PressacSensing

enocean®

QUICKSTART-GUIDE
Under Desk Sensor

1. Introduction
It is recommended that you read this Quick Start Guide carefully before using the Under Desk Sensor.

Symbols

⚠ **WARNING**
Important information regarding risks.

ⓘ **NOTE**
The section contains further information.

Health Risks

⚠ Use the device only for its intended purpose. The device is only suitable for indoor use. Avoid exposing the unit to moisture, dirt or dust. Avoid direct sunlight and other sources of heat.
Avoid placing the device in a metal case. Such placement will affect the ability to communicate with other devices. Do not open the device! In case of an error, please contact the manufacturer.

ⓘ For more information please visit:
http://www.pressac.com

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BOTTOM VIEW

ON/OFF Switch

3. Product Activation
The Pressac Under Desk Sensor requires turning on prior to first use. This can be achieved by switching the switch on the bottom of the product to the on position.

Product Operation
The Under Desk Sensor will send a message indicating presence has been detected as soon as the first movement is seen. The PIR input will be disabled for 60 seconds after detection of movement. Once enabled again after 60 seconds, if no further movement is detected for the absence time-out period then an absence telegram will be transmitted.

Once the device is in an absence state, any detection of movement will result in a presence detection telegram being sent immediately. If there is no change in state for the repeat telegram duration, then a repeat telegram indicating the last state will be transmitted.

2. Product Description
A wireless, battery powered, Passive Infrared (PIR) sensor designed to be mounted underneath a desk. The Pressac Sensing Under Desk PIR Sensor sends a wireless EnOcean® telegram when movement is detected assisting organisations to analyse how spaces are being used.

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5. Physical Installation
The Under Desk Sensor should be mounted towards the rear of the desk with the aperture in the PIR shield facing the detection location.

Screws are provided for permanent installation, along with two sticky pads for temporary installation. Four caps are also included for covering the mounting holes after installation.

ⓘ NOTE: Installation using sticky pads is intended for temporary installations. Please do not use the sticky pads for permanent installations.

The angle of detection is approximately 41° from the top curved face of the PIR and the aperture hole is 180° wide, based on a 600mm high desk the detection range is a 500mm radius semi-circle at floor level.
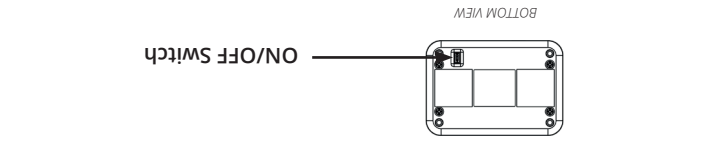
4. Secure Mode
The Under Desk Sensor includes an enhanced secure mode. When secure mode is turned on, all device communication is encrypted by AES128. For more information, EnOcean's full security specification can be found on https://www.enocean.com.

Switching Between Modes
ⓘ NOTE: Before changing the Under Desk Sensor's operating mode please make sure the device is removed from all receiving devices it has been configured to work with. Failure to do so could result in ignored telegrams.

The Under Desk Sensor can be switched between standard mode and secure mode by pressing its button for at least 10 seconds. The devices mode will be changed when the learn button is released.
• Secure mode is indicated by the LED flashing GREEN four times.
• Standard mode is indicated by the LED flashing red four times.

The Under Desk Sensor is delivered in standard mode with encryption turned off.

TECHNICAL SPECIFICATIONS	
Wireless Protocol	EnOcean
Detection Range	Typically 0.5 Meters
Presence Detection	Instant
Security and Encryption	AES-128 Configurable ON/OFF
Battery Life*	Typically 3 - 5 Years
Battery Type	AA Size 3.6V Lithium
Repeater	No
Environment	IP2X
Mounting	Screw or Adhesive Pad
Enclosure Material	ABS
Calibration	Not Required
Operating Temperature Range	0°C to +40°C
Storage Temperature Range	-20°C to +55°C
Dimensions	93mm x 65mm x 28mm approx
EEP	A5-07-01

*Typical life expectancy of the battery is dependent on use-case.

TELEGRAM INFORMATION - VALUE OF DATA BYTE 1	
Absence Telegram	0x00
Detection Telegram	0xFF
Walk Test Telegram	0xFD
Repeated Unoccupied	0x0A
Repeated Occupied	0xFA

6. Commissioning

Adding the Under Desk Sensor to an EnOcean radio network.

ℹ NOTE: If including a Under Desk Sensor in secure mode please ensure your receiving device is EnOcean security compatible.

1. Ensure your Under Desk Sensor is within range of your EnOcean gateway or receiving device.
2. Place your EnOcean gateway or receiving device into inclusion mode.
3. Press the button on the top of the Under Desk Sensor and the LED will blink green twice. The device will now transmit a teach in telegram.

LED → [FRONT VIEW]   [TOP VIEW] ← Button
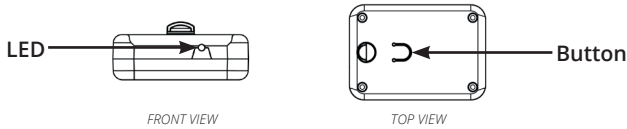
4. Wait for the teach in process to end. Please allow extra time if using secure mode.
5. Successful inclusion will be indicated on the EnOcean gateway or receiving device.

The Under Desk Sensor can also be included into your EnOcean network manually. This can be achieved using the unique EnOcean ID and the EnOcean Equipment Profile (EEP) of the Under Desk Sensor. The EnOcean ID and EEP are printed on the Under Desk Sensor's product label.

7. Changing the Battery

Estimated battery life using default settings, assuming average use, can be found in the technical specification section of this document. Changing the battery in the Under Desk Sensor can be done by following the steps below.

1. Remove the four screws from the back of the unit and gently pull the Under Desk Sensor apart.
2. Replace the battery in the battery holder.
3. Reassemble the device, replace the four screws on the back of the device and gently tighten.

8. Remote Management and Commissioning

8.1 Signal Telegram and Unlock

A Signal Telegram indicating the Under Desk Sensor is available to remote unlock for 1 second is sent after every learn telegram, and when the device is powered on.

Successful remote unlock of the Under Desk Sensor will be indicated by a single flash of the LED.

ℹ NOTE: The default unlock code for the Pressac Under Desk Sensor is 87735522.

8.2 Action Command

Sending the Action command will help identify the Under Desk Sensor by alternate flashing the LED red and green for 6 seconds.

9. Configurable Options via Remote Commissioning

ℹ NOTE: A copy of the latest device description file can be found on http://www.pressac.com.

OPTION	CONFIGURABLE	DEFAULT
LED Motion Detection Indication	ON/OFF	OFF
Absence Time Out	Between 2 and 30 minutes	2
Repeat Telegram	Between 10 and 300 minutes	20
Device Button Disable	ON/OFF	OFF
Walk Test Mode	ON/OFF	OFF

9.1 LED Motion Detection Indication

When LED motion detection indication is switched on the LED will light up green when motion is detected. When switched off the LED will remain off when motion is detected.

9.2 Absence Time Out

The configurable time in which the Under Desk Sensor takes to send an unoccupied/no-movement message after no motion is detected.

9.3 Repeat Telegram

A configurable time in which a repeat telegram is sent after no change in state has been detected.

9.4 Button Disable

When activated the button will be unable to send learn telegrams, activate walk test mode and change security options. Only factory restore functionality will remain possible.

⚠ When the button is disabled it is only possible to send a signal telegram and unlock the device by power cycling.

9.5 Walk Test Mode

When switched on the LED will become permanently RED. Each time motion is detected the LED will flicker green and a presence telegram will be transmitted. (Max, one telegram every 0.5 seconds). Once activated walk test mode will time out after 30 seconds.

Manually Activating Walk Test Mode

Walk test mode can be activated by holding the button and releasing it when the LED flickers green after 3 seconds. Walk test mode will time out after 30 seconds

10. Restore Factory Settings

A factory restore will reset all settings and remote unlock codes back to default. This can be initiated by turning off the Under Desk Sensor and turning it back on while holding down the button.

While a restore is in progress the LED will flash red four times followed by a GREEN LED flicker if successful or a red LED flicker if unsuccessful.

Declaration Of Conformity

Pressac Communications Limited (the original manufacturer) declares that the product branded

CE

• Pressac Sensing Under Desk Sensor - 868MHz

satisfies the requirements of RED 2014/53/EU and has been independently tested and found compliant with the essential requirements of:

• BS EN 61326:2006 Electromagnetic Compatibility
• BS EN 60950-1:2006+A2:2013 Information technology equipment. Safety. General requirements

FCC Declaration

Pressac Communications Limited (the original manufacturer) declares that the product branded

FC

• Pressac Sensing Under Desk Sensor - 902MHz

Contains FCC ID: SZV-STM300U
Contains IC: 5713A-STM300U
Contient le module d'émission IC: 5713A-STM300U

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (i) this device may not cause harmful interference and (ii) this device must accept any interference received, including any interference that may cause undesired operation.

Where applicable the original Certificates of Compliance are held at Pressac's business address, with copies being available on request.

Robert Smith, Technical Director, Nottingham, June 2018.