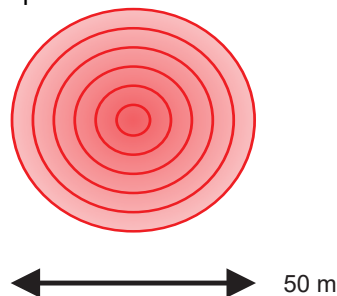




Detection range

Up to 50 m in diameter depending on the location and interior of the space.



Introduction

AD46 CASAMBI features advanced sound detection technology, which can detect both low-frequency (LF) sounds, such as door opening via pressure change, and high-frequency (HF) sounds, such as speech, footsteps, and key jingling. This allows for automatic lighting control via the sensor or manual control via the push button, providing maximum flexibility and convenience. One of the key properties of this technology is its detection range, which can reach up to 50 meters in diameter, depending on the location and interior of the space. Acoustic sensors exhibit optimal performance in enclosed environments.

Casambi technology

The Casambi technology is based on Bluetooth Low Energy technology, where all Casambi products serve as both signal amplifiers and information distributors. This results in a robust system and enables the continuous operation of the system even if one unit fails.

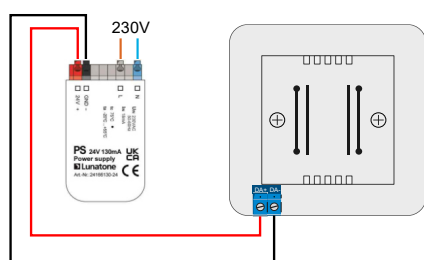
Wireless features

- ▶ Wireless communication
- ▶ On/off and dimming control of Casambi fixtures
- ▶ Provides occupancy readings to the Casambi network
- ▶ Grouping of fixtures
- ▶ Color temperature
- ▶ Daylight harvesting
- ▶ Occupancy sensor

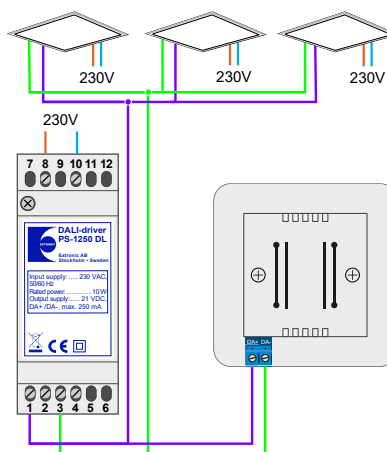
Sensor features

- ▶ Up to 50 m detection range in diameter depending on location and interior.
- ▶ Detects LF sound, the low frequency pressure change from door openings.
- ▶ Detects HF sound, audible sounds generated from speech, footsteps, key jingling, etc.
- ▶ Automatic lighting control via detector or manual control via push button.
- ▶ Adjustable sensitivity.
- ▶ Possibility to connect and control DALI luminaires

24VDC connection via 130mA Lunatone Power Supply

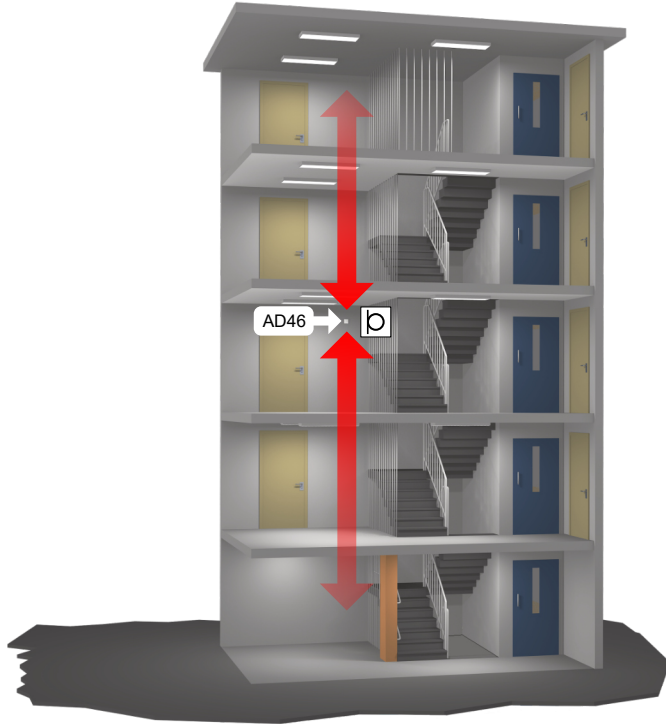


DALI connection via PS1250 DL



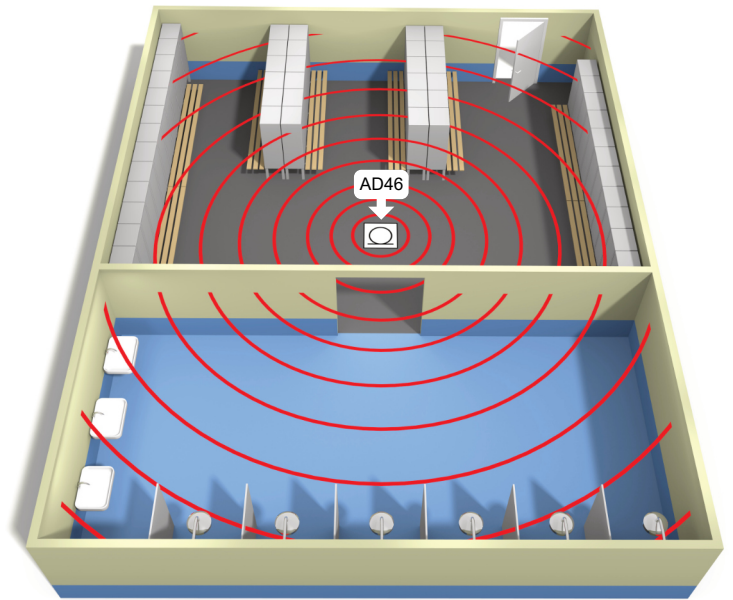
Stairwell

The Stairwell is often a closed area with access through a number of doors, making the acoustic technology advantageous. It is the only technology that provides activation when the door opens. Normally, one to two acoustic sensors are sufficient to detect a stairwell with five floors, depending on the location and interior design.



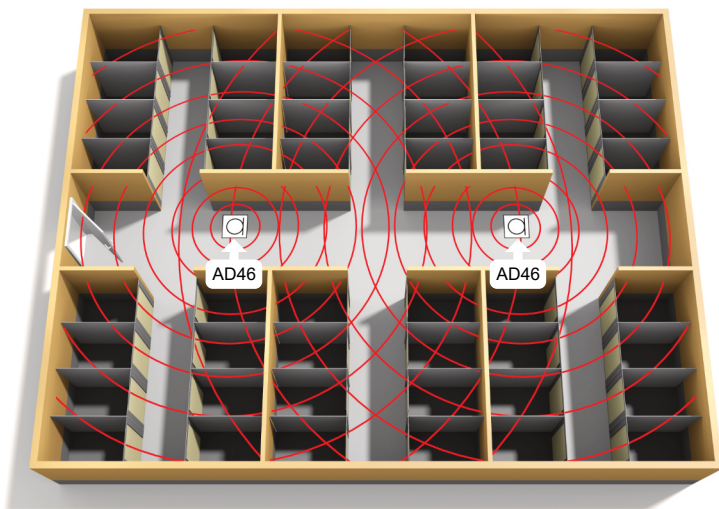
Dressing Room/Shower Room

Dressing rooms are an excellent example of spaces where acoustic technology is superior. The acoustic sensor detects presence around corners and lockers that a PIR sensor would have failed to detect. One sensor can detect presence in both the dressing room and shower room.



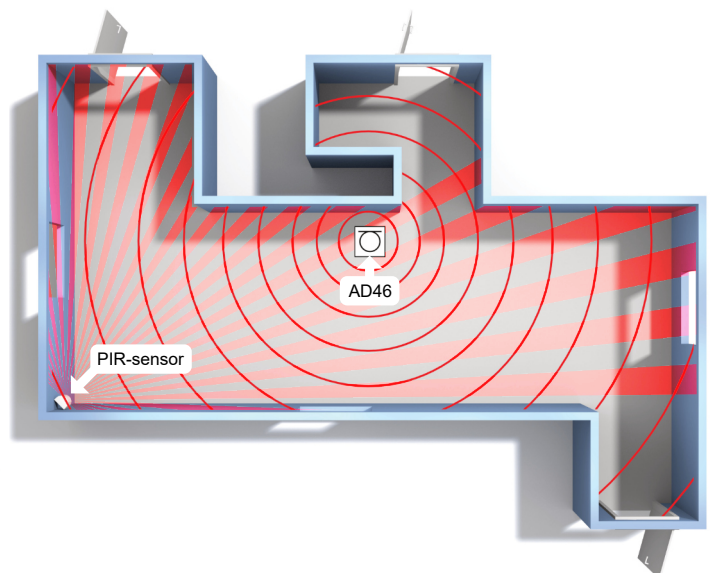
Basement and Attic Hallways

In enclosed basement and attic spaces, the acoustic technology is unmatched, the only technology that provides activation while the door to the space opens. Detection of presence also possible through grille doors.



AD46 as a Supporting Sensor

Acoustic sensors can be used as a supporting sensor in conjunction with PIR sensors in corridors, for example, where one or more entrances are hidden from the PIR sensor. The AD46 detects the low frequencies that occur when a hidden door opens and turns on the lighting. Acoustic detection alone may not always be satisfactory, for example, due to fully covering carpets that dampen the higher frequency sounds.



Light Sensor

The light level (1-4000 lux) of the light sensor is displayed in the Casambi app. Transfer curves can be created in the Casambi app to determine lighting levels from different lux values.

The lux level can be calibrated in the Casambi app to compensate for the sensors location.

Power Supply and DALI Connection

The detector can be powered from 12-24VDC or 12VAC. The sensor can also be powered with a DALI power supply. If the sensor is connected to a DALI bus, DALI-luminaires can be controlled from the sensor. E.g. Profile "AD46 Dali BC".

Create a Network

- Download the Casambi app for iOS or Android
 - Start the app
 - Create a new network
 - Choose firmware (*our products are compatible with both versions*)
 - Classic
 - Evolution (*Always choose Evolution in new projects*)
 - Mandatory fields
 - Name
 - Email
 - Sharing

After the network is created

- Network
 - Control hierarchy ON
 - Timers at start ON

Add devices to the network

- More
 - Nearby devices
 - Press the device
 - Optional profile change (*can only be changed when the device is not in a network*)
 - Add to network

Create a Scene

- Scenes
 - Add a scene
 - Enter scene name
 - Choose which fixtures the scene will control

Sensor settings

(A scene must be created before these settings)

- More
 - Sensors
 - Press the sensor
 - Press "not in use under" Presence Sensor
 - Presence
 - Presence Scenes
 - Choose scene
 - Set delay time
 - Set dimming time

Technical specification

Mechanical data

Dimensions (L+W+H)	84 x 35 x 84 mm
Weight	83 g
Colour	White, RAL 9003
IP rating	IP21

Power

Operating voltage	12-24 VDC, 12 VAC, DALI
Power consumption	28 mA
Startup time	30 sec
LED indication	Yes, for HF and LF sound

Sensor

Detection range	Up to 50 m i diameter
Sensor Technology	Acoustic

Wire terminals

Stranded	0,327- 2 mm ²
Solid	0,327- 2 mm ²

Operating and storage conditions

Ambient temperature	-40 °C till +70°C
Storage temperature	-40 °C till +85°C
Humidity	Max 90% , icke-kondenserande

Compliance and Standards

Environment	Complies with the REACH and RoHS directives
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Software compatibility

Classic/ Evolution/ Long range