



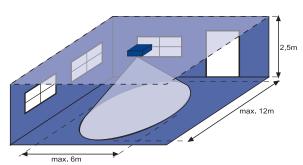


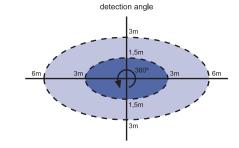


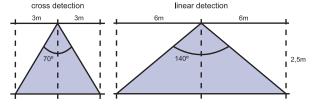
General description

Hidden movement detector for installation above false or technical ceilings. It is also possible to install it in brick walls or plasterboards. This device is oriented to substitute the ceiling 360° passive detectors, clearly overcoming their performances.

It is based on radio frequency technology, that allows it to pass through any kind of surface, except the metallic ones. Its hidden installation guarantees safety against non desired intrusions or vandalism. Moreover, it combines aesthetics and automation in a single installation. It allows a wide and easy parameterization, being suitable for lighting functions, as well as people detection and intruder control.







Technical information

Supply - 24Vcc through BUS KNX.

Consumption - 35mA @ 24Vcc.

Connections - BUS connection KNX (four poles terminal block).

Type of protection - IP20. Extra low security voltage SELV, 24V direct current.

Temperature range - Running: -10°C a 55°C / Storage: -30°C a 60°C / Transport: -30°C a 60°C.

Size / weight - 25x45x65mm. / 115g.

Mount - over false ceilings or hidden in walls or bricks.

Standardization - for KNX.

Norm CE - According to the directives of electromagnetic compatibility and low voltage. EN 50090-2-2 / UNE-EN 61000-6-3:2007 / UNE-EN 61000-6-1:2007 / UNE-EN 61010-1.

Communication objects Table

Object	Name / Function	Length	DPT
0	Channel 1 - Detection event: Bit	1 bit	1.001
1	Channel 1 - Detection event: Byte	1 byte	5.010
2	Channel 1 - Detection event: Temperature	2 byte	9.001
3	Channel 1 - Enable / disable channel	1 bit	1.001
4	Channel 1 - Force remote detection	1 bit	1.001
5	Channel 1 - Remaining time (seconds)	1 byte	7.005
6	Channel 2 - Detection event: Bit	1 bit	1.001
7	Channel 2 - Detection event: Byte	1 byte	5.010
8	Channel 2 - Detection event: Temperature	2 byte	9.001
9	Channel 2 - Enable / disable channel	1 bit	1.001
10	Channel 2 - Force remote detection	1 bit	1.001
11	Channel 2 - Remaining time (seconds)	1 byte	7.005

Number of assignments: 33.

Communication objects description

[3][9] - 1 bit object to switch on or off each channel. By sending "1", the channel is enabled (movement detection), and by sending "0", disabled (stand by).

[4][10] - Remote activation: allows to emulate a detection without having detected movement previously. By sending "1", the detector is activated remotely performing the start detection event. Used for master / slave mode.

[5][11] - Allows to read the remaining time from the last detection; this is, time until detector performs the end detection event. In case of generating a new detection, time is rebooted, starting again the countdown. Time value will depend on timing (delay end of detection), indicated in the parameters of the detector. Maximum time range is [0, 65535] seconds.

[0][1][2] - Events communication objects of channel 1. The values sent for activation or deactivation events are indicated in parameters.

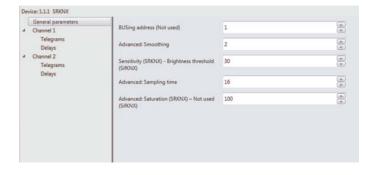
[6][7][8] - Events communication objects of channel 2. The values sent for activation or deactivation events are indicated in parameters.





Applied parameters

Parameters allows to perform a configuration of the detector according to the needings in each case. Next, you can see a detailed description of them:



General parameters

In this field appears the detection configuration parameters of the detector:

Address - Not used.

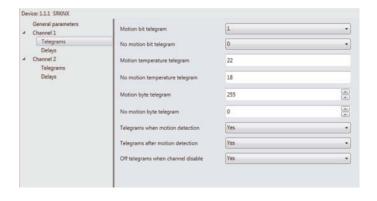
Advanced: smoothing - It is a detection filter. Sets the number of signals that must go beyond the programmed threshold (adjustment), or the saturation level programmed before the device considers a detection has happened between the interval of selected control cycles. Smoothing range is [0,10] and it must be allways less than control cycles /2. The greater the inserted value, the greater movement quantity required in order detector sets the detection. Value to be inserted, by default, is 2.

Sensitivity - Allows to set the detection level. Range is [0,100], being 0 minimum detection level and 100, maximum detection level. With high values, detector will be more sensitive to movement Adjustment modification will be affected from the ends of the cone detection to its vertical; this is, with small value adjustments, detector will lose more sensitivity at the ends of the detection area. Value to be introduced, by default, is 30.

Advanced: sampling time - It is the number of cycles taken as basis for establishing the shot when a movement occurs.

It can be described as the time (in cycles) in which there has to generate as many signals (buffering) as programmed for performing a detection. The range of the control cycles is [0,255], being 0 a sample cycle of minimum amplitude, and 255 a sample cycle of maximum amplitude.

Advanced: saturation - If a signal reaches the saturation level, sensor will activate without taking into account neither the control cycles nor buffering. It is useful to differentiate big movements from the small ones. The value could vary among 0 and 100%. If its use is non desired, set value should be 100%.



Channel 1/2 Telegrams

Motion bit telegram - Value sent in object 0/6 (DPT1.00X) when a motion is detected.

No motion telegram - Value sent in object 0/6 (DPT1.00X) after switch-off delay.

Motion byte telegram - Value sent in object 1/7 (Byte) when a motion is detected.

No motion telegram - Value sent in object 1/7 (Byte) after switch-off delay.

Motion temperature telegram - Value sent in object 2/8 (DPT9.002) when a motion is detected.

No motion temperature telegram - Value sent in object 2/8 (DPT9.002) after switch-off delay.

Telegrams when motion detection - Enables / disables sending On telegrams after a motion detection.

Telegrams after motion detection - Enables / disables sending Off telegrams if there is no motion within the switch-off delay.

Off telegrams after channel disable - Enables / disables sending Off telegrams after a channel is switched off.



Channel 1/2 Delays

Channel enable delay- The channel does not respond until the enable delay time set has elapsed.

Channel disable delay - The channel keeps detecting motion until the disable delay time set has elapsed.

Channel switch off delay - Time between the last motion detection and the sending of switch-off events. It is retriggered by new motion detections.

Remarks

Feed low voltage lines (BUS and inputs) in separate ducting to that of power (230V) and outputs to ensure there is enough insulation and avoid interferences.

Do not connect the main voltages (230 V) or any other external voltages to any point of the BUS.