

## ITR412-001 - HIGH BAY KNX PRESENCE SENSOR



Device	ITR412-001
Power Supply	21-30 V DC
Current Consumption	10 mA (dynamic)
	5 mA (static)
Output	2 x Lighting
	2 x HVAC
	1 x Alarm
Detection Range	360°, $\Phi$ 16m (install height 10m)
Sensitivity	4 steps via ETS
Type of Protection	IP 20
Temperature Range	Operation (-20°C...45°C)
Maximum Air Humidity	< 90 RH
Flammability	Non-flammable Product
Color	White
Dimensions	102x54 ( $\Phi$ xH)
Certification	KNX Certified
Configuration	Configuration with ETS

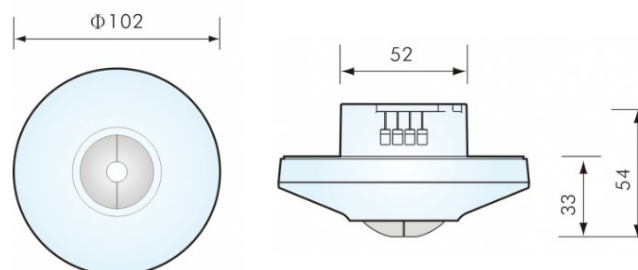
### DESCRIPTION

ITR412-001 - High Bay KNX Presence Sensor is a multi-functional presence light level and PIR sensor. ITR412-001's alarm, 2-level standby, ambient light appraisal and constant light control functions can be used to ensure comfortable life and energy saving. According to different application requirements, the sensor can be configured as the master-slave mode. Also, the sensor can be programmed using the most current ETS software. ITR412-001 is for highbay mounted between 2.5m to 10m height at proper locations.

### IMPORTANT NOTES

- Special Programming: ITR412-001 is designed for professional KNX installation. It only can be programmed by ETS software.
- Cable Connections: Ensure making correct connections for Black and Red wires.
- Voltage: The input voltage shall be 21-30VDC.
- Mounting Location: Installation at indoors, to avoid installation near the air-conditioner vent, and be away from the heat source.
- The tightening torque shall not exceed 0.2Nm.
- Avoid contact with liquids and corrosive gases.

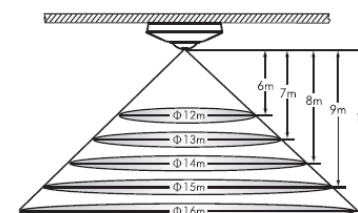
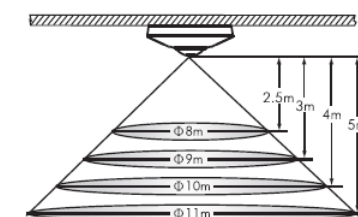
### DIMENSIONS



### FUNCTIONS

- ITR412-001 supports movement and LUX detection.
- Adjustable from approximately 10 Lux to  $\infty$  and Lux learning range: 10 Lux - 2000 Lux for both Lux1 & Lux2.
- Load On Time in Standby Mode: 3 precise adjustments: 5min, 10min, 15min and  $\infty$ .
- Load on Illumination in Standby Mode: 3 precise adjustments: 10%, 20%, 30% and OFF.
- Auto Off Time Adjustment: Adjustable from approximately 5 sec to 30 min.
- The sensor can be fitted into the European standard boxes such as surface mount and flush mount boxes.
- A red LED is equipped as an indicator for test triggering and a green LED is for indicating ETS installation. Moreover, the LED function can be disabled by ETS.
- 2 channels can be used for controlling more KNX devices simultaneously.

### DETECTION



## USEFUL INSTALLATION TIPS

As the sensor reacts to temperature changes, the following conditions should be avoided:



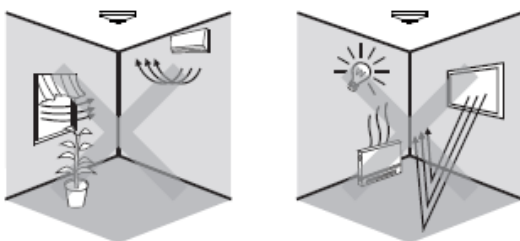
Avoid targeting the sensor toward the objects which may be swayed in the wind, such as curtain, tall plants, miniature garden, etc.



Avoid targeting the sensor toward the objects whose surfaces are highly reflective, such as mirror, glass and pool, etc.

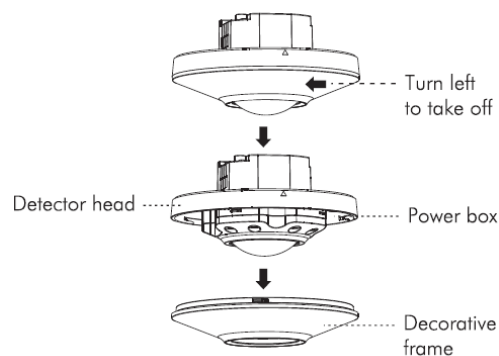


The sensor should be mounted away from heat sources such as air conditioning, lights, heating vents etc.

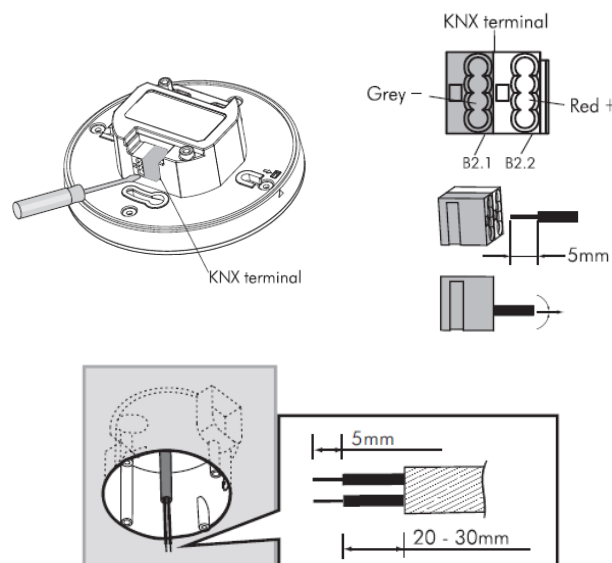


## MOUNTING

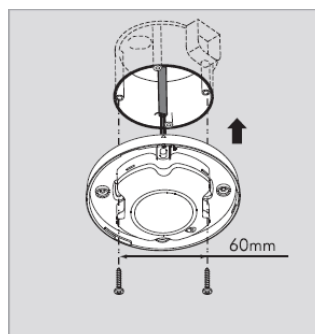
First, Take off decorative frame of ITR412-001. Then, Pull out KNX bus cable from standard european junction box.



Second, connect the bus cables and the bus terminal consists of two components with four terminal contacts each.



After that, please pay attention for correct wiring and fix the power box into European standard junction box with 2 screws.



Finally, fix the decorative frame and restore the power supply.

## OPERATIONS

The purpose of conducting walk test is to check and adjust the detection coverage. Set Time knob to "Test" for conducting walk test. Lux value is invalid in Test mode.

### Walk Test Process

⇒ Tester must be within the detection coverage.

⇒ Switch power on.

⇒ Detector take approx. 60 sec to warm up with load on, then turns off after warming up time.

⇒ Walk from outside across to the detection pattern until red LED and load turns on for approx. 2sec then off, the next trigger should be 2sec interval.

⇒ Adjust detector head aiming to the direction to be detected.

⇒ Adjust sensitivity and adjust time setting to change the switch off delay time.

### Usage of Lens Shield

Used Lens Shield	Covered Detection Range
None	Φ 32m
Small Segment	8.5" per piece
A + B	Φ 10m
A	Φ 14m

ITR410-003 has provided 3 lens of shields for masking the unwanted detection areas.

