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theRonda S360 Slave UP WH 2080530 theRonda S360 Slave UP GR 2080531

## 1. Product characteristics

- Passive infrared presence detector for ceiling installation
- Circular detection area 360°, up to  $\emptyset$  9 m (64 m<sup>2</sup>)
- Restriction of detection area with cover clips
- Detection sensitivity configurable
- Ready for immediate use due to factory presetting
- Test mode for checking function and detection area
- Extension of detection area via Master/Slave switching, a maximum of 10 detectors can be switched in parallel with each other
- Ceiling installation in flush-mounted box
- Surface mounting on ceilings possible with back box (option)
- User remote control "theSenda S" (option)
- Management remote control "SendoPro" (option)
- Installation remote control "theSenda P" (option)
- App remote control "theSenda B" (option) and corresponding app "theSenda Plug" (iOS/Android)

# 2. Security

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Danger of death through electric shock or fire!
Installation should only be carried out by a qualified electrician!

- Work on electrical systems may only be carried out by qualified electricians or by instructed persons under the guidance and supervision of a qualified electrician in accordance with the technical regulations applying to electricity!
- Comply with the country-specific safety regulations for work on electrical systems! Ensure absence of voltage in the cable before installation!
- The device is maintenance-free. If the device is opened or penetrated with any object, the guarantee lapses.

## 3. Proper use

The presence detector is intended for indoor installation. The presence detector is exclusively intended for the use as contractually agreed between the manufacturer and the user. Any other use is considered to be unacceptable. The manufacturer does not accept liability for any resulting damages.

# 4. Function

The slave presence detector is primarily used in offices and schools, as well as in homes, to extend the detection area. When someone is present, the presence signal is led via the P terminal to the master presence detector.

## 5. Detection area

The circular detection area of theRonda S presence detector covers an average detection area. Note that seated persons are detected in differently-sized areas. The recommended installation height is 2 m - 4 m. As installation height increases, the sensitivity of the presence detector decreases. The extent and distance between the active and passive zones of the presence detector also increases. The detection range is reduced as the temperature increases.

#### Seated persons:

The presence detector reacts very sensitively to the slightest movements. The details refer to smallest movements at table height (approx. 0.80 m). The detection sensitivity is reduced from an installation height of > 3 m. More pronounced movements are required for clear detection.



Installation height (A)	Across (t)	Frontal (r)	Seated (s)
2.0 m	Ø 7.0 m (38 m <sup>2</sup> )	Ø 2.5 m (5 m <sup>2</sup> )	Ø 2.5 m (5 m²)
2.5 m	Ø 7.0 m (38 m <sup>2</sup> )	Ø 3.0 m (7 m <sup>2</sup> )	Ø 3.0 m (7 m <sup>2</sup> )
3.0 m	Ø 8.0 m (50 m <sup>2</sup> )	Ø 4.0 m (13 m <sup>2</sup> )	Ø 4.0 m (13 m <sup>2</sup> )
3.5 m	Ø 8.0 m (50 m²)	Ø 4.0 m (13 m <sup>2</sup> )	_
4.0 m	Ø 9.0 m (64 m²)	Ø 4.0 m (13 m²)	-

All figures are guidance values.

# 6. Installation

### Flush-mounted fitting

The presence detector is flush-mounted using a size 1 standard flush-mounting installation socket.



## Ceiling installation

A ceiling installation unit 73A is available for simplified ceiling installation of the presence detector (see accessories). This also ensures cord grip and contact protection. The installation diameter is 72 mm (drill diameter 73 mm).



## Surface-mounted installation

A back box 110A is available for surface mounted installation (see accessories).



# 7. Switching

The slave presence detectors are used together with a master device in a master/slave combination.

#### Master/Slave parallel switching

If the detection area covered by one presence detector is insufficient (larger rooms), then up to 10 detectors can be operated in parallel by connecting the P terminals. In the process, presence detection is performed by all detectors together. The Master measures the brightness, operates the buttons and controls the lighting. Slaves are used as further detectors. They only provide presence information.



- Light measurement only with the Master
- Parameters are only set on the Master
- Switch up to 10 detectors in parallel
- Use the phase with the same phase for all detectors.

Master: theRonda S360-101 UP Slave: theRonda S360 Slave UP

## 8. Settings

The presence detector theRonda S does not have a potentiometer. The presence detectors are supplied with basic settings ready for operation. The specifications are guidance values. Management remote control "SendoPro 868-A", service remote control "theSenda P" and app remote control "the-Senda B" (with "theSenda Plug" app) are available for startup. They allow the remote adjustment of the setting values.

# Parameters and control commands via remote control

The following parameters can be checked or changed via the remote control for support during start-up as well as servicing:

Parameter	Description	Can be queried by SendoPro 868-A/ theSenda B (app)	SendoPro 868-A/	Can be changed by theSenda P
Detection sensitivity (PIR)	Value range in increments		х	х
LED display motion	Off/On		х	

The parameters are sent to the presence detector via infrared by using the "SendoPro 868-A" management remote control, the "theSenda P" service remote control, or "the-Senda B" app remote control (with "theSenda Plug" app). Changed parameters are immediately applied and used by the detector.

# The following control commands can be triggered with the remote control:

Control command	Description	Can be triggered by SendoPro 868-A/the- Senda B (app)	Can be triggered by the- Senda P
Presence test	On/Off	х	х
Restart	Restart detector	х	х
Factory settings	Set all parameters and set- tings to factory setting.	x	

### **Detection sensitivity**

The detector has 5 sensitivity increments. The basic setting is the middle increment (3).

With the "SendoPro 868-A" management remote control, as well as with "theSenda B" app remote control (with "the-Senda Plug" app), the increments 1 to 5 can be selected and sent to the detector.

With the "theSenda P" installation remote control, the sensitivity can be decreased  $\sqrt{n}$  or increased  $\sqrt{n}$  by one increment each time the button is pushed.

Incre- ment	Sensitivity
1	very insensitive
2	insensitive
3	Standard
4	sensitive
5	very sensitive

By selecting the test presence operating mode, the set sensitivity increment is not changed.

## LED display motion

The motion detection can be displayed via the LED.

#### Value range

No display of motion detection.	Off
The LED is switched on when motion is detected, otherwise switched off.	On

Settings are possible with "SendoPro 868-A" management remote control or with "theSenda B" app remote control (with "theSenda Plug" app).

### Factory settings

The theRonda S360-101 UP presence detector is delivered with the following parameter values:

Parameter	Value
Detection sensitivity (PIR)	Increment 3
LED display motion	Off

# 9. Start-up

#### Switch-on behaviour

Every time the power supply is switched on, the presence detector runs through two phases that are shown by an LED:

#### 1. Start-up phase (30 s)

- The red LED flashes at one second intervals.
- The detector does not respond to remote control commands.

#### 2. Operation

The detector is ready for operation (LED off).

# Presence test $\mathbf{\dot{\pi}}$

Presence test mode is used to test presence detection and wiring. Presence test mode can be activated with "SendoPro 868-A" management remote control, with "theSenda B" app remote control (with "theSenda Plug" app) and with "the-Senda P" installation remote control.

#### Setting the presence test mode via remote control

The detector goes directly into test mode when the test mode is set via the remote control:

- Every movement is indicated by the LED.
- Test mode ends automatically after 10 min. The detector restarts itself (see switch-on behaviour).

## 10. Technical data

Operating voltage	110-230 V AC +10%/-15%	
Frequency	50-60 Hz	
Upstream protection device:	13 A	
Power consumption	approx. 0.1 W	
Type of installation	Ceiling installation; flush/surface mounted or ceiling installation	
Recommended installation height	2.0-3.0 m/max. 4 m	
Minimum height	> 1.7 m	
Detection area horizontal	360°	
Maximum range	Ø 4 m (Mh. 3 m)/13 m <sup>2</sup> seated Ø 4 m (Mh. 3 m)/13 m <sup>2</sup> radially moving Ø 8m (Mh. 3m)/50 m <sup>2</sup> tangentially moving	
Connection type	Screw terminals	
Max. cable cross-section	Max. 2 x 2.5 mm <sup>2</sup>	
Size of flush-mounted box	Size 1, Ø 55 mm (NIS, PMI)	
Protection rating	IP 20 (IP 54 installed)	
Ambient temperature	–15 °C +50 °C	
CE Declaration of Conformity	This device conforms to the safety regulations of the EMC directive 2014/30/EU and of directive 2014/35/EU.	

### Product overview

Type of installa- tion	Channel	Operating voltage	Colour	Туре	ltem number
Ceiling installa- tion	_	110– 230 V AC	White	theRonda S360 Slave UP WH	2080530
			Grey	theRonda S360 Slave UP GR	2080531
			Special colour in accordance with customer information	theRonda S360 Slave UP SF	2080533

## Troubleshooting

Fault	Cause
Device does not respond	Short circuit or several phases in parallel swit- ching! Disconnect detector from the power supply for 5 min (thermal fuse)
Error flashing (4 x per second)	Error in self-test; device not functional!

## LED display

LED	Description
Flashing at 1 second intervals	The presence detector is in the start-up phase.
Flickering for 2 s	The command sent from the remote control via infrared was accepted by the presence detector.
Lighting up briefly	The command sent from the remote control via infrared was rejected by the presence detector. The command is not valid. Check the selected detector type or parameters on the SendoPro or in the app.
Fast flashing	Error flashing; The presence detector has found an error.
Lights up or flickers irregularly	The presence detector is in presence test mode or "LED display movement" is activated. The LED displays detection of movement.

### **Dimensions diagrams**





# 11. Accessories

Back box 110A WH Item no.: 9070912 Details > www.theben.de/en



Back box 110A GR Item no.: 9070913 Details > www.theben.de/en



DE (ceiling installation) box 73A Item no.: 9070917 Details > www.theben.de/en



Cover clip for area restriction Item no.: 9070921 Details > www.theben.de/en



SendoPro 868-A Item no.: 9070675 Details > www.theben.de/en



#### theSenda P Item no.: 9070910 Details > www.theben.de/en



theSenda B Item no.: 9070985 Details > www.theben.de/en



# 12. Contact

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