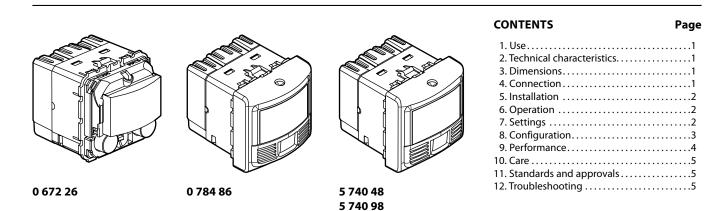
# **La legrand**®

# Detector switch - Dual Tech SCS



#### 1. USE

This device allows a light source to be controlled automatically through the detection of any presence in the surveillance zone using local controls.

Presence sensor with 180° detection angle.

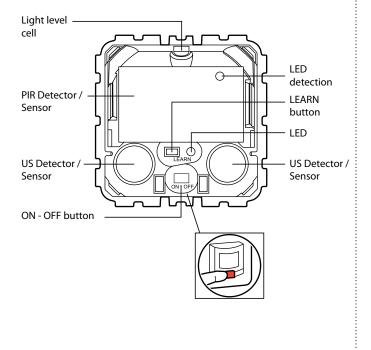
Detection type: infrared (PIR) and ultrasound (US)

Assembly type: wall flush mounted

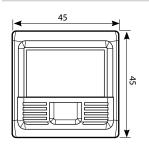
## **2. TECHNICAL FEATURES**

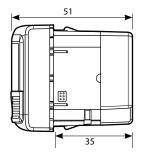
Voltage: 27 V=

No-load power consumption: 20 mA Connection between the sensor and controller: BUS/SCS cable Wiring: 2 x 0.35 mm<sup>2</sup> Flush-mounting box: 40 mm min. Weight: 60 g Impact resistance: IK04 Penetration by solid and liquid matter: IP20 Usage temperature:  $-5^{\circ}$ C to  $+45^{\circ}$ C Storage temperature:  $-20^{\circ}$ C to  $+70^{\circ}$ C Type of terminals: screw

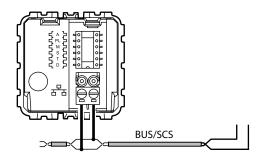


#### 3. DIMENSIONS





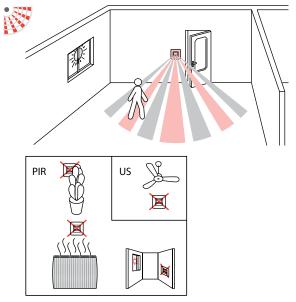
# 4. CONNECTION



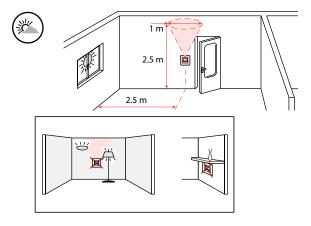
Pressing the auxiliary control allows the load to be switched on or off manually. If the control is not pressed, the sensor will cut off the load at the end of the time delay or when the light level threshold has been reached.

# 5. INSTALLATION

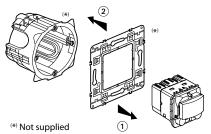
# 5.1 Sensor positioning



#### ■ 5.2 Recommended light exposure



#### 5.3 Positioning



#### 6. OPERATION

#### 6.1 More than one sensor and more than one load

#### Manual ON/Automatic OFF mode

Pressing the auxiliary control allows the load to be switched on or off manually. If the control is not pressed, the sensor will cut off the load at the end of the time delay or when the light level threshold has been reached.

#### Auto ON/OFF mode:

The load will be switched on and off automatically.

**Option:** It is possible to control the sensor by infrared remote control using: Cat. Nos. 0 882 00/01/20/31/32/33.

7.	SETTINGS

#### ■ 7.1 Detection parameters

Sensor parameters		Default value	Modifiable parameters	Configuration tools	
				0 882 30	0 882 35
Time delay		15 mins	3, 5, 10, 15, 20 min	-	~
			30s - 255 h 59 min 59s	~	-
Sensi	tivity	PIR (very high)	Low, medium, high, very high	~	~
	Auto on/Auto off	Inactive	Activate/ Deactivate	~	~
Sing Walk-through mode Manual on/Aut off Partial on/ Group off		Active	Activate/ Deactivate	~	~
	Manual on/Auto off	Inactive	Activate/ Deactivate	~	~
		Inactive	Activate/ Deactivate	~	-
5 -	Initial	PIR	Not modifiable	~	-
_sys	Maintain	PIR	Not modifiable	✓	_
	Restart	PIR	PIR, Deactivate	✓	-
Alarm	n	Inactive	Activate/ Deactivate	~	-

( ) **Time delay:** Length of time the load is on after detection.

Sensitivity: Detection range setting.

#### Modes:

light.

# $({\bf k})$ Auto on/Auto off mode:

Comes on automatically:

- At the detection of a presence if there is an insufficient natural level of light.

Turns off automatically:

If no presence is detected and at the end of the time delay set.
Or if the natural light level is sufficient (regulation activated)
Another detection causes automatic switch-on if there is insufficient

# اللهُ الله Walk-through mode:

- If no presence is detected in the 20 seconds following an initial detection, the product will cut off the load after 3 minutes.

 If another presence is detected in the 3 minutes following initial detection, the device will cut off the load at the end of the set time delay.

#### 🛪 🔊 Manual on/Auto off mode:

Comes on via a manual switch, automatic switch off:

- Where no presence is detected and at the end of the time delay set.

After switch-off, any new detection within a 30 second period triggers an automatic switch-on. The Restart function must be activated. After 30 seconds the device is switched on via a manual switch.

#### Partial on/Group off mode:

Possibility of controlling one or more lighting points individually. In this mode it is essential for a lighting group to be created: - either by manual teach phase.

- or from the advanced configuration tool Cat. No. 882 30 using the function "PnL capteur" (PnL sensor).

The sensor switches on the loads that are linked to it via the actuator. Where there is no detection and at the end of the time delay it switches off all loads in the group to which it belongs.

Technical data sheet: S000077070EN-1

Updated:



#### 7. SETTINGS (continued)

### 7.1 Detection parameters (continued)

#### **Detection system:**

**Initial detection:** The load is switched on as soon as the first detection occurs if the natural light level is below the light level threshold.

Maintain: The load remains active if another presence is detected. Restart: In manual mode. After switch-off, any new detection within a 30 second period triggers an automatic switch-on. After 30 seconds the device must be switched on manually.

Alarm: an audible signal is emitted before switch-off. (1 minute before, then 30 seconds, then 10 seconds).

#### 7.2 Light parameters

Sensor parameter		Default value	Modifiable parameters	Configuration tools	
				0 882 30	0 882 35
Light level threshold		500 lux	20, 100, 300, 500, 1000 lux	-	~
			0 - 1275 lux	~	-
-	Calibration	-	0 - 99995 lux	✓	-
Advanced mode	Regulation	Inactive	Activate/ Deactivate	~	_
Ad	Light contribution	Auto	Auto - 1275 lux	~	_

- Q- **Light level threshold:** Value at which the load comes on if the natural light level is less than the setting.

#### Caution:

The device becomes a motion detector at 1275 lux.

#### Advanced mode:

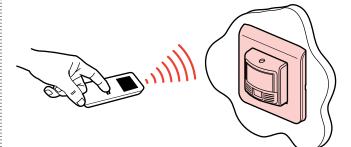
- Calibration: The surrounding light level measured with a luxmeter must then be transmitted to the sensor (see data sheet Cat. No. 0 882 30)
- Regulation: Automatic switch-off of the load 10 minutes after the light level threshold is exceeded with an additional safety threshold (to avoid lights switching off at the wrong moment).

**Light contribution:** Quantity of additional lux provided by the load being switched on.

When the light contribution parameter is set to "Auto" (value 0) on the configuration tool Cat. No. 0 882 30 the sensor automatically calculates the light contribution.

#### 7. SETTINGS (continued)

■ 7.3 Modifying the parameters using the configuration tools



• 0 882 35: Simplified configuration tool

0 882 30: Advanced configuration tool

When the sensor receives an IR command using the configuration tool it emits a beep acknowledging the modification.

For more information about setting parameters, refer to the data sheet for the configuration tool Cat. No. 0 882 30.

#### Range: 1 m.

#### - Restore to factory settings:

1<sup>st</sup> press: Short press on LEARN: the LED flashes slowly.

2<sup>nd</sup> press: Press and hold down LEARN for 10 seconds until the LED flashes quickly.

#### 8. CONFIGURATION

#### 8.1 Physical configuration

#### **BUS SCS sensor Physical Configuration**

The physical configuration only authorises point-to-point addressing: one single actuator can be controlled via the sensor.

A: Area (0 – A) PL: Light point (0 – F) M: Mode (0 – 4) S: Sensitivity of the motion detector (0 – 3) T: Time delay (0 – 9) D: Light level threshold or daylight set point (0 – 5)

#### The A and PL configurator: addressing

The A and PL configurators provide the address of the actuator to be controlled.

#### NB:

- If the product does not have the A and PL configurators positioned then it is not configured.
- The configuration A=0 and PL=0 does not exist

#### The M configurator: the modes

The M configurator allows the user to choose the product's modes of operation:

M configurator	Mode
No configurator	Automatic On/Off mode & without setting range & with presence detection
1	Automatic On/Off mode & light level measure & without presence detection
2	Supervision mode
3	Automatic On/Off mode & setting range & with detection
4	Automatic On/Off mode & setting range & without detection

#### 8. CONFIGURATION (continued)

# 8.1 Physical configuration (continued)

#### The S configurator: the sensor's sensitivity

The sensor's sensitivity can be adjusted using the S configurator: If the sensor is a Dual-Tech then the sensitivity selected is applied to all technologies.

S configurator	Sensitivity of the sensor
No configurator	Low
1	Medium
2	High
3	Very High

#### The T configurator: time delay

Time that the load is switched ON: Time Delay (in min) **T** configurator No configurator 15 1 0.5 2 1 3 2 5 4 5 10 15 6 7 20 8 30 9 40

#### The D configurator: light level threshold

The value of the light level threshold in lux (or set point) is set via the D configurator:

D configurator Lux	
No configurator	Surface mounted wall installation: 300
No configurator	False ceiling: 500
1	20
2	100
3	300
4	500
5	1000

#### 8.2 Virtual configuration

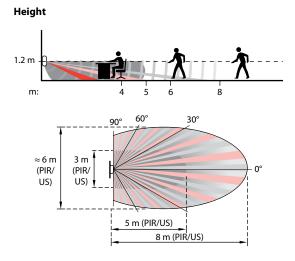
The sensor is programmed via the Virtual configurator software which can be used to modify / programme all of the sensor parameters.

#### 8.3 Lighting Management Configuration

- Plug'n Go

(sensor connected to an inlet in a suspended ceiling controller) - Push'n Learn





#### ■ 9.1 PIR detection (Walk-through)

Sensitivity	Ø (m)
Low (25%)	7
Medium (50%)	8
High (75%)	10
Very high (100%)	12

#### ■ 9.2 US detection (Walk-through)

Sensitivity	0° (m)	30° (m)	60° (m)	90° (m)
Low (25%)	-	-	-	-
Medium (50%)	6	6	6	2
High (75%)	7	7	6	2
Very high (100%)	8	8	7	3

#### ■ 9.3 PIR + US detection (Presence)

#### Side test:

Sensitivity	m
Low (25%)	1
Medium (50%)	1
High (75%)	2
Very high (100%)	5

#### Diagonal then side output test:

Sensitivity	m
Low (25%)	3
Medium (50%)	4
High (75%)	5
Very high (100%)	6

# 10. CARE

Keep the lens clean. Clean the surface with a cloth.

Do not use acetone, tar-removing cleaning agents or trichloroethylene. Resistant to the following products: - Hexane (EN 60669-1)

- Methylated spirit
  - Soapy water
  - Diluted ammonia
  - Bleach diluted to 10%
  - Window-cleaning products.
- Caution:

Always test before using other special cleaning products.

# 11. STANDARDS

# Directive: CE

Installation standards: NFC 15-100

Product standards: IEC 60669-2-1

Environmental standards:

- European Directive 2002/96/EC:

WEEE (Waste Electrical and Electronic Equipment). - European Directive 2002/95/EC:

RoHS (Restriction of Hazardous Substances).

- Decrees and/or regulations: ERP (public buildings) ERT (workplace buildings) IGH (high-rise buildings)

# **12. TROUBLESHOOTING**

PROBLEM	CAUSES	SOLUTIONS	
Lighting stays on when there is no-one present	Sources of interference can cause false tripping,	1- Reduce the sensitivity level	
	such as: air current, vibrations, radiators	2- If the interference continues: using the configuration tool, go into the Detection system parameters, select Maintain and then choose PIR and US	
		3- If the interference still continues, move the sensor away from sources of interference	
Lighting does not switch off during the day	Regulation function not active	Activate the regulation function	
when there is an adequate level of natural light	Light level threshold set too high	Reduce the light level threshold	
	Light contribution is too high	Check that the sensor is positioned correctly in relation to the window	
		Decrease the power of the luminaires	
Lighting switches off when there are people	Time delay too short	Increase the time delay	
present and the natural light level is not	Detection sensitivity too low	10 to 1 minutes is recommended for work areas	
adequate (darkness)	Light level threshold too low	Increase the sensitivity	
		Move the sensor closer to the work area	
		Increase the threshold	