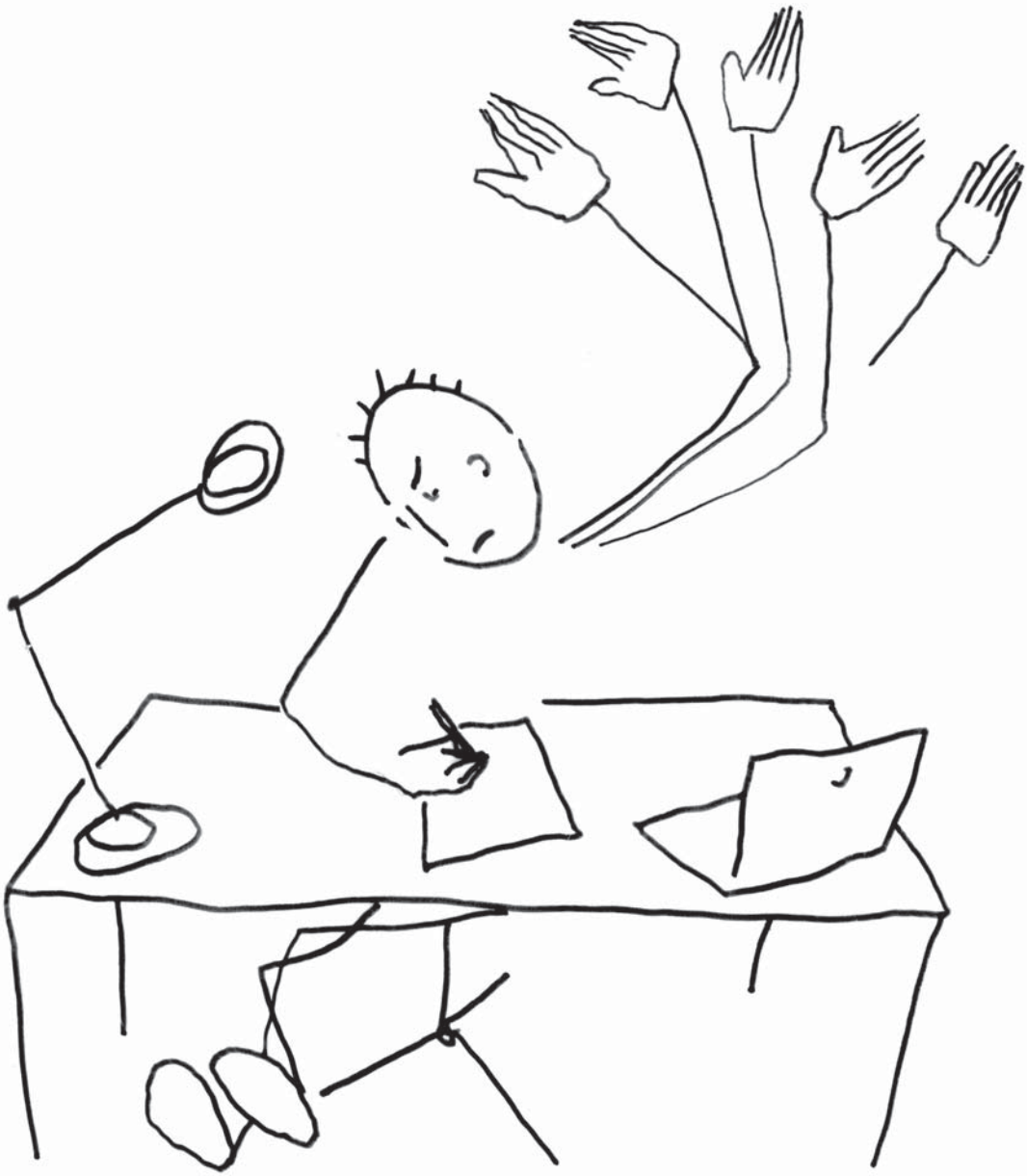





Presence Detectors

Expertise, efficiency and precision – our newly developed range of presence detectors is a shining example of tomorrow's intelligent use of energy. We make technology that's committed to a system.

Presence Detectors really need to Work



Made for the most exacting of demands: Presence detectors from STEINEL Professional

**Presence detectors are the cream of the crop in lighting automation.
We say: What counts is light when it's needed –
and no light when it isn't.
All automatically. And always with perfection.**

Technology that works
Presence detectors must work in a way that requires absolutely no thinking on the part of either the people using them or the electricians fitting them. Our foremost maxim is sensor technology that works perfectly. Because a building comes with all sorts of different detection tasks and rooms that also involve widely differing activities, sensor technology needs to satisfy a wide range of demands. Presence detectors that leave pupils sitting in the dark while they are quietly at study are not particularly helpful. Long stay-'ON' times to compensate for detection weaknesses are not particurlary helpful either. Nor are presence detectors that fail to provide the capability of manual intervention - to turn the light 'OFF', say, for video presentations. Poor detection performance is simply no use at all – and has nothing to do with what we can provide.

Top expectations demand performance to match
We are committed to meeting the expectations placed on us by building the best sensors money can buy – because only a first-class engine makes a first-class car. In our opinion, this is the only way of providing you with the very best presence detectors that are available on the market. Developed and produced entirely by STEINEL Professional from the initial idea down to the very last detail. For perfection that works and lasts.

Putting Presence Detectors through their Paces

A real-life measurable basis for comparing the way presence detectors actually work not only ensures a high standard of quality and performance. This shows who's the No. 1 in the technology stakes.

Performance by comparison

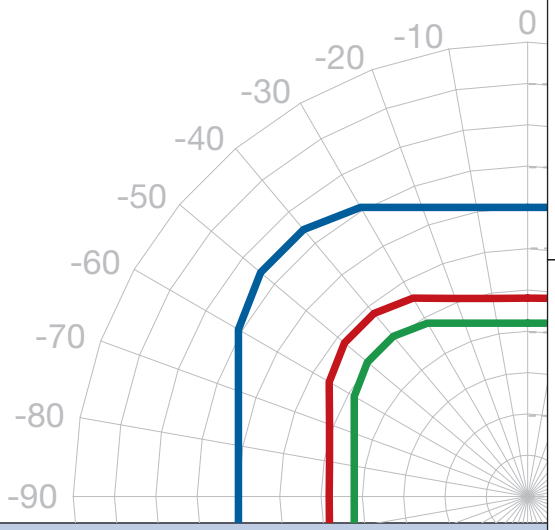
To be in a position to compare all presence detectors, they must be measured under exactly the same conditions: Position, room temperature – excluding other non-controllable influences – and, in particular, the same, standardised movement at all times. Only then is it possible to compare the true performance of presence detectors. At STEINEL Professional, we have a special test room that meets all of these conditions. This means we know our own sensors and those of all our competitors inside out.

The optical system, its resolution density, reach, detection characteristics and evaluation software are all crucial to the quality of a presence detector. Standardised testing provides us with the tremendous precision and the knowledge with which we bring objectivity and hard fact into the equation: It's an incorruptible measurement process that permits international comparison.

We know what we're talking about

Standardised movement is performed by a robot that simulates the human forearm: our NEMA arm robot. Using a temperature-controlled, standardised forearm model of unchanging mass, it performs a 90°-movement that's always the same (conforming to the American NEMA Standard).

Whether and the speed with which the sensor detects it is recorded in a measurement protocol that ultimately provides the basis for producing the detection diagram. There's not a sensor in the world that can't be measured and compared as objectively as this. On the basis of this process, we know exactly how every motion and presence detector performs. And we are extremely proud of where our products rank in this comparison – but at the moment we'll politely refrain from comment.



Control PRO System

CONTROL PRO SYSTEM

STEINEL Professional – true Presence Detectors

An all-new generation of sensor technology:
Control PRO System
We have taken a thorough look at the demands that are made on sensor technology today. In addition to the expectations users put on them, we also devote our attention to those of planners, architects, consultants and electrical fitters. After painstakingly and exhaustively analysing the market, we can meet the expectations placed on modern sensor technology with solutions tailored to every specific need.

The result: our Control PRO generation of presence detectors.

The Professional line-up: covering a range no other can
The Control PRO System uses 4 sensor technologies, 2 infrared versions and 2 high-frequency versions. Both infrared presence detectors have a mechanically scalable square-shaped detection characteristic – unparelleled anywhere else in the world. The design of our new Control PRO family is understated. This range is intended for recessed ceiling installation and therefore extremely shallow. They go perfectly with square as well as round ceiling elements and lights. A range of accessories also permits surface-mounting. Needless to say, our presence detectors are available in all the most commonly demanded combinations (switching output, HVA output, 1 – 10 V dimming output, KNX/EIB, DALI). Featuring additional functions and setting capabilities, they can be used in master/slave applications and benefit from a self-learning IQ mode. They can also be operated by IR remote control. A precision constant-light controller is, of course, also integrated. Alongside presence detectors, the Control PRO System also offers a modern DUAL smoke detector and an air-quality sensor covering all demands on building sensors in matching design.

That's STEINEL Professional – Intelligent lighting for professional applications.

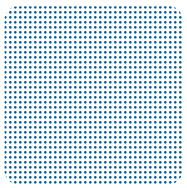
Benefits

- Exactly the right sensor technology for any specific lighting application
- (infrared, digital infrared, high-frequency sensor systems, DUAL technologies, dedicated corridor sensors etc.)
- Unique square-shaped detection zone
- Unparalleled mechanical scalability of reach
- All the main connection options (high-load relay, 2 outputs, DALI, KNX, 1–10 V interface, wireless interconnectability etc.)
- Master-master/master-slave systems
- All products in one and the same design
- Plus smoke detector and air-quality sensor with co-ordinated design and operating concept
- Pushbutton/switch input for semi-automatic operation
- Load-free programming with visible LED
- Constant-light function, permanent light 'OFF' function
- Can be remotely controlled
- Concealed, surface and ceiling mounting
- Compatible with all common recessed boxes

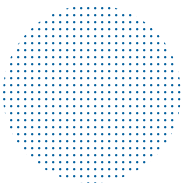
Interfaces

COM1 COM1 AP	COM2	DIM
KNX	DALI	IMPULSER

Unique Presence Detectors



IR Quattro/
IR Quattro HD

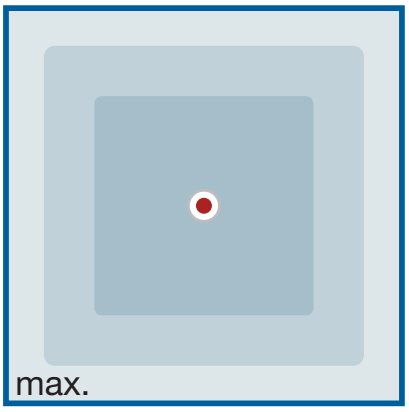


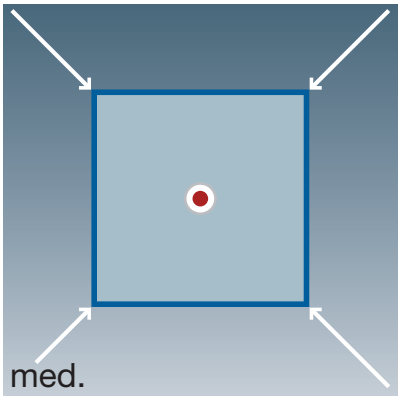
conventional
presence detector

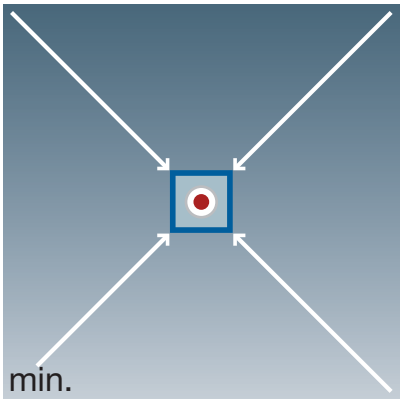
The square, scalable detection zone from Presence Control PRO IR

The world is round – rooms aren't

Our IR presence detectors have a square detection zone providing unmatched precision. This detection zone can be scaled with precision, and that's unique. Never before has it been possible to cover rooms with presence detectors without overlaps or leaving gaps: perfectly plannable zones, reliable detection at every point of the room. No longer is there any need for planners, electrical fitters or users to get worked up later on over poor presence-detection performance. Instead, everyone can look forward to maximum energy savings. Unseen anywhere else in the world, the incredible resolution of our presence detectors, with up to 4,800 switching zones, provides a level of detection precision that's previously not been possible.





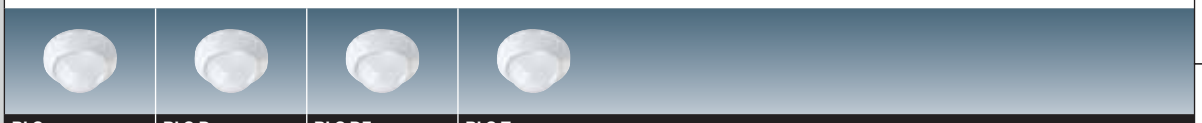


detection zone selected

CONTROL PRO SYSTEM

Overview
Presence Detectors

	Presence Control PRO				Smoke Detector	Air-quality Sensor
						
	IR Quattro	**Quattro HD**	**HF 360**	**Dual HF**	**Fire Control PRO**	**Air Control PRO Signal**
Indoors	●	●	●	●	●	●
In-ceiling installation	●	●	●	●		●
On-ceiling installation	●	●	●	●	●	●
COM 1	●	●	●	●		
COM 1 AP	●	●	●	●		
COM 2	●	●	●			
DIM	●	●	●	●		
DALI	●	●	●	●		
KNX	●	●	●	●		
IMPULSER	●					
Mounting height	2.5 m – 8 m	2.5 m – 10 m	2.5 m – 3.5 m	2.5 m – 3.5 m	2.5 m – 3 m	2.5 m – 3 m
IR-Switching zones	1760	4600	-	-		
Square detection zone	Presence: 4 x 4 m max. Radially: 5 x 5 m max. Tangentially: 7 x 7 m max.	Presence: 8 x 8 m max. Radially: 8 x 8 m max. Tangentially: 20 x 20 m max.	Detection zone: 1 – 8 m dia.	Detection zone: 3 x 20 m		
Detection angle	360°	360°	360°	360°		
Page	**84**	**86**	**88**	**90**	**104**	**106**

	LuxMaster			
				
	BLS	**BLS D**	**BLS DF**	**BLS T**
Indoors	●			●
In-ceiling mounting	●	●	●	●
On-ceiling mounting	●	●	●	
Mounting height	2.50 - 3 m	2.50 - 3 m	2.50 - 3 m	2.50 - 3 m
IR-Switching zones	1320	1320	1320	1320
Detection angle	360° with 180° angle of aperture	360° with 180° angle of aperture	360° with 180° angle of aperture	360° with 180° angle of aperture
Reach	12 m max.	12 m max.	12 m max.	12 m max.
Page	**110**	**110**	**110**	**110**

Decision-making Matrix for Presence Detectors and Room Sensors

Outdoors
(see page 32)

BLS LuxMaster

Room presence detector

- Offices
- Conference rooms
- Class rooms
- Meeting rooms

- IR-sensor with 3 pyro-sensors
- Round detection characteristic
- Reach 12 m

BLS
LuxMaster

Switching light

BLS, BLS T
(semi-automatic)

1–10 V interface for constant-lighting control & basic brightness

BLS D, BLS DF
(remote control)

Control PRO System

CONTROL PRO SYSTEM

	Switching light (1 relay)
	Switching light slim-line surface-mounting version (1 relay)
	Switching light & HVA (heating/ventilation/air-conditioning, 2 relays)
	1–10 V interface for constant-lighting control & basic brightness
	Digital DIM interface for constant-lighting control & basic brightness
	Digital BUS interface for 4 lighting controls & HVA (heating/ventilation/air-conditioning)
	Battery-operated wireless sensor (transmitter)

Indoors

Application

Presence Control

Presence detector Room

- Small offices
- WCs, washrooms
- Storage, service, utility rooms
- No detection of mechanical movements (e.g. lift)

- IR-sensor with 1 pyro-sensor
- Mechanical reach setting
- Restrictable square detection zone for the typical shape of a room
- 7 x 7 m tangential detection
- 5 x 5 m radial detection
- 4 x 4 m presence detection


Presence Control PRO IR Quattro

Presence Control

- Medium-sized to large offices
- Conference and meeting rooms
- Class rooms, lecture theatres
- Wherever the tiniest movement needs detecting
- Also suitable for large heights (e.g. sports halls and warehouses)

- IR-sensor with 4 digital pyro-sensors
- Mechanical reach setting
- Restrictable square detection zone for the typical shape of a room
- 20 x 20 m tangential detection
- 8 x 8 m radial detection
- 8 x 8 m presence detection


Presence Control PRO IR Quattro HD

Presence Control

- WCs with toilet cubicles
- Break rooms
- Changing rooms
- Multi-storey car parks
- Stairwells

- HF-sensor
- 360° detection zone
- Extremely slim-line design
- unobtrusive on ceilings
- 8 m all-round detection
- Electronic reach setting
- Detection independent of temperature


Presence Control PRO HF 360

Presence detector Corridor

- Passageways
- Corridors etc.

- HF-sensor
- ideal for corridors with people walking towards the sensor
- for 2 x 20 m (radially) detection zone
- Electronic reach setting
- Detection independent of temperature


Presence Control PRO Dual HF

Fire Control

Smoke detector

- Smoke detector with 2 sensor sizes (smoke + heat)
- For detecting fire
- Low-battery indicator
- Light sensor for daytime low-battery warning
- Function button 10-minute muting and self-test
- Relay contact
- Wired interconnection of as many as 30 STEINEL Professional smoke detectors
- 230 V power supply

- Version with 9V alkaline block battery
- Long-life lithium battery


Fire Control PRO


Fire Control PRO Lithium

Air Control

Air-quality sensor

- Classrooms and conference rooms
- Studies
- Offices
- Training and conference rooms
- Version for surface and concealed mounting

- CO_2 sensor for monitoring air quality
- Traffic-light system for indicating air quality
- Floating output
- For connecting a ventilation system or window operating system providing automatic control for both


Air Control PRO Signal AP (surface-mounting)


Air Control PRO Signal UP (concealed mounting)

Accessories


Remote control RC3, Service


Remote control RC6, Service KNX


Remote control RC4 DIM


Remote control RC5 DALI


Remote control RC7 KNX


Surface-mounting adapter

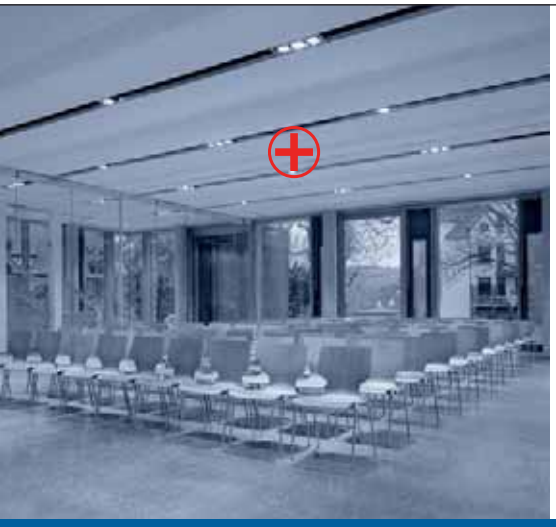

Surface-mounting adapter KNX, DALI


Clamping-type adapter

Guard cage

Presence Control PRO IR Quattro HD

Passive Infrared Presence Detector



HD
4800
switching zones

CONTROL PRO SYSTEM

- Extremely high-resolution
- 4 digital pyros
- 4800 switching zones for maximum detection quality
- Presence zone covering a true 64 m²
- Mechanical reach setting
- Precision planning as a result of square detection zone
- Precision, infinitely variable scalability
- Quickly installed, parameters quickly set
- Can be remotely controlled

We take high definition quite literally: PRESENCE CONTROL PRO IR QUATTRO HD

The "HD" version is our range-topping presence detector which provides performance that's second to none. And when we say high definition, we mean high definition: With performance specifications that are hard to believe, the precision of detection this model gives you is truly unique: 4800 switching zones, a genuine presence zone of 8 x 8 m (= no less that 64 sqm), mechanically scalable square detection zone. The secret behind this high-performance presence detector lies in the precision co-ordinated optical system, in the software developed with all the expertise from 20 years of sensor technology and in the first-ever use of 4 digital pyros, i.e. elements that detect infrared radiation emitted from a human being. Digital technology significantly improves signal evaluation even further without increasing the risk of switching errors.

HD is a presence detector for the most challenging of detection tasks in a building: Offices and classrooms, where most activities are performed sitting down, high spaces, such as sports halls and foyers, as well as meeting, training and conference rooms. The remote control allows you to select and set all the main functions, programmes and operating modes easily and conveniently. The Presence Control PRO IR Quattro HD gives you a wide range of options. It's available in a COM1, COM1 AP, COM2 as well as a 1 – 10 V DIM, KNX and DALI version.

Detection zone

Detection zone:
20 x 20 m max., tangentially

Accessories

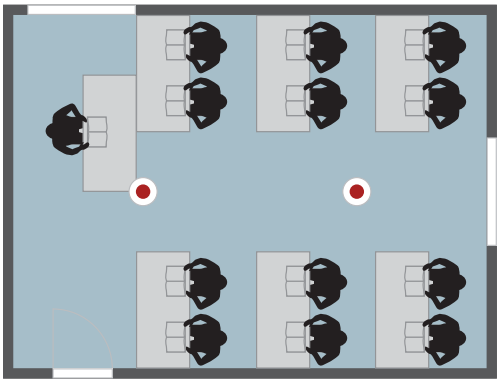
Service remote control
RC3
RC6 KNX

Remote control
RC4 DIM

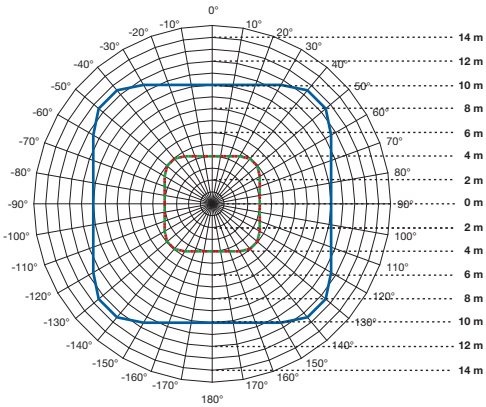
Remote control
RC5 DALI
RC7 KNX

Clamping-type
ceiling adapter
Control PRO UP Box

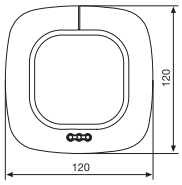
Surface-mounting adapter
Control PRO AP Box (IP 54)

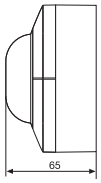


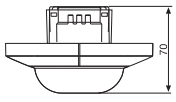
tangential radial presence



Presence Control PRO IR Quattro HD, installation height 2.80 m
blue = tangentially, red = radially, green = presence



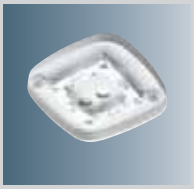




IR Quattro HD

EAN	**IR Quattro HD COM1** **4007841 002794** **IR Quattro HD COM1 AP** **4007841 592400** **IR Quattro HD COM2** **4007841 002770** **IR Quattro HD DIM** **4007841 002787** **IR Quattro HD KNX** **4007841 002763** **IR Quattro HD DALI** **4007841 002756**
Dimensions (WxHxD)	120 x 120 x 76 mm
Square detection zone	- Presence 8 x 8 m max. (64 sqm) - Radially 8 x 8 m max. (64 sqm) - Tangentially 20 x 20 m max. (400 sqm)
Point of application	inside buildings
recommended installation height	2.5 m – 10 m ceiling height
Reach	mechanically adjustable
Sensor system	13 detection levels, 4,800 switching zones
Functions set at DIP switches (KNX using ETS software)	DIP 1 Normal / test mode DIP 2 Semi-/ fully automatic mode DIP 3 Pushbutton / switch mode DIP 4 Pushbutton 'ON' / pushbutton 'ON'-'OFF' DIP 5 Constant-lighting control 'ON'-'OFF' (DIM/DALI)
Parallel connections	Master/slave Master/master
User-friendly setting capability	Teach-in (with optional RC3 remote control)
Light-level setting	10 – 1000 lux, ∞ / daylight DIM 100 – 1000 lux
IP rating	IP 20 (IP 54 with AP Box)
Safety class	II
Temperature range	0° C to +40° C
Housing	UV-resistant, paintable
Accessories	- RC3 service remote control **EAN 4007841 000387** - RC4 DIM remote control **EAN 4007841 003012** - RC5 DALI remote control **EAN 4007841 592806** - RC6 KNX service remote control **EAN 4007841 593018** - RC7 KNX remote control **EAN 4007841 592912** - Surface-mounting adapter Control PRO AP Box **EAN 4007841 000363** - Clamping-type ceiling adapter Control PRO UP Box **EAN 4007841 000370** - Guard cage **EAN 4007841 003036** - Surface-mounting adapter Control PRO AP BOX KNX/DALI **EAN 4007841 003029**

Interfaces



COM1 COM1 AP	COM2	DIM
KNX	DALI	

Surface-mounting adapter Control PRO AP Box KNX, DALI

Guard cage

For information on the interfaces specified, please turn to page 92 in this section.

FUNCTIONAL 36 month WARRANTY STEINEL German Quality

Presence Control PRO IR Quattro

Passive Infrared Presence Detector

- 1760 switching zones for excellent detection quality
- Mechanical reach setting
- Precision planning from square detection zone
- Precision, infinitely variable scalability
- Quick installation, fast parameter setting

The new benchmark: the Presence Control PRO IR Quattro

A presence detector of the category that offers a host of innovative details, yet primarily a level of performance that's nothing short of perfect. The IR QUATTRO is the basic version from STEINEL Professional's new range of presence detectors. It provides a square detection zone (QUATTRO optical system) that can be mechanically scaled for precision adjustment to the specific detection task in a room. Adjusting reach results in no overall reduction or enlargement of presence, radial and tangential zones. Reducing reach precisely restricts the field's outer limits though. To begin with, the tangential zone becomes smaller until it is eliminated, then the radial range is taken out and finally the presence zone is reduced in size. This way, unbeatable detection qualities are maintained at all times in spite of optical restriction. All told, IR QUATTRO sensors provide a level of precision that's never been seen before. The RC3 service remote control allows you to select and set all the main functions, programmes and operating modes easily and conveniently. The Presence Control PRO IR Quattro also provides a wide range of options. It comes in a COM1, COM1 AP, COM2, IMPULSER as well as a 1 – 10 V DIM, KNX and DALI version and with RC3, RC4 Dim and RC5 DALI remote controls.

Detection zone

Detection zone:
7 x 7 m max., tangentially

Accessories

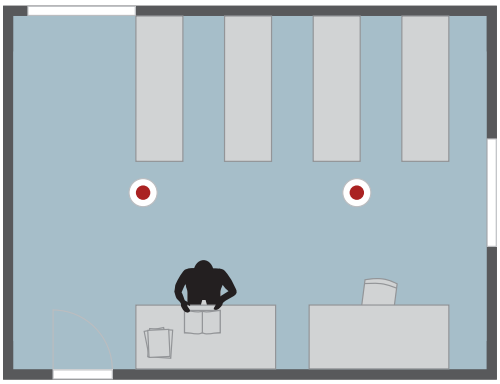
Service remote control
RC3
RC6 KNX

Remote control
RC4 DIM

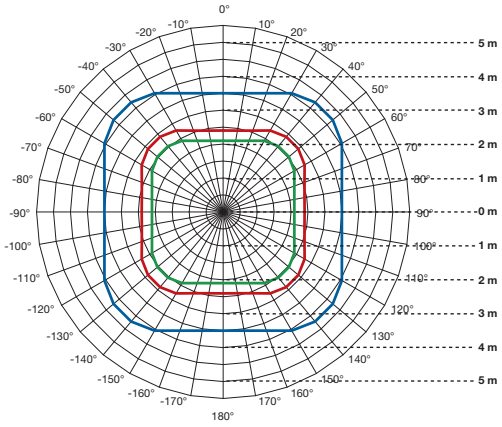
Remote control
RC5 DALI
RC7 KNX

Clamping-type
ceiling adapter
Control PRO UP Box

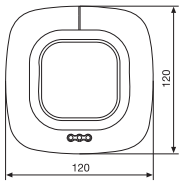
Surface-mounting adapter
Control PRO AP Box (IP 54)

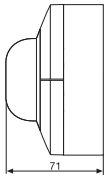


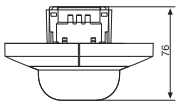
tangential radial presence



Presence Control PRO IR Quattro, installation height 2.80 m
blue = tangentially, red = radially, green = presence



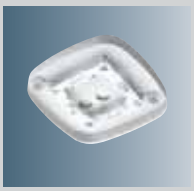




Presence Control PRO IR Quattro

EAN	**IR Quattro COM1** **4007841 000349** **IR Quattro COM1 AP** **4007841 592301** **IR Quattro COM2** **4007841 000356** **IR Quattro DIM** **4007841 002718** **IR Quattro KNX** **4007841 002701** **IR Quattro DALI** **4007841 002749**
Dimensions (WxHxD)	120 x 120 x 76 mm
Square detection zone	- Presence 4 x 4 m max. (16 sqm) - Radially 5 x 5 m max. (25 sqm) - Tangentially 7 x 7 m max. (49 sqm)
Application	inside buildings
recommended installation height	2.5 m – 8 m ceiling height
Reach	mechanically adjustable
Sensor system	13 detection levels, 1760 switching zones
Functions set at DIP switches (KNX using ETS software)	DIP 1 Normal / test mode DIP 2 Semi-/ fully automatic mode DIP 3 Pushbutton / switch mode DIP 4 Pushbutton 'ON' / pushbutton 'ON'-'OFF' DIP 5 Constant-lighting control 'ON'-'OFF' (DIM/DALI)
Parallel connections	Master/slave Master/master
User-friendly setting capability	Teach-in (with optional RC3 remote control)
Light-level setting	10 – 1000 lux, ∞ / daylight DIM 100 – 1000 lux
IP rating	IP 20 (IP 54 with AP Box)
Safety class	II
Temperature range	0° C to +40° C
Housing	UV-resistant, paintable
Accessories	- Control PRO RC3 service remote control **EAN 4007841 000387** - RC4 DIM remote control **EAN 4007841 003012** - RC5 DALI remote control **EAN 4007841 592806** - RC6 KNX service remote control **EAN 4007841 593018** - RC7 KNX remote control **EAN 4007841 592912** - Surface-mounting adapter Control PRO AP Box **EAN 4007841 000363** - Clamping-type ceiling adapter Control PRO UP Box **EAN 4007841 000370** - Guard cage **EAN 4007841 003036** - Surface-mounting adapter Control PRO AP BOX KNX/DALI **EAN 4007841 003029**

Interfaces



COM1 COM1 AP	COM2	DIM
KNX	DALI	IMPULSER page 176

Surface-mounting adapter Control PRO AP Box KNX, DALI

Guard cage

For information on the interfaces specified, please turn to page 92 in this section.

FUNCTIONAL 36 month WARRANTY

STEINEL German Quality

Presence Control PRO HF 360

High-Frequency Presence Detector

- High-frequency sensor system
- Extremely slim and "invisible"
- Detection irrespective of temperature
- Reach is electronically adjustable and can be restricted on two sides
- Ideal for WCs, changing rooms, stairwells etc.
- System with an extremely long life
- All connection options available

A pioneer of sensor technology: Presence Control PRO HF 360

The Presence Control PRO HF 360 for the first time provides a new technology for presence detectors: the high-frequency sensor system. This technology was developed by STEINEL Professional – there's no one else in the world with an understanding of this technology that's as deep and goes as long way back as ours does. Cutting-edge, high-frequency technology guarantees that movement is detected absolutely anywhere. Reach is electronically adjustable. This model is exceptionally slim, making it hardly visible mounted on the ceiling. Not without reason: With no lens and because it doesn't immediately look like a presence detector, it's not a target for wilful damage (for vandals, say). 1 or 2 detection directions can be masked out for adjustment to the room situation. As the sensor works with an active detection system, movements are detected no matter what the temperature. High-frequency sensors work extremely swiftly, switching light 'ON' instantly (e.g. in WCs: light comes 'ON' in response to the very first movement of the door, meaning it's already 'ON' as soon as someone enters the room). The Presence Control PRO HF 360 model is available in a COM1, COM1 AP, COM2 as well as a 1 – 10 V DIM, KNX and DALI version.

Detection zone

Reach: 1 – 8 m all round
Angle of coverage: 360°
Angle of aperture: 140°

Our high-frequency sensors work at 5.8 GHz and 1 mW.

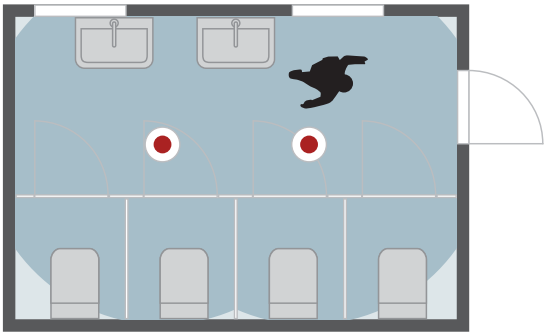
Accessories

Service remote control
RC3
RC6 KNX

Remote control
RC4 DIM

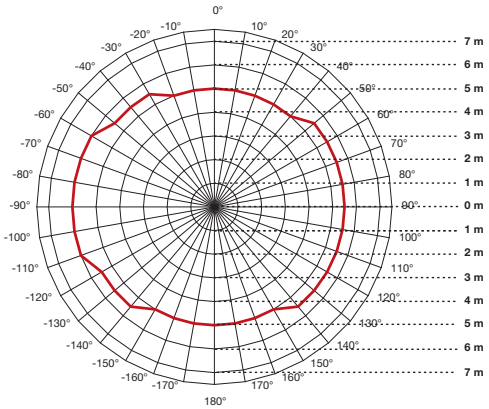
Remote control
RC5 DALI
RC7 KNX

Clamping-type
ceiling adapter
Control PRO UP Box

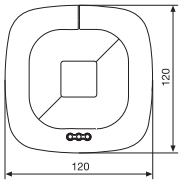


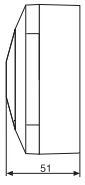
Presence Control PRO HF 360

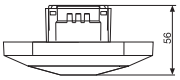
EAN	**HF 360 COM1** **4007841 002800** **HF 360 COM1 AP** **4007841 751302** **HF 360 COM2** **4007841 002848** **HF 360 DIM** **4007841 002831** **HF 360 KNX** **4007841 002824** **HF 360 DALI** **4007841 002817**
Dimensions (WxHxD)	120 x 120 x 56 mm
Point of application	inside buildings
recommended installation height	2.5 m – 3.5 m ceiling height
Detection angle	360° with 140° angle of aperture, also through glass, wood and stud walls; 1 or 2 detection directions can be masked for adjustment to room situation
Reach	8 m max. all round, electronically and infinitely variable
Sensor system	High-frequency 5.8 GHz, transmission power < 1mW
Functions set at DIP switches (KNX using ETS software)	DIP 1 Normal / test mode DIP 2 Semi-/ fully automatic mode DIP 3 Pushbutton / switch mode DIP 4 Pushbutton 'ON' / pushbutton 'ON'-'OFF' DIP 5 Constant-lighting control 'ON'-'OFF' (DIM/DALI)
Parallel connections	Master/slave Master/master
User-friendly setting capability	Teach-in (with optional RC3 remote control)
Light-level setting	10 – 1000 lux, ∞ / daylight DIM 100 – 1000 lux
IP rating	IP 20 (IP 54 with AP Box)
Safety class	II
Temperature range	0° C to +40° C
Housing	UV-resistant, paintable
Accessories	- RC3 service remote control **EAN 4007841 000387** - RC4 DIM remote control **EAN 4007841 003012** - RC5 DALI remote control **EAN 4007841 592806** - RC6 KNX service remote control **EAN 4007841 593018** - RC7 KNX remote control **EAN 4007841 592912** - Surface-mounting adapter Control PRO AP Box **EAN 4007841 000363** - Clamping-type ceiling adapter Control PRO UP Box **EAN 4007841 000370** - Guard cage **EAN 4007841 003036** - Surface-mounting adapter Control PRO AP Box KNX/DALI **EAN 4007841 003029**



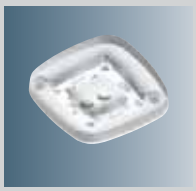
Presence Control PRO HF 360, installation height 2.80 m
red = radially







Surface-mounting adapter Control PRO AP Box (IP 54)



Surface-mounting adapter Control PRO AP Box KNX, DALI

Guard cage

COM1 COM1 AP | COM2 | DIM

KNX | DALI

For information on the interfaces, please turn to page 92 in this section.

FUNCTIONAL 36 month WARRANTY

STEINEL German Quality

Presence Control PRO Dual HF

High-Frequency Presence Detector for Corridors

- Ideal corridor sensor using high-frequency technology
- Reliable detection over up to 20 m
- Reach electronically adjustable for both directions together
- Detection irrespective of temperature
- Ideal for detecting radial movement towards the sensor
- Ideal in corridors of normal ceiling height (hotel landings, halls and passageways at home, etc.)

Lighting automation perfected: Presence Control PRO DUAL HF

This product uses high-frequency technology that differs from the one used by the Presence Control PRO HF 360: DUAL HF with dual directional characteristic. Landings in hotels, corridors in schools and office buildings etc. are typical areas that lend themselves to automatic lighting control. But so far, there's been no sensor that could really cope with the job satisfactorily. That's a bold claim, but one that can be explained in physical terms. In corridors, most people walk towards the sensor (radially). Because of the direction they walk in, this is where infrared sensors installed at normal ceiling height are pushed to their limits because the probability of someone crossing 2 switching zones is rare and only happens late on. Attempts can be made to improve this situation by using special lenses, but at the end of the day it's the laws of physics that count. High-frequency technology, in contrast, even prefers a radial walking direction because the signal generated is even greater. The DUAL HF sensor is the first system to be featured in our range that uses 2 special HF-sensors to watch over both directions in a corridor from the ceiling: providing reliable detection over up to 24 m! Truly unique! Reach can be proportionally reduced in both directions all electronically. This model is available in the COM1, COM1 AP, KNX, DALI and 1 – 10 V DIM connecting options.

Detection zone

Max. reach: 3 –10 m
in each direction, infinitely adjustable

Our high-frequency sensors work at 5.8 GHz and 1 mW.

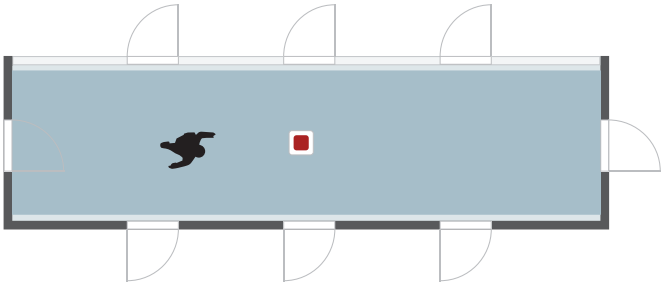
Accessories

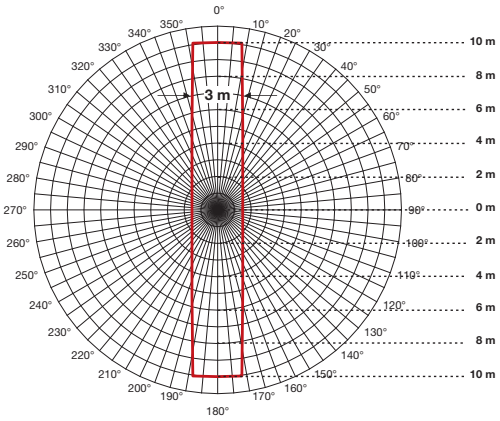
Service remote control
RC3
RC6 KNX

Remote control
RC4 DIM

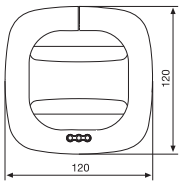
Remote control
RC5 DALI
RC7 KNX

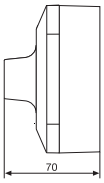
Clamping-type ceiling adapter
Control PRO UP Box

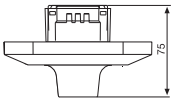




Presence Control PRO Dual HF, installation height 2.8 m, indoor corridor situation, radial walking direction



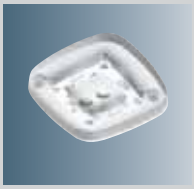




Presence Control PRO DUAL HF360

EAN	**DUAL HF COM1** 4007841 002978 **DUAL HF COM1 AP** 4007841 590703 **DUAL HF DIM** 4007841 002985 **DUAL HF KNX** 4007841 002992 **DUAL HF DALI** 4007841 003005
Dimensions (WxHxD)	120 x 120 x 76 mm
Point of application	inside buildings
recommended installation height	2.5 m – 3.5 m ceiling height
Detection angle	360° with 140° angle of aperture, also through glass, wood and stud walls
Reach	10 x 3 m max. in each direction, electronically and infinitely adjustable
Sensor system	High-frequency 5.8 GHz, transmission power < 1mW
Functions set at DIP switches (KNX using ETS software)	DIP 1 Normal / test mode DIP 2 Semi-/ fully automatic mode DIP 3 Pushbutton / switch mode DIP 4 Pushbutton 'ON' / pushbutton 'ON'-'OFF' DIP 5 Constant-lighting control 'ON'-'OFF' (DIM/DALI)
Parallel connections	Master/slave Master/master
User-friendly setting capability	Teach-in (with optional RC3 remote control)
Light-level setting	10 – 1000 lux, ∞ / daylight DIM 100 – 1000 lux
IP rating	IP 20 (IP 54 with AP Box)
Safety class	II
Temperature range	0° C to +40° C
Housing	UV-resistant, paintable
Accessories	- RC3 service remote control **EAN 4007841 000387** - RC4 DIM remote control **EAN 4007841 003012** - RC5 DALI remote control **EAN 4007841 592806** - RC6 KNX service remote control **EAN 4007841 593018** - RC7 KNX remote control **EAN 4007841 592912** - Surface-mounting adapter Control PRO AP Box **EAN 4007841 000363** - Clamping-type ceiling adapter Control PRO UP Box **EAN 4007841 000370** - Guard cage **EAN 4007841 003036** - Surface-mounting adapter Control PRO AP Box KNX/DALI **EAN 4007841 003029**

Surface-mounting adapter Control PRO AP Box (IP 54)



Surface-mounting adapter Control PRO AP Box KNX, DALI

Guard cage

COM1 COM1 AP	DIM	IMPULSER
KNX	DALI	

Page 176

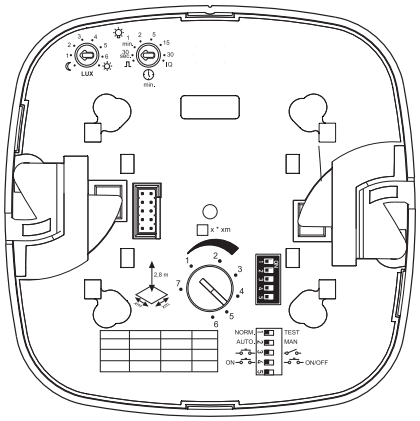
For information on the interfaces, please turn to page 92 in this section.

FUNCTIONAL 36 month WARRANTY

STEINEL German Quality

Presence Detector Interfaces/Operation

COM1/COM1 AP (Switching Light)



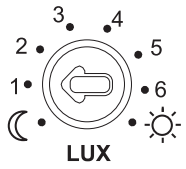
	COM1	COM1 AP
	Presence Control PRO	
Voltage	230 – 240 V, 50 Hz/60 Hz	
Output	Relay 230 V - Resistive load 2000 W max. (cos φ = 1) - 1000 VA max. (cos φ = 0.5) - Max. 'ON' current 800 A/200 µs - 30 x (1 x 18 W), 25 x (2 x 18 W) - 25 x (1 x 36 W), 15 x (2 x 36 W) - 20 x (1 x 58 W), 10 x (2 x 58 W) Pay attention to specific 'ON' currents of electronic ballasts. A relay or contactor must be provided on line side for higher switching capacities.	
Time setting	30 sec. – 30 min., pulse mode (approx. 2 sec.), IQ mode (automatic adjustment to usage profile)	

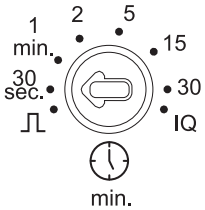
Presence Detector Network

STEINEL Professional offers you all the customary connection options. Straightforward and efficient, they provide the means of interconnecting presence detectors to create entire, automatically controlled lighting systems. From COM1 and COM2, KNX, DALI and DIM interface, right through to interconnecting presence detectors using our Impulser system, STEINEL Professional covers the entire range of connection options. Interfaces are simply selected exactly as required for the chosen models to provide technically perfected lighting automation tailored to the specific application.

COM1 and COM1 AP interfaces are available for the following sensors:

- IR Quattro
- IR Quattro HD
- HF 360
- DUAL HF





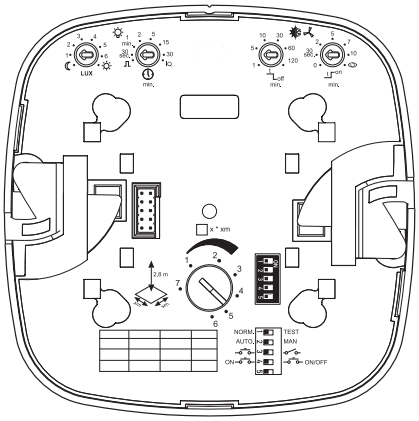
COM1/COM1 AP (surface-mounting) interface is only responsible for switching light 'ON' and 'OFF'.

Lighting controller
Operating in response to ambient brightness and the presence of persons, the lighting controller switches light 'ON' when it's needed and 'OFF' again when it isn't. Light is only switched 'ON' when it's needed. Avoiding any wastage of energy and unnecessary costs.

Brightness level potentiometer for light output
When ambient light falls below the preselected brightness level, the detector switches artificial light 'ON' whenever someone is present. Brightness level is set on a scale from 1 – 6, with these levels reflecting typical room situations. Alternatively, day or night-time mode can be selected. Using the RC3 service remote control, current brightness level can be programmed in (teach-in mode) as the switching threshold.

Stay-'ON' time potentiometer for light output
Lighting stay-'ON' time indicates the time light stays 'ON' for until switching 'OFF' again after the last detected movement. A pulse mode activating any staircase lighting time switch and the IQ mode are provided as special functions. The IQ mode automatically matches stay-'ON' time to suit room and usage situation.

COM2 (Switching Light & HVA)



	COM2
	Presence Control PRO
Voltage	230 – 240 V, 50 Hz/60 Hz
Power Switching contact 1	Relay 230 V - Resistive load 2000 W max. (cos φ = 1) - 1000 VA max. (cos φ = 0.5) - Max. 'ON current 800 A/200 µs - 30 x (1 x 18 W), 25 x (2 x 18 W) - 25 x (1 x 36 W), 15 x (2 x 36 W) - 20 x (1 x 58 W), 10 x (2 x 58 W) Pay attention to specific 'ON' currents of electronic ballasts! A relay or contactor must be provided on line side for higher switching capacities.
Power Switching contact 2	Presence - 230 W max./230 V - 1A max. (cos φ = 1) for HVA (heating/ventilation/air-conditioning)
Time setting Switching contact 1	30 sec. – 30 min., pulse mode (approx. 2 sec.), IQ mode (automatic adjustment to usage profile)
Time setting Switching contact 2	0 sec. – 10 min. switch-'ON' delay 1 min. – 2 h stay-'ON' time automatic room surveillance

The COM2 interface is available for the following sensors:

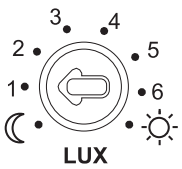
- IR Quattro
- IR Quattro HD
- HF 360

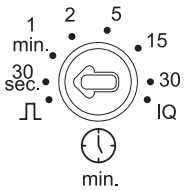
COM2 is the interface for using the presence detector to control heating, ventilation and air-conditioning in addition to lighting. This way, all room services can be managed conveniently and with maximum energy efficiency.

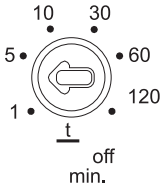
Lighting controller
Operating in response to ambient brightness and the presence of persons, the lighting controller switches light 'ON' when it's needed and 'OFF' again when it isn't. Light is only switched 'ON' when it's actually required. Avoiding wastage of energy and unnecessary costs.

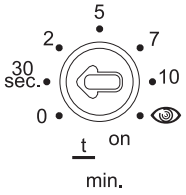
HVA control
Heating, ventilation and air-conditioning systems are controlled from the HVA output. This only switches systems 'ON' and 'OFF' in relation to the presence of persons since heating, ventilation and air-conditioning need to be provided even if daylight is bright enough. If a room is not being used any more, heating, ventilation and air-conditioning can be switched off to save energy and costs.

Brightness threshold potentiometer for light output
When ambient light falls below the preselected brightness level, the detector switches artificial light 'ON' whenever someone is present. Brightness level is set on a scale from 1 – 6, with these levels reflecting typical room situations. Alternatively, day or night-time mode can be selected. Using the RC3 service remote control, the current brightness level can be programmed in (teach-in mode) as the switching threshold.









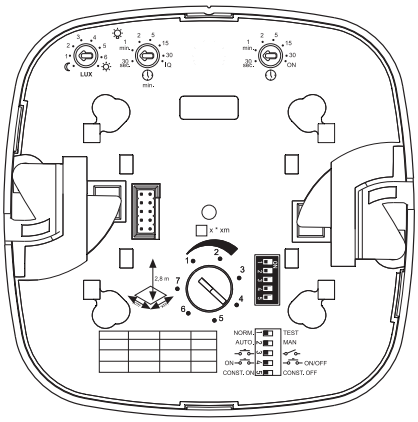
Stay-'ON' time potentiometer for light output
The light output's stay-'ON' time defines how long light is set to stay 'ON' for after the last movement is detected. A pulse mode activating any staircase lighting time switch and the IQ mode are provided as special functions. The IQ mode automatically matches the stay-'ON' time to suit any particular room situation and its usage.

Stay-'ON' time potentiometer for HVA output
The HVA output controls interfaced actuators in relation to presence as heating, ventilation and air-conditioning need to stay 'ON' during the day too. The stay-'ON' time selected indicates how long the HVA output is to stay 'ON' for after the last detected movement.

Switch-'OFF' delay potentiometer for HVA output
The HVA output time delay provides the capability of setting a time delay of up to 10 minutes before switching the contact. It can be switched 'ON' immediately by selecting the 0 seconds setting. The room surveillance function provides the means of activating the HVA switching contact only when the room is being used. The actuator only switches in when many movements are being detected. This way, for example, taking a quick look into a room leaves the actuator 'OFF'.

Presence Detector Interfaces/Operation

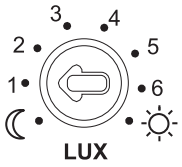
1 – 10 V DIM (Switches and Controls Light):

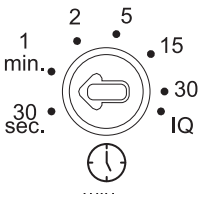


	DIM
	Presence Control PRO
Voltage	230 – 240 V, 50 Hz/60 Hz
Output	Relay 230 V - Resistive load 2000 W max. (cos φ = 1) - 1000 VA max. (cos φ = 0,5) - Max. 'ON' current 800 A/200 µs - 30 x (1 x 18 W), 25 x (2 x 18 W) - 25 x (1 x 36 W), 15 x (2 x 36 W) - 20 x (1 x 58 W), 10 x (2 x 58 W) Pay attention to specific 'ON' currents of electronic ballasts! A relay or contactor must be provided on line side for higher switching capacities.
Time setting	30 sec. – 30 min., IQ mode (automatic adjustment to the usage profile)
Control output	1 – 10 V, 50 electronic ballasts max. (100mA max.)
Basic brightness	0 sec. – 30 min., 10 %

The DIM interface is available for the following sensors:

- IR Quattro
- IR Quattro HD
- HF 360
- DUAL HF



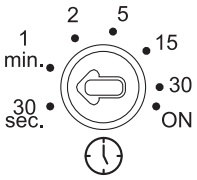


The 1 – 10 V DIM interface allows you to control light by means of the constant-lighting controller and activated basic brightness.

Lighting controller
The preselected brightness level indicates the level of light that's to be maintained in a room all the time. The basic brightness function provides the capability of selecting a basic lighting level of 10% after the stay-'ON' time elapses. It can be switched 'ON' for safety purposes or to show the way for a specific period, or if ambient light falls below the brightness threshold.

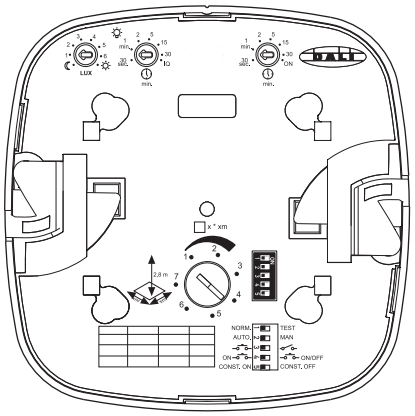
Brightness threshold potentiometer for light output
When ambient light falls below the preselected brightness level, the detector switches artificial light 'ON' whenever someone is present. Brightness level is set on a scale from 1 – 6, with these levels reflecting typical room situations. Alternatively, day or night-time mode can be selected. Using the RC3 service remote control, current brightness level can be programmed in (teach-in mode) as the switching threshold.

Stay-'ON' time potentiometer for light output
The light output's stay-'ON' time indicates the time light stays 'ON' for until switching 'OFF' again after the last detected movement. A pulse mode activating any staircase lighting time switch and the IQ mode are provided as special functions. The IQ mode automatically matches the stay-'ON' time to suit the room and usage situation.



Stay-'ON' time potentiometer for basic brightness
When ambient light falls below the selected brightness threshold, this function provides basic illumination for the duration of the stay-'ON' time that's set. It is dimmed to 10% of maximum light intensity. As soon as a person enters the scene, the detector switches either to 100% light intensity (constant-lighting controller 'OFF') or adjusts to the preselected brightness level (constant-lighting controller 'ON'). Once movement is no longer being detected, the detector dims back to basic brightness after the stay-'ON' time expires. This is switched 'OFF' when stay-'ON' time (1 min. – 30 min.) has expired or the daylight component is sufficient to exceed the selected level of brightness. In the 'ON' setting, the detector switches basic brightness 'ON' and 'OFF' as soon as the level of light falls below the brightness threshold.

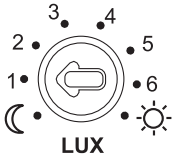
DALI (Digital DIM Interface for Controlling 2 Lighting Channels)



	Presence Control PRO
Voltage	230 – 240 V, 50 Hz/60 Hz
DALI output 1	2-core DALI control cable/broadcast
DALI output 2	2-core DALI control cable/broadcast
Controllable DALI electronic ballasts	12 DALI electronic ballasts per output mode
Time setting	30 sec. – 30 min., IQ mode
Basic brightness	0 sec. – 30 min., 10 %

The DALI interface is available for the following sensors:

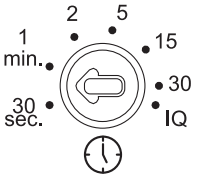
- IR Quattro
- IR Quattro HD
- HF 360
- DUAL HF

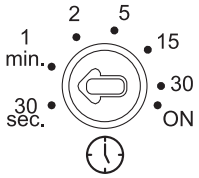


Controlling lighting through the Digital DALI interface provides the capability of managing light by means of a constant-lighting controller as well as leaving a basic brightness switched 'ON', e.g. in corridors or stairwells.

Lighting controller
The preselected brightness level indicates the level of light that is to be constantly maintained in the room. The basic brightness function provides the capability of selecting a basic lighting level of 10% after the stay-'ON' time elapses. It can be switched 'ON' for safety purposes or to show the way for a specific period or if ambient light falls below the brightness threshold. The DALI interface additionally provides a second light output that can be operated by remote control independently of the first light output. DALI also allows you to save and retrieve two different lighting situations by remote control as a means of quickly and easily providing recurring lighting scenarios (e.g. presentations) at the press of a button.

Brightness threshold potentiometer for light output
When ambient light falls below the preselected brightness level, the detector switches artificial light 'ON' whenever someone is present. The brightness level is set on a scale from 1 – 6, with these levels reflecting typical room situations. Alternatively, day or night-time mode can be selected. Using the RC3 service remote control, the current brightness level can be programmed in (teach-in mode) as the switching threshold.





Stay-'ON' time potentiometer for light output
The light output's stay-'ON' time indicates the time light stays 'ON' for until switching 'OFF' again after the last detected movement. A pulse mode activating any staircase lighting time switch and the IQ mode are provided as special functions. The IQ mode automatically matches the stay-'ON' time to suit the room and usage situation.

Stay-'ON' time potentiometer for basic brightness
When ambient light falls below the selected brightness threshold, this function provides basic illumination for the duration of the stay-'ON' time that is set. It is dimmed to 10% of maximum light intensity. As soon as a person is present, the detector switches either to 100% light intensity (constant-lighting controller 'OFF') or adjusts to the preselected brightness level (constant-lighting controller 'ON'). Once movement is no longer being detected, the detector dims back to basic brightness after the stay-'ON' time expires. This is switched 'OFF' when its stay-'ON' time (1 min. – 30 min.) has expired or the daylight component is sufficient to exceed the level of brightness selected. In the 'ON' setting, the detector switches basic brightness 'ON' and 'OFF' as soon as the level of light falls below the brightness threshold.

Presence Detector Interfaces/Operation

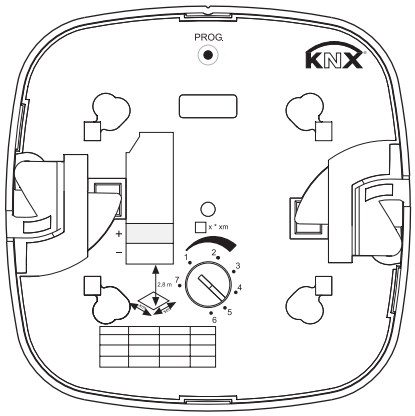
KNX (Digital BUS interface for 4 lighting controls & HVA (heating/ventilation/air-conditioning))

The last word in flexibility, convenience and security: KNX

KNX is a field bus, an upgrade of the EIB, and has the purpose of interconnecting individual components for automating building services. It provides the capability of using a single system for controlling services, such as lighting, heating, ventilation and air-conditioning, alarm and surveillance systems, interfaces for maintenance work and building protection etc. KNX is used for interconnecting various devices (via twisted cable pairs, wireless link, 230V mains power, IP/Ethernet). Data can then be communicated freely between individual components – irrespective of make or type of application. The various components can be configured at any time i.e. also retrospectively. Tailoring light management in this way produces a high level of efficiency and matches it to requirements.

IR remote controls

Two special IR remote controls are available as accessories for our presence detectors. These allow the user to make settings very easily for lighting, dimming as well as saving and retrieving up to 4 scenarios. Brightness measurement can be calibrated by remote control, detector parameters can also be changed without using the ETS software and a test mode can be started and terminated. In the KNX version, parameters changed by IR remote control can be read via the bus.



	Presence Control PRO
KNX mains connection	24 V via KNX bus voltage
Settings	by means of ETS software or remote control
Lighting channels Light 1 – Light 4	Switching/dimming; Switching mode - constant-lighting control
Stay-'ON' time	IQ mode, 1 – 30 min., depending on presence and brightness
Light measurement	Mixed light
Basic brightness	OFF/ 10% – 50%
Stay-'ON' time	Basic brightness 'ON' duration, 1 – 30 min.
HVA output	depending on presence
Presence stay-'ON' time output	1 – 255 sec.
Switch-'ON' delay	Room surveillance, 1 – 30 min.
Stay-'ON' time	1 – 120 min.
Further outputs	Brightness level, photo-electric lighting controller

The KNX interface is available for the following sensors:

- IR Quattro
- IR Quattro HD
- HF 360
- DUAL HF

The Control PRO System presence detectors equipped with the KNX interface are capable of performing the following functions:

- Presence detection
- Controlling lighting with brightness control
- Controlling HVA

Presence detection
This function watches over a room. A signal is immediately sent out as soon the presence of a person is reliably detected and also as soon as presence stops being detected. This watchdog function can, for example, be inhibited during the day and only enabled at night for a specific duration as well as over the weekend.

Lighting controller
Operating in relation to ambient brightness and the presence of persons, the lighting controller switches light 'ON' when it's needed and 'OFF' again when it isn't. Light is only switched 'ON' when it's needed. Avoiding any waste of energy and unnecessary costs.

HVA controller
Heating, ventilation and air-conditioning systems are controlled using the HVA output. This only switches systems 'ON' and 'OFF' in relation to persons being present because heating, ventilation and air-conditioning need to be provided even if daylight is sufficient. When a room is not being used any more, heating, ventilation and air-conditioning can be switched off to save energy and costs.

Presence detector operating modes
One of the following operating modes needs assigning to the presence detector:

- Individual detector
- Main detector
- Secondary detector - master
- Main master in parallel mode
- Secondary master in parallel mode

Individual detector
Only one detector is installed in the room.

Master
Presence detection zone can be extended by connecting as many as 4 additional presence detectors (slaves) to the master via the bus. The main detector ascertains overall presence (is a person present in at least one of the detection zones?), controls lighting, heating, ventilation and air-conditioning for the entire room and sends the relevant objects.

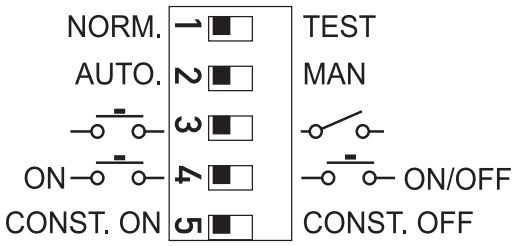
Slave
A slave delivers the "Presence 'ON'" and "Presence 'OFF information to the main detector.

Main master in parallel mode
As many as 4 secondary masters in parallel mode can be connected to a master in parallel mode. These provide independent lighting management with brightness control for their specific detection zone. The main detector ascertains overall presence (is a person present in at least one of the detection zones?), controls lighting, heating, ventilation and air-conditioning for the entire room and sends the relevant objects.

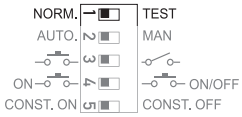
Secondary master in parallel mode
A secondary master in parallel mode delivers its own detection zone's "Presence 'ON'" and "Presence 'OFF'" information to the main detector and provides presence-governed lighting management with brightness control for its specific detection zone.

Presence Detector Interfaces/Operation

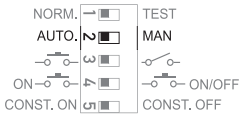
DIP Switches



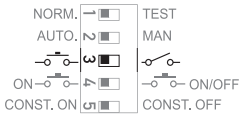
The functions of the DIP switches apply to all connection options.



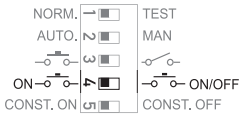
Normal/test-mode DIP switches
The test mode has the purpose of checking for proper operation as well as for setting and pacing out the detection zone. On detecting presence, the presence detector switches the load 'ON' for approx. 8 seconds. In addition, the blue indicator LED on the presence detector instantly shows that a detection has been made, permitting load-free testing. In the normal operating mode, the presence detector operates on the basis of the functions and values set by potentiometer, DIP switch and remote control.



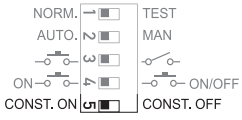
Fully/semi-automatic mode DIP switches
In the fully automatic mode, the detector switches 'ON' when movement is detected and ambient light falls below the brightness threshold selected. Light is automatically switched 'OFF' when movement is no longer being detected and the stay-'ON' time selected has elapsed or there is sufficient daylight. Working as a semi-automatic unit, the detector only switches 'ON' and automatically 'OFF' again after manually operating an external button or switch.



Button/switch DIP switches
A separate "S" terminal allows an external button or switch to be connected to the presence detector. To evaluate the signal, the detector needs to know whether an external button or switch is connected. This can be used for operating the detector as a semi-automatic unit and for manually overriding it at any time (4h 'ON', 4h 'OFF').



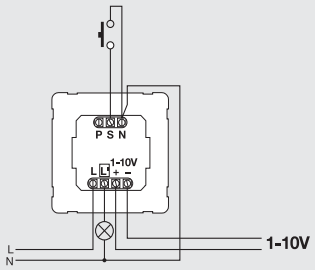
'ON' – 'ON'/'OFF' DIP switches
Two options are provided here: ON/OFF means that the detector can be switched 'ON' and 'OFF' manually at any time. 'ON', in contrast, means it can only be switched 'ON' manually. This prevents light from being switched 'OFF' in areas requiring permanent security lighting or, for example, when using a detector as a staircase lighting time switch.



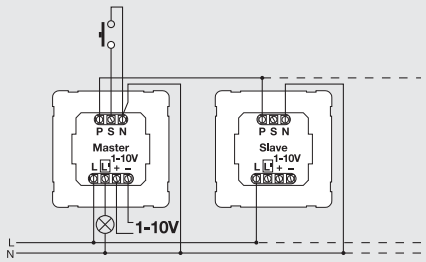
Constant-lighting control – 'ON'/'OFF' DIP switches
Constant-lighting control provides a constant level of light in offices, classrooms, conference rooms etc. The detector measure the prevailing level of daylight and switches in a component of artificial light to achieve the desired level of brightness. As daylight changes, the switched-in artificial lighting component is adjusted accordingly. In addition to the daylight component, artificial light is also switched 'ON' and 'OFF' in relation to whether or not persons are present.

Interconnected master/master – master/slave system
The presence detectors also provide the option of an interconnected master/master and master/slave system. In the case of an interconnected master/master system, the detection zone is extended by the interconnected detectors, each switching a load in accordance with specific master settings. The slaves in an interconnected master/slave system merely extend the detection zone and report presence to the master. The connected load is only switched 'ON' and 'OFF' on the basis of the master's settings.

DIM detector

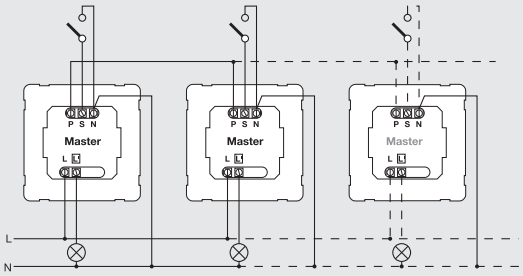


DIM detector with slave

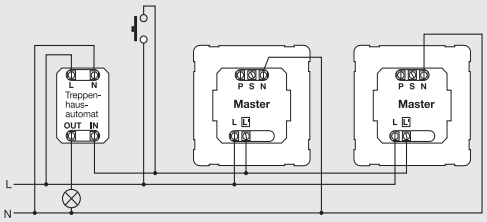


Wiring Diagrams

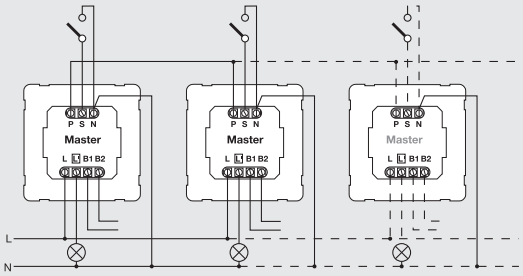
Master/master COM1



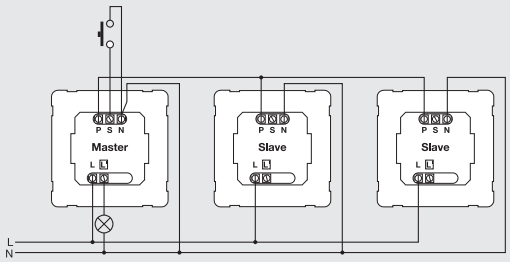
2 detectors connected to external staircase lighting time switch
Old building/refurbishment project



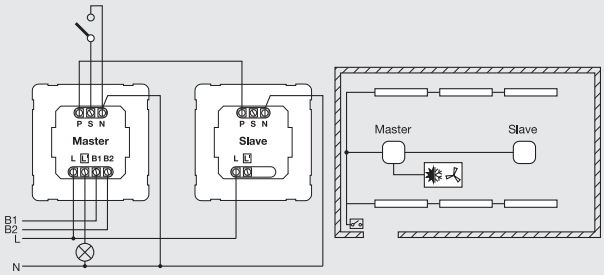
Master/master
COM1/COM2



Detector connected to staircase lighting time switch

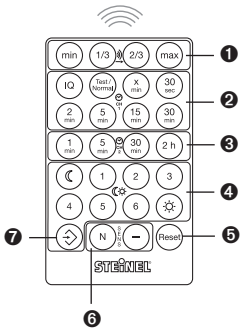


Master/slave



Accessories for Presence Control PRO

Remote Controls



RC3 service remote control
EAN 4007841 000387
RC6 KNX service remote control
EAN 4007841 593018

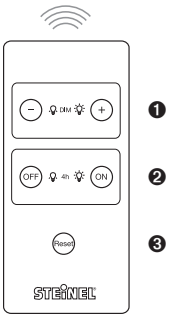
❶ Reach setting HF
❷ Stay-'ON' time, switching contact 1, light
❸ Stay-'ON' time, switching contact 2 (HVA)
❹ Twilight setting
❺ Reset function at potentiometer and DIP settings
❻ Reduce sensitivity (HF only, cf. RS PRO)
❼ Teach IN

suitable for Presence Control PRO
- IR Quattro HD
- IR Quattro
- HF 360
- Dual HF 360

RC3 in conjunction with COM 1, COM 1 AP, DIM and DALI interface
RC6 KNX in conjunction with KNX interface

RC4 DIM user remote control
EAN 4007841 003012

❶ Light dimming function
❷ Light 'ON'/'OFF' (4 hours)
❸ Reset function at potentiometer and DIP settings



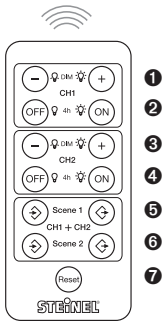
suitable for Presence Control PRO
- IR Quattro HD
- IR Quattro
- HF 360
- Dual HF 360

each with DIM interface

You will find further information on operation at:
www.steinel.de

RC5 DALI user remote control
EAN 4007841 592806
RC7 KNX user remote control
EAN 4007841 592912

❶ Reduce DIM level, increase output 1
❷ Permanent 'OFF'/'ON', output 1 (4 hours)
❸ Reduce DIM level, increase output 2
❹ Permanent 'OFF'/'ON', output 2 (4 hours)
❺ Save lighting scenario 1
(value for output 1/2 is saved)
❻ Save lighting scenario 2
(value for output 1/2 is saved)
❼ Reset function at potentiometer and
DIP settings

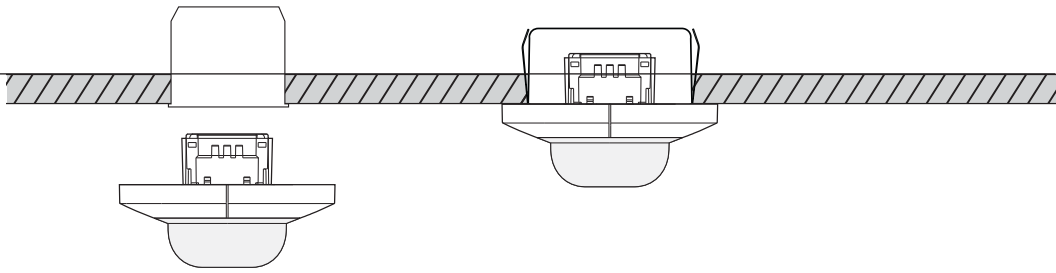


suitable for Presence Control PRO
- IR Quattro HD
- IR Quattro
- HF 360
- Dual HF 360

RC5, in each case with DALI interface
RC7, in each case with KNX interface

FUNCTIONAL 36 month WARRANTY
STEINEL German Quality
CE

Accessories for Presence Control PRO

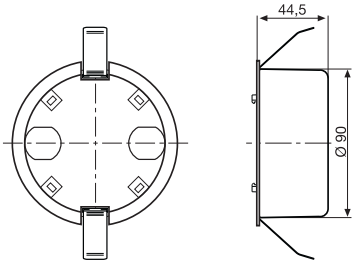


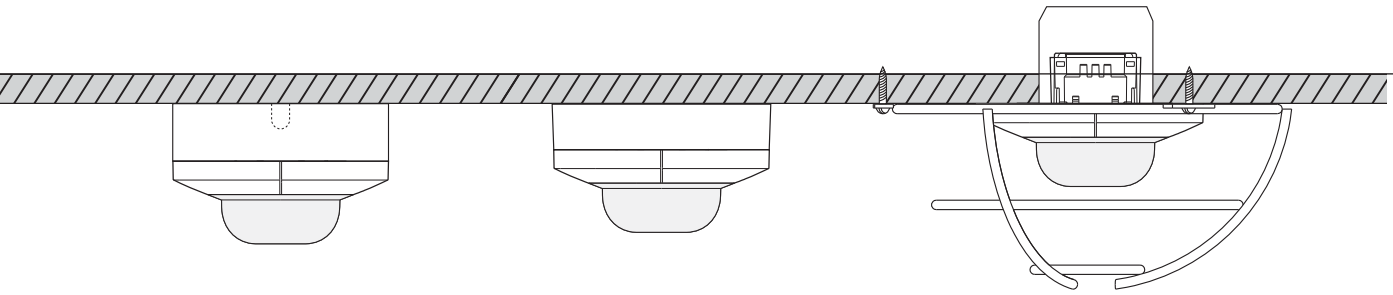
Standard installation
The products are intended as standard for concealed installation in flush-mounting boxes.

Clamping-type ceiling adapter Control PRO UP Box
EAN 4007841 000387
The clamping-type adapter can be used for fitting the chosen detector directly in the ceiling. Installation is fast and straightforward, no additional screw-mounting or fixing necessary.

suitable for Presence Control PRO
- IR Quattro HD
- IR Quattro
- HF 360
- Dual HF 360

- COM1
- COM2
- DIM
- KNX
- DALI





Surface-mounting adapter Control PRO AP Box (IP 54)
EAN 4007841 000363
The surface-mounting adapter Control PRO AP Box is provided for facilitating surface-mounting. With four-wire cable entry and large wiring compartment, installation is convenient and requires hardly any no effort. It provides protection rating to IP 54.

suitable for Presence Control PRO
- IR Quattro HD
- IR Quattro
- HF 360
- Dual HF 360

- COM1
- COM2
- DIM

Surface-mounting adapter Control PRO AP Box KNX, DALI
EAN 4007841 003029
Also featuring four-wire cable entry and a large wiring compartment, the surface-mounting adapter is suitable for surface-mounting the KNX and DALI connection options.

suitable for Presence Control PRO
- IR Quattro HD
- IR Quattro
- HF 360
- Dual HF 360

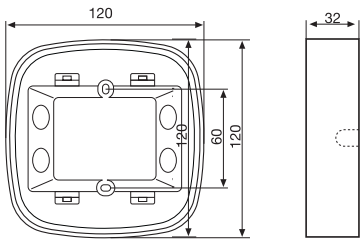
- KNX
- DALI

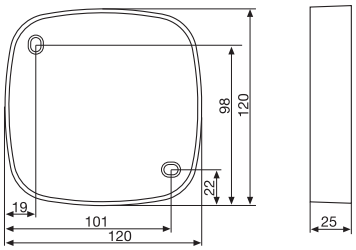
Guard cage Control PRO
EAN 4007841 003036
It provides protection from damage, e.g. from balls or vandals.

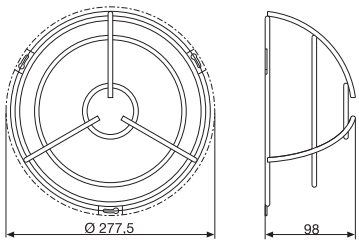
suitable for Presence Control PRO
- IR Quattro HD
- IR Quattro
- HF 360
- Dual HF 360

- COM1
- COM2
- DIM
- KNX
- DALI

- Air Control
- Fire Control







Fire Control PRO

Smoke Detector

- Identifying hazards
- Warning people
- Saving life

- 2 detection sensor variables: smoke and temperature (optical/thermal)
- Light sensor for low-battery warning during the day (loud acoustic warning signal)
- 24 h auto-calibration
- Microprocessor-controlled signal evaluation
- Symmetrical-flow smoke chamber
- Temperature-drift correction
- Cyclical self-test function
- Also suitable for kitchens and bathrooms
- Design co-ordinated with presence detector for a neat ceiling look

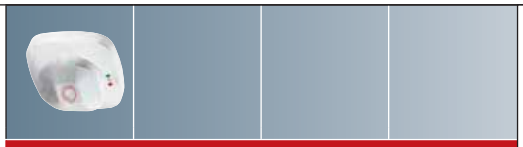
The new generation of safety: Fire Control

The Fire Control PRO is a state-of-the-art smoke detector neatly integrated in the Control PRO family from STEINEL Professional. As a DUAL sensor, the Fire Control PRO uses two detection methods for twice the safety: Smoke and temperature detection. Smoke is detected in a specially designed smoke chamber, temperature by a thermo-differential sensor.

It provides the capability of reliably detecting different types of fire, such as burning liquids or smouldering fires. This also makes the system less receptive to kitchen and bathroom vapours, dust or electrical interference pulses.
The Fire Control PRO benefits from processor-controlled signal evaluation and drift compensation, preventing any triggering of false alarms to the greatest possible extent.

Indicated status:
OK / Fire detected /
230 V

Smoke detection
deactivated for 15 min.
or test mode



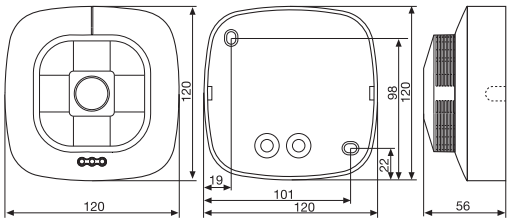
Fire Control PRO

EAN	**FC PRO** 4007841 590406 **FC PRO Lithium** 4007841 000073
Dimensions (WxHxD)	120 x 120 x 56 mm
Rated voltage	230 V
Battery	9-V MH block battery, or 9-V long-life lithium block battery
Battery failure signal	30 s cycle, 30 days
Acoustic alarm	85 dB (A)
Maximum detection zone	80 m²
Relay contact	1 A 250 V
IP rating	IP 40
Safety class	II
Operating temperature	0° C to 40° C
Storage temperature	-5° C to +70° C
Interconnectability	up to 30 Fire Control PRO

Smoke detection can be deactivated for 15 minutes by function button (e.g. in the event a large controlled quantity of smoke coming from a saucepan); with temperature detection remaining active. To begin with, a light sensor only allows the acoustic low-battery warning to sound during the day. Only when battery capacity becomes critical is a warning also given at night. In addition to the 9-V battery (lithium or metal hydride), the Fire Control PRO smoke detector also comes with a 230-V connection and a communication port for interconnecting detectors. Needless to say, the STEINEL Fire Control is VDS-tested and has a self-test feature.

Smoke detectors are becoming compulsory in the home! Some 50 million of them will need to be installed over the next few years to make up the deficit.

FUNCTIONAL 36 month WARRANTY · STEINEL German Quality · CE · VdS



Air Control PRO Signal

Air-Quality Sensor

AC PRO Signal

- Air-quality sensor matching presence detector
- High energy-saving potential from on-demand ventilation
- Automatic, maintenance-free CO_2 measurement
- Controls air-conditioning (ventilation, window opening, co-ordinated heating control etc.)
- Provides information on air quality and the need for fresh air (visually and acoustically)
- Also suitable for retrofitting in training, conference, classrooms, offices and the home
- Acoustic warning every 5 min. above 1500 ppm (can be deactivated)
- Self-calibrating (to fresh air and air pressure/altitude)
- Indicator with 3 LED's (green, amber, red)
  Green: < 1000 ppm
  (light 'ON' permanently, can be switched 'OFF')
  Orange:1000 ppm – 1500 ppm
  (light 'ON' permanently)
  Red: > 1500 ppm (flashing)

It's a matter of quality: Air Control

In addition to managing light, some of our presence detectors also provide the capability of controlling heating, ventilation, air-conditioning in relation to whether or not persons are present. This makes a lot of sense from an energy point of view as it can save large quantities of it: If nobody's there, why keep the heating on all the time.

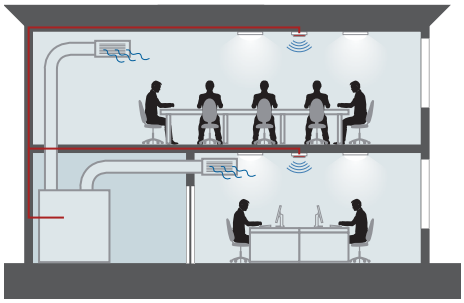
Yet, gradually, another aspect's creeping into the focus of discussion: air quality or the content of CO_2 in room air. Ventilation systems require energy and the air that's exchanged needs either heating or cooling. But the mere presence of persons is not enough for air to be exchanged through a ventilation system or automatically controlled window. What's important is the quality of air.

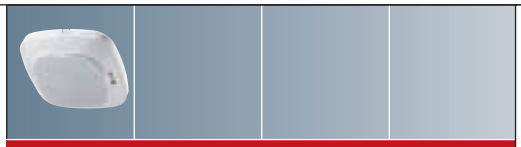
People inhale O_2 and exhale CO_2. This is a situation everyone's familiar with: as the meeting wears on, concentration lapses and, at some point everybody's tired, and later on people start to get a headache. The reason for this is the content of CO_2 in room air. Unfortunately, this is something people only notice when it's far too late to remedy the situation and actively provide ventilation. This is where our Air Control sensor comes in - because it measures the amount of CO_2 that's present in room air.

CO_2 meas. range	Controls
400 – 2000 ppm	

CO_2 measurement range 400 – 2000 ppm with an accuracy of +/- 150 ppm

The LED traffic-light logic indicates the quality of room air





AC PRO Signal

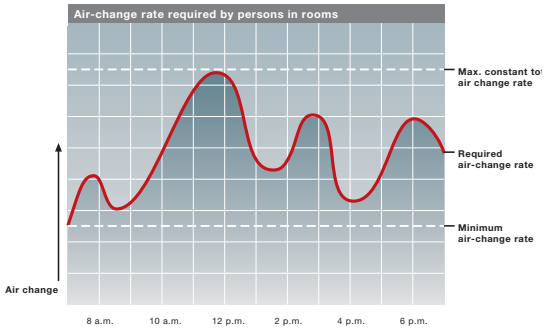
EAN	**AC PRO Signal UP (surface-mounting) 4007841 592608** **AC PRO Signal AP (concealed) 4007841 592707**
Dimensions (WxHxD)	AC PRO Signal UP 120 x 120 x 53 mm AC PRO Signal AP 120 x 120 x 49 mm
Voltage	230 VAC, electrically isolated power supply unit
CO_2 measurement range	400 – 2000 ppm
CO_2 accuracy	5% of measurement reading ± 150ppm (at 25°C and 1013 hPa)
Indicated by LED	Green: up to 1000 ppm (light 'ON' permanently, can be switched 'OFF') Amber: from 1000 ppm CO_2 to 1500 ppm CO_2, (light permanently 'ON') Red: over 1500 ppm CO_2 (flashing) Acoustic warning signal: every 5 min. above 1500 ppm CO_2, can be switched 'OFF'
Temperature dependence of CO_2	< 5 ppm per °C
Temperature (storage)	- 40°C to + 70°C
Relay (function)	Relay ON from 1200ppm Relay OFF from 800ppm (with falling CO_2 concentration)
Response time (T90)	5 min
Signal output	HVA equipment connected by means of floating base-isolated output; 230 W max.
Housing	Standardised concealed box
IP rating	IP 20 (shock hazard protection for indoors)
Safety class	II

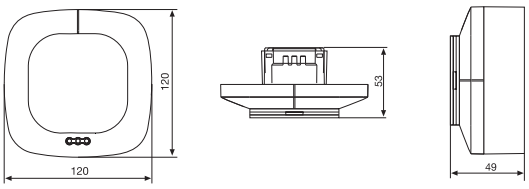
A traffic-light system of LED's indicates air quality to persons present in a room: green, amber and red. On red, a short acoustic warning signal additionally warns every 5 minutes.

The product also provides a floating switching output for connecting an automatic ventilation system. Ventilation is switched on in the amber range and only switches off again when the light switches to green. This new system can be used for controlling ventilation systems extremely efficiently, optimising the use of energy.

But the Air Control sensor without automatic ventilation is also an extremely recommendable option in meeting rooms, training rooms, conference rooms etc. for improving concentration and performance.

The green LED and acoustic warning signal can be deactivated by DIP switch. This also makes the system ideal for use in bedrooms and hotel rooms. The Air Control sensor is available as a surface-mounting and concealed version.





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