  This scenario features maximum sensitivity. To prevent undesired switching, it should be used for small areas.
- **Scenario 8:**
  Large office, quiet workplace
  As per scenario 9, but with a slightly reduced sensitivity. Also suitable for large areas.
- **Scenario 7:**
  Large office, large entrance area
  As scenario 8, but with a further reduced sensitivity.
- **Scenario 6:**
  Hotel room, room with persons sleeping
  This scenario also provides maximum sensitivity. In addition, signal processing has been optimized to reliably detect the presence of persons sleeping.
- **Scenario 5:**
  Hotel room, room with persons sleeping
  As scenario 6, but with a further reduced sensitivity.
- **Scenario 4:**
  Noisy workspace, light industry, hallways
  The sensor can be triggered by vibrations. In scenarios 7-9, this may lead to longer stay-ON times. Scenario 4 is more robust in the way it works.
- **Scenario 3:**
  Noisy workspace, light industry, hallways
  As scenario 4, but with a further reduced sensitivity.
- **Scenario 2:**
  Very noisy environments, heavy industry

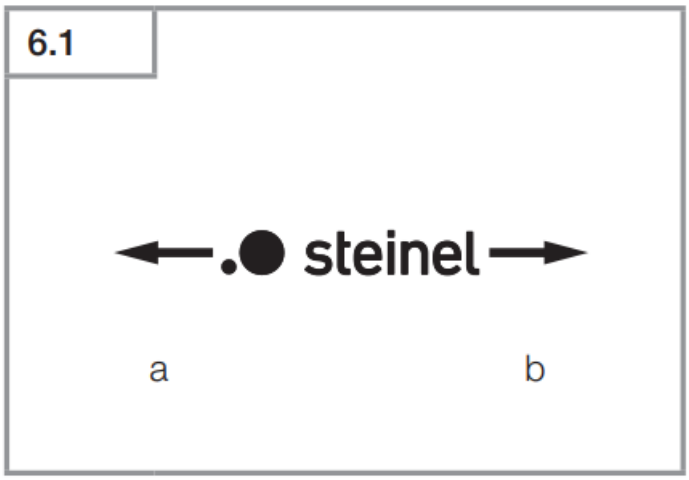
This scenario should be used if there are larger vibrations or if there are sources of electrical interference. The True Presence function is not available, the sensor functions as a conventional presence detector.

- **Scenario 1:**

  Very noisy environments, heavy industry

  As scenario 2, but with a further reduced sensitivity.

Setting Hallway detection
Reach can be set separately for both directions via the Smart Remote app The Steinel logo on the sensor indicates the direction. (Fig. 6.1)



- The reach shown by “S” points to the direction in which the S in the Steinel logo points.
- The reach shown by “L” points to the direction in which the L in the Steinel logo points.

  Setting reach via the Smart Remote app

Bluetooth grouping
The sensors can be operated a individual sensors or as a group. The group is interconnected via wireless communication. In each group, a group master must be defined in the Smart Remote app. All sensors in a group operate in the same way as the group master is configured. Reach can be set individually for all lights in the lighting group.

The COM1 and COM2 versions additionally, provide the following functions:

Twilight setting
The chosen response threshold can be set from approx. 2 to 2000 lux.

Daytime operation
When movement is detected, the sensor switches the load ON irrespective of ambient brightness.

Teach-IN
The Teach-IN function is to be selected at the level of light at which you want the sensor to respond to movement from now on. The level of ambient brightness measured in this way will be saved after 10 seconds. The load is deactivated during this period.

Time setting
The chosen stay-ON time can be set from a minimum of 30 seconds (True Presence) / 10 seconds (Hallway) up to a maximum of 60 minutes. When the response threshold is exceeded, the sensor switches OFF after the stay-ON time expires.

Neighbouring-light function

The neighboring light function can be activated and deactivated via the Smart Remote app. This function assigns the neighboring groups to the active sensor group. The active group responds to activation signals from the neighboring group assigned to it and switches to the main light as defined in the settings.

Operating mode

Semi-automatic mode
The light now only switches OFF automatically. The light is switched ON manually. The light must be requested using the button and stays ON for the time set.

Fully automatic mode
The light automatically switches ON and OFF about the light level when someone is present. Light can be switched ON and OFF manually at any time. This temporarily interrupts the automatic switching function.

Presentation mode
If input S is used in fully automatic mode with load activated, the sensor will activate presentation mode. The load remains switched OFF as long as movement is being detected. As soon as movement is no longer being detected and the stay-ON time has elapsed, the sensor returns to normal sensor mode.

Button input
Tells the sensor how to interpret incoming signals S. Assigning external buttons allows you to operate the detector as a semi-automatic unit and override it manually at any time. SOUND or SOUND/OFF describes the behavior after actuating the button. In the ON-OFF setting, the light can be switched ON and OFF manually at any time. In the SOUND setting, the light can no longer be switched OFF manually. The stay-ON time starts from the beginning again each time the switch is pressed.

IQ mode
The stay-ON time is self-learning and adjusts dynamically to user behavior. The optimum time cycle is determined using a learning algorithm. The shortest time is 5 minutes, and the longest time is 20 minutes.

Hallway pulse mode
The pulse function activates the output for 2 seconds (e.g. for staircase lighting time switches). The sensor will then be in a dead time for 8 seconds.

Smart Remote app
To read off the sensor via smartphone or tablet, you must download the STEINEL Smart Remote app from your app store. You will need a Bluetooth-capable smartphone or tablet.

Android

iOS

LED function

- Initialization: LED flashes blue
- Normal mode: LED off
- Bluetooth connection active: LED is flashing slowly in blue
- Hallway test mode, movement: LED permanently lights up green
- Hallway movement test mode no movement: LED permanently lights up red
- True Presence calibration process: LED permanently lights up white

Maintenance and care

The product requires no maintenance. The sensor can be cleaned with a damp cloth (without detergents) if dirty.

Disposal
Electrical and electronic equipment, accessories, and packaging must be recycled in an environmentally compatible manner. Do not dispose of electrical and electronic equipment as domestic waste.

EU countries only
Under the current European Directive on Waste Electrical and Electronic Equipment and its implementation in national law, electrical and electronic equipment no longer suitable for use must be collected separately and recycled in an environmentally compatible manner.

Conformity
STEINEL Vertrieb GmbH hereby declares that the True Presence COM1/COM2/ BT IPD / Hallway COM1/COM2/BT IPD radio equipment type conforms to Directive 2014/53/EU. The full wording of the EU Declaration of Conformity is available for downloading from the following Internet address: www.steinel.de

Manufacturer's Warranty
As a purchaser, you are entitled to your statutory rights against the vendor. If these rights exist in your country, they are neither curtailed nor restricted by our Warranty Declaration. We guarantee that your STEINEL

Professional sensor
product will remain in perfect condition and in proper working order for 5 years. We guarantee that this product is free from material-, manufacturing- and design flaws. In addition, we guarantee that all electronic components and cables function properly and that all materials used and their surfaces
are without defects.

Making Claims
If you wish to make a claim, please send your product complete and carriage paid with the original receipt of purchase, which must show the date of purchase and product designation, either to your retailer or contact us at STEINEL

(UK)
Limited, 25 Manasty Road, Axis Park, Orton Southgate, Peterborough, PE2 6UP, for a returns number. For this reason, we recommend that you keep your receipt of purchase in a safe place until the warranty period expires. STEINEL shall assume no liability for the costs or risks involved in returning a product. For information on making claims under the terms of the warranty, please go to **www.steinel-professional.de/garantie** If you have a warranty claim or would like to ask any question regarding your product, you are welcome to call us at any time on our Service Hotline at 01733 366700.

Technical specifications

Dimensions (L × D × H in mm)	True Presence UP: 103 × 103 × 50 True Presence AP: 123 × 123 × 45 Hallway UP: 103 × 103 × 66.5 Hallway AP: 123 × 123 × 62
Input voltage	220-240 V, 50 / 60 Hz
Power consumption • Stand-by	True Presence: < 1 W Hallway: < 0.5 W
Capacity, switching output 1: (COM 1/COM 2)	Incandescent/halogen lamp load 2,000 W Fluorescent lamps, electronic ballast 1,500 W Fluorescent lamps, uncorrected 1,000 VA Fluorescent lamps, series-corrected 400 VA Fluorescent lamps, parallel-corrected 1,000 VA Low-voltage halogen lamps 2,000 VA LED < 2 W 100 W 2 W < LED < 8 W 300 W LED > 8 W 600 W Capacitive load 176 µF
Capacity, switching output 2: (COM 2 only)	max. 230 W/230 V max. 1 A (cos φ = 1) for HVAC (heating/ventilation/air-conditioning)
Time setting	COM1 relay Hallway: 10 s – 60 min / IQ mode True Presence: 30 s – 60 min / IQ mode
	COM2 relay Stay-ON time: 1 min – 120 min Switch-ON delay: 0 min – 10 min
Twilight setting	2-2,000 lux
Reach	True Presence: Ø 9 m True Presence (mounted up to a height of max. 4 m) Ø 15 m presence Ø 15 m movement (can be set to within one centimeter) Hallway: 25 × 3 m x 2.8 m
Angle of coverage	360°

Mounting height	True Presence: 2.8-12 m Hallway: 2-4 m Optimum mounting height: 2.8 m
IP rating	IP54 (surface-mounted version only)
Temperature range	-20°C to +50°C
True Presence frequency	7.2 GHz (responds to micro-movements resulting from the vital functions)

UWB transmitter power	≤ -41 dBm/MHz
Bluetooth frequency	2.4-2.48 GHz
Hallway frequency	5.8 GHz
Bluetooth transmitter power	5 dBm/3 mW
Hallway transmitter power	< 1 mW

Troubleshooting

Malfunction	Cause	Remedy
Light does not switch ON	■ No supply voltage ■ Lux setting too low ■ No movement detection	■ Check supply voltage ■ Slowly increase lux setting until light switches ON ■ Ensure unobstructed sensor vision ■ Check detection zone
Light does not switch OFF	■ Lux setting too high ■ Stay-ON time running out ■ Interfering heat sources: e.g. fan heater, open doors and windows, pets, light bulb/halogen floodlight, moving objects	■ Reduce lux setting ■ Wait until stay-ON time elapses; reduce stay-ON time if necessary ■ Check detection zone ■ Select scenario with lower sensitivity
Sensor switches OFF despite persons being present	■ Stay-ON time too short ■ Light-level threshold too low	■ Increase stay-ON time ■ Change twilight setting ■ Select scenario with higher sensitivity
Sensor does not switch OFF quickly enough	■ Stay-ON time too long	■ Reduce stay-ON time
Sensor does not switch ON quickly enough when approached from the front	■ Reach is reduced when approached from the front	■ Install additional sensors ■ Adjust reach ■ Reduce distance between two sensors
Sensor does not switch ON when persons are present despite it being dark	■ Lux setting too low ■ Semi-automatic mode activated ■ 4 hours OFF activated	■ Increase light-level threshold ■ Activate fully automatic mode or switch light ON at button ■ Deactivate 4 hours OFF
Sensor not connecting with the app	■ App or smartphone system crash	■ Restart mobile terminal device

Contact: www.steinel.de/contact

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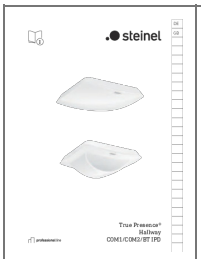
Documents / Resources

	steinel COM1 Presence Detectors True Presence [pdf] Installation Guide COM1, COM1 Presence Detectors True Presence, Presence Detectors True Presence, Detectors True Presence, True Presence, Presence

References

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- Steinel Group | STEINEL
- International | STEINEL
- User Manual