ARCHITECTURAL LIGHTING LUMINAIRES 2013

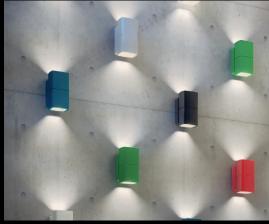
















SYLVANIA

- 716 Introduction
- 719 Intelligent luminaires



720 Lighting Control Modules (plugable control)



722 Controls for colourchanging luminaires



724 DIN-rail controls for DALI systems



725 Small-room controls (OriDIM)



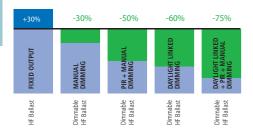
737 Stand Alone energy saving lighting controls



CONTROL

Energy Efficient Lighting Controls







Presence detection



Absence detection



Passive InfraRed sensor



Microwave sensor

In a world where cost-saving gives competitive advantage, where Corporate-Social-Responsibility is central to your company's brand-image, and where legislative compliance is crucial, deployment of lighting control systems answers these three challenges. Conservation of energy from automated controls can reduce lighting-related energy consumption by up to 60%. With a range of sophisticated products that enable immediate energy savings and simple operation, Havells-Sylvania offers a complete end-to-end solution for lighting. From daylight-harvesting and digital dimming to emergency-testing and energy-use reporting, a bespoke system using DALI and Ethernet networks can be expanded from single rooms and corridors to complete building-wide control, optimising building running costs whilst maintaining comfort and safety. Control systems can also improve the simplicity of operation of lighting installations, automating regular switching patterns, regulating light levels and allowing entire floors or buildings to change from 'daytime' to 'night-time' illumination settings at the press of a single button.

Havells-Sylvania is able to arrange the planning and commissioning of a broad range of control systems tailored to meet the requirements of each specific installation from a simple luminaire including daylight linking to sophisticated PC controlled systems incorporating hundreds or thousands of luminaires. A brief summary of control principals and technologies follows, for further information on the range of control systems available please contact our sales office or your local sales representative.

Types of control

On/off switching

· Local switch control

Lighting control at its most basic - the use of a local switch plate to turn light luminaire on and off as required.

• Occupancy sensing

Presence detection: lights on automatically when motion is detected. Lights off automatically when area is unoccupied for a period of time.

Absence detection: lights switched on manually by the user, lights off automatically.

PIR sensor: detects the movement of a warm body. Microwave sensor: detects any small movement over a larger area.

Timed control

Automates the switching on and off of luminaires during the day i.e. to ensure that all (or selected) luminaires are switched off at times when the building, or areas within the building, will be unoccupied. These timed events can also be based on an astronomical clock, allowing the automated times to be offset to sunrise and sunset.

Switch Dim

A variety of different systems are available, but all work using mains voltage as a control signal. Depending on how long a conventional push-to-make switch is held down the ballast can interpret the signal either as a dimming or switching command.

Allows fittings to be dimmed through the use of a local switch plate, providing a greater degree of control to the occupants of the space.

DSI

With this system both on/off and 1% - 100% power regulation are achieved by means of a digital signal broadcast to all of the ballasts on a control circuit (loop). Control requires the use of more sophisticated equipment. Control is usually achieved through the use of more sophisticated switch plates or remote control devices to recall and adjust desired dimming levels. The dimming curve used in DSI ballasts ensures that changes in light level are friendlier to the human eye when compared to the traditional 1-10V ballast. With DSI there is the potential for a maximum of 100 ballasts per loop.

Daylight Harvesting Systems

Uses photocells to maintain an approximate illumination level within an area by either switching or dimming luminaires as the amount of daylight within an area increases or decreases.

1-10V Analogue

Analogue ballasts incorporate a dimming circuit which regulates the lamp power - typically between 10-100% depending on lamp or luminaire type, normally controlled through either a linear or rotary potentiometer (dimmer). On/Off control requires a separate On/Off mains switch within the circuit.

Regulation parameters:

- No signal/connection = full output
- 10V = full output
- 1V = minimum output

Changes in light level tend to have a non-linear appearance to the human eye when the dimming is adjusted. The maximum number of ballasts on a circuit is dependent upon the total control circuit current and the potentiometer capacity. Any change to the system may require the system to be re-wired.

DALI - Digital Addressable Lighting Interface

DALI ballasts provide both power regulation and on/ off switching along with a degree of local intelligence within each ballast, reducing the complexity of the control system. In a DALI system each ballast on a loop can be individually addressed and controlled, providing potential to greatly reduce the wiring complexity and allowing changes to the system to be achieved by simply reprogramming the ballasts. Each DALI loop can accommodate a maximum of 64 ballasts and each ballast can be allocated to up to 16 control groups. A maximum of 16 pre-programmed scenes levels can also be programmed into each ballast, for easy recall by the control system.

Additionally DALI can provide:

- Function checks of ballasts and lamps in each luminaire from a central position.
- Storage of pre-programmed information in the ballast (e.g. pre-set illumination levels of fixture grouping).

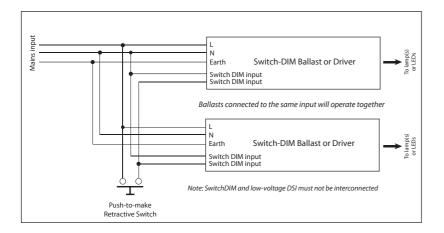
Changes in light level tend to have a linear appearance when the dimmer is adjusted.



Lighting Control Wiring diagrams

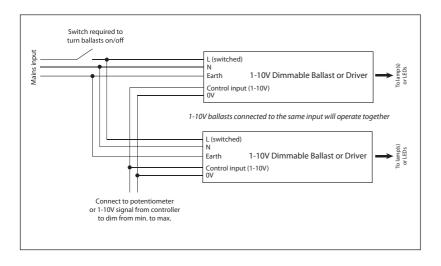
The following guides provide examples of typical wiring diagrams and requirements for the four main types of control systems:

- Switch dim ballast using local push to make switches
- 1-10V analogue dimmable ballast Incorporating a dimmer circuit and controlled by local potentiometer
- **Digital Serial Interface (DSI)** Requiring a control loop to send digital control signals and local switch plates or remote control device to control (usually requires programming)
- **Digital Addressable Lighting Interface (DALI)** incorporating dimmer and local intelligence, requires a DALI bus and control devices or by sophisticated management systems



Switch Dim Ballasts

- All ballasts require a permanent mains supply
- Switch is push-to-make (retractive)
- Max number of ballast is governed by rating of the push-to-make switch
- All wiring is mains rated
- Do not connect to a low voltage control equipment



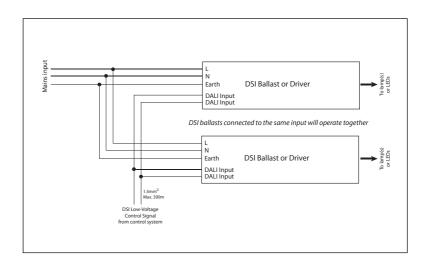
1-10V Analogue Dimmable Ballasts

- All external wiring 'by others' to comply with relevant standards
- Dimming control cable to be 2 core screened min 0.75mm Polarity must be maintained. Use loop-in, loop-out method
- Separate switch required for on/off



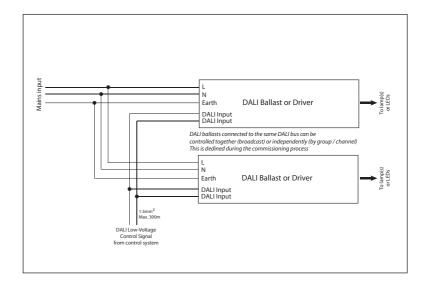
DSI - Digital Serial Interface

- All ballasts require a permanant mains supply
- DSI signal cable is a dedicated 2 core wired with a free-topology
- DSI controller may have various inputs
- There may be restrictions on number of ballasts on one controller typically a ballast requires 2mA and a typical controller may be able to supply upto 20mA, 100mA or, in some cases of larger controllers, upto 200mA.
- System may require 'programming'



DALI - Digital Addressable Lighting Interface

- All ballasts require a permanat mains supply
- DALI data highway is dedicated 2 core cable
- Use 1.5mm2 cable, 300m max, no loops
- System MAY require programming, unless broadcast-DALI is being used where all ballasts always perform the same operations



SYLVANIA

Integrated controls within luminaires





Giotto LED range with integrated miniature microwave detector



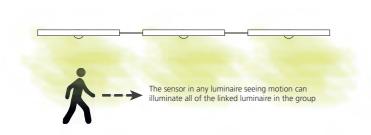


Concord Quadrille Academy with integrated miniature PIR detector

"Intelligent" Luminaires with Lighting Controls Built-In

Luminaires from across all of our brands (Sylvania, Lumiance and Concord) are available with controls builtin, for occupancy detection and/or daylight harvesting.

Standard products include bulkhead and linear luminaires with occupancy detection and daylight harvesting built in.



Grouped Control Behaviour

Individual sensor-equipped luminaires can be linked together to act in a group, where any sensor detecting motion can switch on the whole group. This enables larger areas to be controlled as one. Fixtures close to windows can still independently regulate their output according to daylight.

Speak to our sales team for more information and a bespoke solution for your project.



Analogue Light Level Regulator

Analogue Light Level Regulator

For 1-10V linear luminaires: Clips onto the lamp in a linear luminaire, and provides a 1-10V control signal to the ballast.

Code: P223409

Lighting Control - Control Boxes LCMs





Lighting Control Module



PIR Sensor

Our LCM (Lighting Control Module) range provides control of up to 10 luminaires. The controller unit can be configured to operate in a number of combinations and on request it is possible to have each channel controlled separately, channel A has 4 luminaire outputs, Channel B has 2 and Channel C has 4. Additional pluggable connections allows for the testing of emergency fittings and connections for a simple corridor hold feature.

Applications

- Schools
- Colleges
- Universities
- Hospitals
- Public buildings
- Commercial offices

Lighting Control - Control Boxes LCMs

Code	Туре	Motion	Light	Channels	Switched/ Dimming
2045812	1	Absence	Daylight Dim	All together	DSI
2045813	2	Presence	Daylight Dim	All together	DSI
2045814	3	Absence	-	All together	Switched
2045815	4	Presence	-	All together	Switched
2045816	5	Absence	-	3 Channels Detector Overrides All	Switched
2045817	6	Presence	-	3 Channels Detector Overrides All	Switched
2045818	7	Absence	Daylight Dim	3 Channels	DSI
2045819	8	Presence	Daylight Dim	3 Channels	DSI
2045823	9	Absence	Daylight	All together	DALI
2045824	10	Presence	Daylight	All together	DALI
2045825	11	Absence	Daylight	2 Channels (AB,C)	DALI

Lighting Control Energy saving controls - LCMs



Lighting Control Module

Dimming detectors

(to connect to LCMs with a dimming capability i.e. 1-10V/DSI/DALI output protocol)

Code	Description
2040578	LCM PIR Sensor with dimming & infra red override control
2040579	LCM Microwave Sensor with dimming & infra red
2040822	LCM Photocell (for daylight dimming applications)

Please note: Above items connect to a DSI or 1-10V LCM. Order RJ45 patch lead separately to connect detectors to LCM

Non dimming detectors

(to connect switched only lighting module)

Code	Description
2040819	LCM basic PIR Sensor
2040821	LCM Microwave Sensor with infra red override control

Please note: Above items connect to a switched only lighting module Order RJ45 patch lead separately to connect detectors to LCM

RJ45 Patch leads for sensor connection

Code	Description
2041554	3m patch lead RJ45 to RJ45
2041555	5m patch lead RJ45 to RJ45

Cable looms (1mm² & 6 pole connector to bare ends) for luminaire connection

Code	Description	Length (m)	Cores
2041254	Cable loom	3	3
2041255	Cable loom	5	3
2041256	Cable loom	8	3
2041257	Cable loom	3	4
2041258	Cable loom	5	4
2041259	Cable loom	8	4
2041260	Cable loom	3	5
2041261	Cable loom	5	5
2041262	Cable loom	8	5
2041263	Cable loom	3	6
2041264	Cable loom	5	6
2041265	Cable loom	6	6

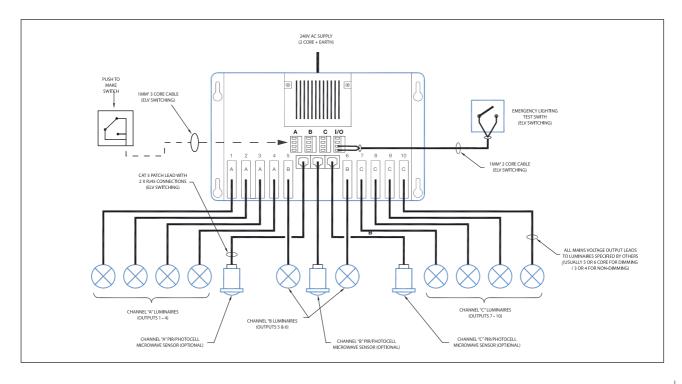
Please note:

Standard switched luminaire – 3 core

Standard switched luminaire with emergency facility – 4 core

Standard dimmable luminaire – 5 core

Standard dimmable luminaire with emergency facility – 6 core





Havells Sylvania supports colour-changing luminaires from all three product brands (Concord, Lumiance and Sylvania) with compatible control systems.

How Does RGB Colour Mixing Work?

RGB colour mixing is an additive process: optically combining the output of red, green and blue coloured-lamps or LEDs to create the desired colour. A typical control system can vary the intensity of each of the three channels in steps of 1/255th of full-brightness, leading to 255 red x 255 blue x 255 green combinations, or a spectrum of 16.5 million possible colours.

What is DMX?

DMX (Digital MultipleX) is a lighting control protocol, originating from the entertainment industry, which is capable of transmitting the levels of up to 512 channels very rapidly, updating many times per second. The DMX control protocol is digital, which means that it sends the level-values for each channel as a stream of binary data using a single balanced cable. As such it is ideal for controlling arrays of colour-changing luminaires, where a luminaire may typically require three channels of control at a time: one for the RED level, one for the GREEN level and one for the BLUE level. Therefore to instruct a luminaire to emit purple light, for example, the red and blue channels would be set to a high level whilst the green channel would be instructed to be at zero brightness

The DMX signal is used for controlling a driver, and is not directly connected to the actual LEDs themselves because it is not a power signal. Regulated power for the LEDS (or other lamp types) is provided by the driver or control gear, which may be built into a luminaire or which may be remote.

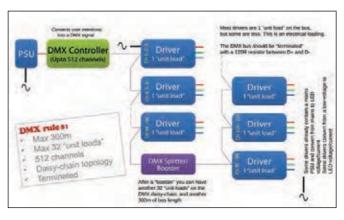
DMX is wired in a daisy-chain topology, of up to 300m long with the "far end" terminated by connecting a 120R resistor between the + and – data conductors. There can be upto 32 "unit loads" connected to the DMX bus, where a typical luminaire has a unit load of "one". For longer runs, or more luminaires, DMX repeaters/splitters or signal amplifiers are required. Some products, such as the Floodline RGB from Sylvania have a lower unit load, enabling longer chains of luminaires.



DMX Wiring

Recommended DMX cable: Belden 9841 (two-core screened cable)

Maximum DMX cable length: 300m, wired as a daisy-chain (no loops, spurs. T's or Y's) Maximum number of DMX devices per daisy-chain: 32 "unit loads"



Note: more advanced DMX control systems, signal distribution and programming are available on request.

DMX Controllers for use with Colour-Changing luminaires

0036926 Wall Mounted DMX Controller with LCD display. Requires a fascia, from the list below.

User controls: scroll wheel and buttons

Select colours, select sequences and adjust master speed/brightness

Outputs: 2 x DMX512.

Configurable terminals: switch input, or 0-10V output.

Professional line-level audio input for sound-to-light sequencing. Built in time-clock with astronomical trigger function.

Built-in webserver for monitoring and colour/pattern recall.

Does not require a PC to configure or operate.

Key feature: Simple out-of-the-box quick setup for standard colours/luminaires

0036927 Brushed Stainless Steel fascia, for Wall Mounted DMX Controller

0036928 White fascia for above0036929 Polished chrome fascia for above



Configured from a PC via USB connection, using simple Windows software

1 x DMX output

Automatic replay without user interaction



DMX controller - Brushed Stainless Steel



DMX controller - Chrome



DMX Controller



Colour - Changing Lighting Controls

Products for use with Lumiance LumiStrip and LumiPanel

We have two colour-controllers for driving the LumiStrip and LumpPanel constant-voltage luminaires:

3036924 accepts a DMX input, such as from either DMX controller 0036926 or 0036930, along with a 24V DC input voltage from a PSU, and converts these into the three channels of constant-voltage output suitable for driving the Lumiance RGB Lumistrip. Use with Constant Voltage Power Supplies, such as 3036294 (100W, 24V) A 5m RGB LumiStrip Pro requires 72W in total.

3036908 is a driver without a DMX input, the colour selection is made via the three buttons on top, or via the radio control unit.

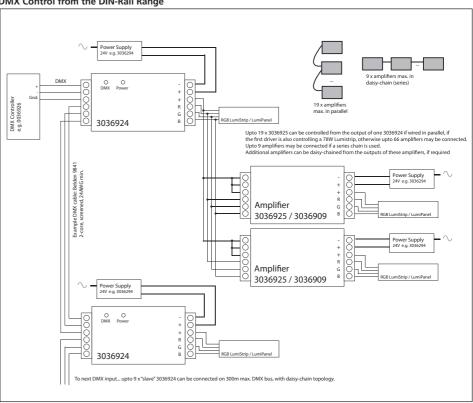
3036909 (30A) / 3036925 (10A) are RGB LED-Power Signal Boosters (for use with LumiStrip / LumiPanel colour

Takes an RGB signal input, along with a PSU, to increase the number of LumiStrip / LumiPanel units that can be controlled.

Notes on maximum system size for LumiStrip or LumiPanel RGB Systems:

- One controller (3036908 or 3036924) connected to a 100W PSU may control upto 66 amplifiers, wired in parallel, if there is no other load connected to the controller, because each amplifier requires 1.5W.
- One controller, connected to a 100W PSU, may control upto 19 amplifiers, if it is also driving a 5m LumiStrip
- Upto 9 amplifiers may be wired in a series chain, with the output of one connected to the input of the next.

DMX Control from the DIN-Rail Range



Green Mint Deep Sky Blue Blue Moonlight Blue Purple Magenta Deep Pink RGB White RGBW White Long Rainbow Ripple Long Rainbow Solid Short Rainbow Ripple Short Rainbow Solid

Hot Colours Ripple

Hot Colours Solid

Cold Colours Ripple

Cold Colours Solid

Orange

Lawn Green

The Low-Voltage I/O module, when used with the DIN-rail Network Processor from the same product range, can output DMX for the controlling simple colour-selection or pre-defined colour-changing sequences.

0041613 DIN Rail PSU 0041627 DIN Rail Network Processor - Contains the control behaviour definition, and also enables web-browser control 0041626 DIN Rail LV I/O Module - For switch inputs, sensors, simple colour/sequence-selection via a DMX output and DSI / 1-10v control 0041614 Control plate, wall-mounting 0041615 Fascia for control plate, Brushed Stainless Steel





DALI track controller



Control plate

Introduction

A modular range of DIN-rail mounting control products, to enable system functionality to be made up of simple building-blocks.

Systems without a Network Processor module can perform scene-setting on 8 scenes or can control 8 individual channels. Systems with a Network Processor can be commissioned to offer a wide variety of system operational behaviour across many scenes and channels, including control from a web-browser.

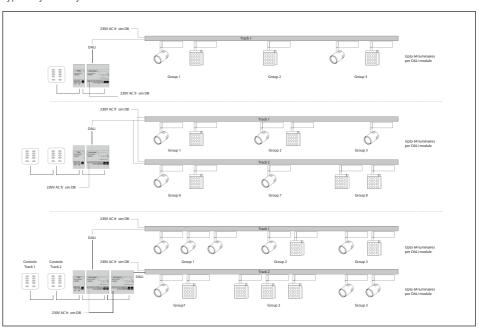
This range of products is ideally suited to control of DALI luminaires on a track system

Modules

Code	Description	Size (U)
0041613	DIN Rail PSU	3
0041612	DIN Rail DALI Module - Connects to DALI track for control of DALI fixtures	6
0041627	DIN Rail Network Processor - Contains the control behaviour definition for systems with more than	6
	8 independent channels, and also enables web-browser control	
0041626	DIN Rail LV I/O Module - For switch inputs, sensors, simple colour/sequence-selection via a	6
	DMX output and DSI / 1-10v control	
0041628	DIN Rail Relay Module - 4 channels x 5A each, feed-through	6
To Order	DIN Rail Dimmer Module - 8 channels x 2A each	9
0041614	Control plate, wall-mounting, 10 buttons	-
0041615	Fascia for control plate, Brushed Stainless Steel	-
0041616	Fascia for control plate, White	-
0041617	Fascia for control plate, Polished Brass	-
0041618	Fascia for control plate, Polished Chrome	-
0041619	Fascia for control plate, Antique Bronze	-
0041622	Enclosure 1 x 12U	12
0041623	Enclosure 1 x 18U	18
0041624	Enclosure 2 x 12U	24

Where one U is equivalent to the size of one MCB

Typical system layout with DALI Track:





OriDIM Small Room Controls



The OriDIM system is ideal for small rooms. The system can be controlled by a wall plate and/or a sensor, facilitating scene-setting in combination with optional occupancy detection and light-level regulation at the same time.

An interface is available to allow simple retractive switches to select scenes, or raise/lower light levels. Upto four circuits may be controlled independently.

Each circuit is connected to luminaires via an "addresser" interface, which broadcasts either an analogue, DSI or DALI control signal to the ballasts. Each interface may control upto 10 ballasts. Interfaces are available with a relay, to cut power to the ballasts when they are "Off" to save energy.

- Ballasts do not require individual commissioning, making DALI control simple
- Either scene-setting or sensor control, or both may be used together

1		\
	6	
	-	

PIR Sensor

Code	Description	Function	mΑ
0041634	Power supply	Required for every system	(200)
0041635	Wall plate	Scene setting, system programming	16
0041630	PIR sensor	Configurable for presence/absence	8
0041636	Switch interface	Allows connection of up to 8 retractive switches	6
0041631	Interface for DSI/DALI channel	Control up to 10 DSI or DALI ballasts together	8
0041632	Interface for DSI/DALI channel with switched output	Control up to 10 DSI or DALI ballasts together, includes a relay to switch off the power	8
0041633	Interface for 1-10V channel with switched output	Control up to 10 analogue ballasts together, includes a relay to switch off the power	8

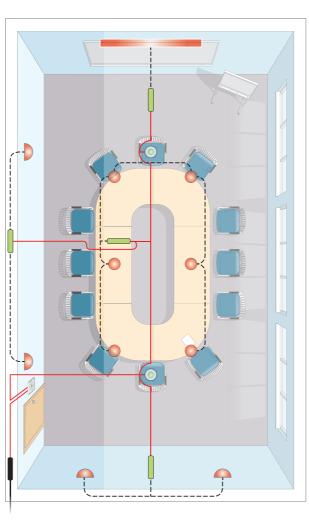


Switch Interface



Interface for DSI/DALI Channel

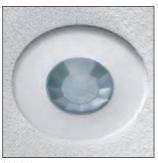
Example system layout: Meeting room



- Sensors for presence and lux
- Independent control of each channel
- Control plate for set scenes for meetings presentations etc







0041540 0041541 0041542 0041543



0041546



0041561



0041558



0051562



0041559



0041594



0041560

Features

Switching detectors with the specific SW SWITCHES SWITCHES





- Presence / Absence detection functionality
- On / off switching via lux level sensing
- Dual sensitivity: independently configurable ON and OFF motion sensitivity
- Adjustable time delay (10 sec to 30 min) before switching luminaires off
- Covers up to 7m diameter at a 2.8m mounting height
- Programmable via remote handset
- Additional user handsets available to control on/off
- IP55 version for damp environments (0041541)
- Box accessory enables surface mounting
- Can also control heating and ventilation loads
- Switching versions may be connected in parallel for larger areas, e.g. 'L shaped corridors'

Dimming detectors Dimming detectors



- DALI or analogue dimming functionality
- Two channel flexibility (on all DALI detectors)
- Step-down illumination
- Scene setting and recall
- Lamp burn-in
- Control capacity: digital detectors up to 20 DALI dimming ballasts (10 if channel 1 relay used), analogue detectors up to 10 dimming ballasts
- User handset available to control on/off, lux levels and pre-set scenes

PIR detectors - Ceiling-mounted

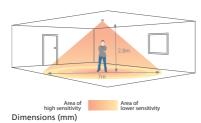
Code	Description	Load Rating at 230 vac R/I/F & CF	Load Rating at 230 vac Time Delay
Occupanc	y-linked detectors with lux level sensing		
0041540	Compact PIR presence/absence detector with lux level sensing,	10A	10 sec to 99 min
	time delay function and infrared override		
0041541	As 0041540 plus suitable for damp environments (IP55)	10A	10 sec to 99 min
Occupanc	y-linked detectors with lux level sensing and dimming		
0041542	PIR presence/absence detector with DALI dimming and time	10A	10 sec to 99 min
	delay function (up to 20 ballasts)		
0041543	Occupancy detector with 1-10V analogue dimming output (up to	10A	10 sec to 99 min
	10 ballasts)		

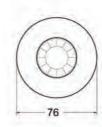
R = Resistive; I = Incandescent; Fluorescent; CF = Compact Fluorescent

Accessories

Description
Handheld programming device
Surface mounting back box
User override remote handset on/off (lux level sensing & dimming models)
User override remote handset, off only (lux level sensing & dimming models)
User handset override on/off; lux up/lux down (lux level sensing & dimming models)
Programming handset for lux level sensing and dimming detectors
Surface mounting back box extender ring

Detection pattern









0041547*



0041561

0051562

0041549*



0041546



0041559



0041560

- Up to 30m detection
- Low numbers of detectors required to cover a large area
- Dual sensitivity: independently configurable ON and OFF motion sensitivity
- Adjustable time delay (15 seconds 30 minutes)
- Holds load on until occupant is no longer detected
- Self contained
- No external control boxes, minimises installation time
- Voltage free contact option
- IP66 version also available
- Box accessory enables surface mounting
- Can also control heating and ventilation loads
- Multiple units can be used in parallel to cover areas such as 'L shaped' corridors

Zone 1

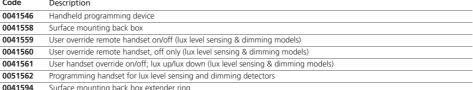
Microwave detectors - wall-mounted

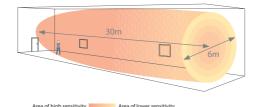
Code	Description	Load rating at 230 vac R/I/F & CF	Load rating at 230 vac Time Delay
Occupancy	-linked detectors with lux level sensing		
0041547*	Microwave occupancy detector with lux level sensing and time	10A	15 sec to 30 min
	delay function		
0041549*	As 0041547*, plus suitable for damp environments (IP66) rating	10A	15 sec to 30 min

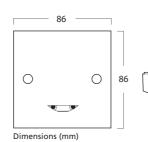
^{*} Note that these products are only suitable for use in the following country(ies): UK. Other countries by request.

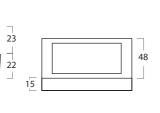
 $Special\ voltage\ to\ order\ R=Resistive;\ I=Incandescent;\ Fluorescent;\ CF=Compact\ Fluorescent$

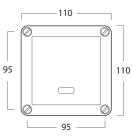
Code	Description
0041546	Handheld programming device
0041558	Surface mounting back box
0041559	User override remote handset on/off (lux level sensing & dimming models)
0041560	User override remote handset, off only (lux level sensing & dimming models)
0041561	User handset override on/off; lux up/lux down (lux level sensing & dimming models)
0051562	Programming handset for lux level sensing and dimming detectors
0041594	Surface mounting back box extender ring















0041563*



0041565*

- Up to 30m detection
- Low numbers of detectors required to cover a large area
- Dual sensitivity: independently configurable ON and OFF motion sensitivity
- Adjustable time delay (15 seconds 30 minutes)
- Holds load on until occupant is no longer detected
- Self contained

Accessories Code

0041546

0041559

0041560

0041561

0051562

Description

Handheld programming device

- No external control boxes, minimises installation time
- Voltage free contact option
- IP66 version also available
- Box accessory enables surface mounting
- Can also control heating and ventilation loads
- Multiple units can be used in parallel to cover areas such as 'L shaped' corridors

Microwave detectors - Wall-mounted

Code	Description	Load rating at 230 vac R/I/F & CF	Load rating at 230 vac Time Delay
Occupancy	-linked detectors with lux level sensing		
0041563*	Microwave occupancy detector with lux level sensing	10A	15 sec to 30 min
	and time delay function		
0041565*	As 0041547*, plus suitable for damp environments (IP66) rating	10A	15 sec to 30 min
* Note that	those products are only suitable for use in the following country/ies:	Post of Europa avent IIV	Franco Portugal Cormany

use in the following country(ies): Rest of Europe except UK, France, Portugal, Germany, Switzerland, Austria, Slovak Republic, Ireland. Other countries by request.

Special voltage to order R = Resistive; I = Incandescent; Fluorescent; CF = Compact Fluorescent

User override remote handset on/off (lux level sensing & dimming models)

Programming handset for lux level sensing and dimming detectors

User override remote handset, off only (lux level sensing & dimming models)

User handset override on/off; lux up/lux down (lux level sensing & dimming models)



0041546



0041561



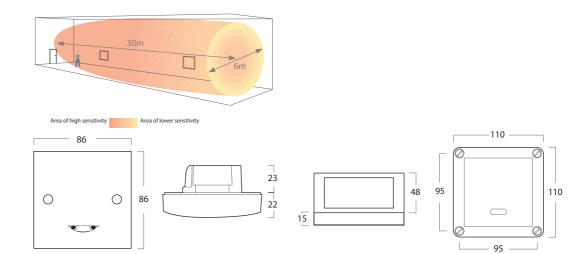


Dimensions (mm)

0051562 0041559



0041560



Zone 3 🔣 💌 🛨



0041567*



0041561

0051562

0041569*



0041546



0041559



0041560

- Up to 30m detection
- Low numbers of detectors required to cover a large area
- Dual sensitivity: independently configurable ON and OFF motion sensitivity
- Adjustable time delay (15 seconds 30 minutes)
- Holds load on until occupant is no longer detected
- Self contained
- No external control boxes, minimises installation time
- Voltage free contact option
- IP66 version also available
- Box accessory enables surface mounting
- Can also control heating and ventilation loads
- Multiple units can be used in parallel to cover areas such as 'L shaped' corridors

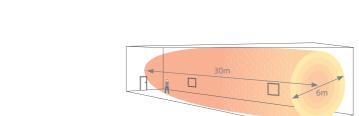
Microwave detectors - Wall-mounted

Code	Description	Load rating at 230 vac R/I/F & CF	Load rating at 230 vac Time Delay
Occupancy	-linked detectors with lux level sensing		
0041567*	Microwave occupancy detector with lux level sensing	10A	15 sec to 30 min
	and time delay function		
0041569*	As 0041547*, plus suitable for damp environments (IP66) rating	10A	15 sec to 30 min

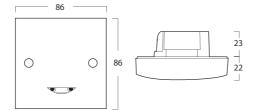
^{*} Note that these products are only suitable for use in the following country(ies): France, Portugal, Switzerland. Other countries by request.

 $Special\ voltage\ to\ order\ R=Resistive;\ I=Incandescent;\ Fluorescent;\ CF=Compact\ Fluorescent$

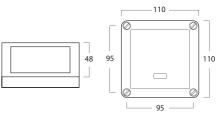
Code	Description
0041546	Handheld programming device
0041559	User override remote handset on/off (lux level sensing & dimming models)
0041560	User override remote handset, off only (lux level sensing & dimming models)
0041561	User handset override on/off; lux up/lux down (lux level sensing & dimming models)
0051562	Programming handset for lux level sensing and dimming detectors



Area of high sensitivity Area of lower sensitivity



Dimensions (mm)







0041571*



0041561

0051562

0041573*



0041546



0041559



0041560

- Up to 30m detection
- Low numbers of detectors required to cover a large area
- Dual sensitivity: independently configurable ON and OFF motion sensitivity
- Adjustable time delay (15 seconds 30 minutes)
- Holds load on until occupant is no longer detected
- Self contained
- No external control boxes, minimises installation time
- Voltage free contact option
- IP66 version also available
- Box accessory enables surface mounting
- Can also control heating and ventilation loads
- Multiple units can be used in parallel to cover areas such as 'L shaped' corridors

Zone 4 💳 💌 🛨

Microwave detectors - Wall-mounted

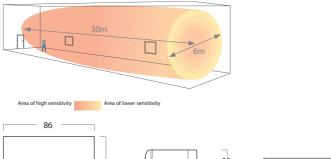
Code	Description	Load rating at 230 vac R/I/F & CF	Load rating at 230 vac Time Delay
Occupancy	-linked detectors with lux level sensing		
0041571*	Microwave occupancy detector with lux level sensing	10A	15 sec to 30 min
	and time delay function		
0041573*	As 0041547*, plus suitable for damp environments	10A	15 sec to 30 min
	(IP66) rating		

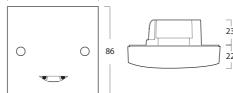
* Note that these products are only suitable for use in the following country(ies): Germany, Austria, Slovak Republic. Other countries by request.

 $Special\ voltage\ to\ order\ R=Resistive;\ I=Incandescent;\ Fluorescent;\ CF=Compact\ Fluorescent$

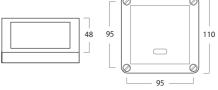
Accessories

Code	Description
0041546	Handheld programming device
0041559	User override remote handset on/off (lux level sensing & dimming models)
0041560	User override remote handset, off only (lux level sensing & dimming models)
0041561	User handset override on/off; lux up/lux down (lux level sensing & dimming models)
0051562	Programming handset for lux level sensing and dimming detectors









-110 **-**

Zone 5 🔢



0041475*



0041561

0051562

0041477*



0041546



0041559



0041560

- Up to 30m detection
- Low numbers of detectors required to cover a large area
- Dual sensitivity: independently configurable ON and OFF motion sensitivity
- Adjustable time delay (15 seconds 30 minutes)
- Holds load on until occupant is no longer detected
- Self contained
- No external control boxes, minimises installation time
- Voltage free contact option
- IP66 version also available
- Box accessory enables surface mounting
- Can also control heating and ventilation loads
- Multiple units can be used in parallel to cover areas such as 'L shaped' corridors

Microwave detectors - Wall-mounted

Code	Description	Load rating at 230 vac R/I/F & CF	Load rating at 230 vac Time Delay
Occupancy	-linked detectors with lux level sensing		
0041475*	Microwave occupancy detector with lux level	10A	15 sec to 30 min
	sensing and time delay function		
0041477*	As 0041547*, plus suitable for damp environments (IP66) rating	10A	15 sec to 30 min
			·

^{*} Note that these products are only suitable for use in the following country(ies): Ireland. Other countries by request. $Special\ voltage\ to\ order\ R=Resistive;\ I=Incandescent;\ Fluorescent;\ CF=Compact\ Fluorescent$

Code	Description
0041546	Handheld programming device
0041559	User override remote handset on/off (lux level sensing & dimming models)
0041560	User override remote handset, off only (lux level sensing & dimming models)
0041561	User handset override on/off; lux up/lux down (lux level sensing & dimming models)
0051562	Programming handset for lux level sensing and dimming detectors

30m	
Area of high sensitivity Area of lower sensitivity	
86	110
O O 86 23 22 22 22 22 22	48 95 110

Dimensions (mm)





0041548*



0041561

0051562

0041550*



0041546



0041559



0041560

- Switching detectors
- Adjustable time delay
- Dual sensitivity: independently configurable ON and OFF motion sensitivity
- Holds load on until occupant is no longer detected Self-contained unit
- No external control boxes, minimises installation time
- Voltage free contact option

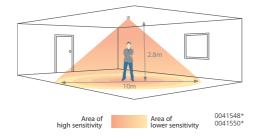
Microwave detectors - Ceiling-mounted

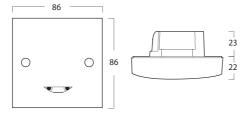
Code	Description	Load rating at 230 vac R/I/F & CF	Load rating at 230 vac Time Delay
Occupancy	-linked detectors with lux level sensing		
0041548*	Microwave occupancy detector with lux level	10A	15 sec to 30 min
	sensing and time delay function		
0041550*	As 0041548*, plus suitable for damp environments	10A	15 sec to 30 min
	(IP66) rating		

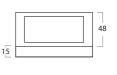
Zone 1

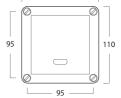
Accessories

Code	Description
0041546	Handheld programming device
0041558	Surface mounting back box
0041559	User override remote handset on/off (lux level sensing & dimming models)
0041560	User override remote handset, off only (lux level sensing & dimming models)
0041561	User handset override on/off; lux up/lux down (lux level sensing & dimming models)
0051562	Programming handset for lux level sensing and dimming detectors









110

Dimensions (mm)

^{*} Note that these products are only suitable for use in the following country(ies): UK. Other countries by request. Special voltage to order R = Resistive; I = Incandescent; Fluorescent; CF = Compact Fluorescent





0041564*

- Switching detectors • Adjustable time delay
- Dual sensitivity: independently configurable ON and OFF motion sensitivity
- Holds load on until occupant is no longer detected Self-contained unit
- No external control boxes, minimises installation time
- Voltage free contact option





Microwave detectors - Ceiling-mounted

Code	Description	Load rating at 230 vac R/I/F & CF	Load rating at 230 vac Time Delay
Occupancy	-linked detectors with lux level sensing		
0041564*	Microwave occupancy detector with lux level	10A	15 sec to 30 min
	sensing and time delay function		
0041566*	As 0041548*, plus suitable for damp	10A	15 sec to 30 min
	environments (IP66) rating		

^{*} Note that these products are only suitable for use in the following country(ies): Rest of Europe except UK, France, Portugal, Germany, Switzerland, Austria, Slovak Republic, Ireland. Other countries by request.

 $Special\ voltage\ to\ order\ R=Resistive;\ I=Incandescent;\ Fluorescent;\ CF=Compact\ Fluorescent$



0041566*

0041546 0041561



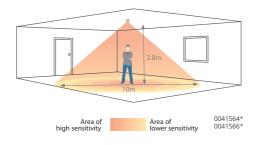
0051562

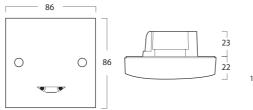
0041560

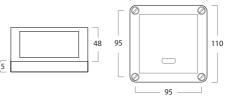
0041559

Accessories

Code	Description
0041546	Handheld programming device
0041559	User override remote handset on/off (lux level sensing & dimming models)
0041560	User override remote handset, off only (lux level sensing & dimming models)
0041561	User handset override on/off; lux up/lux down (lux level sensing & dimming models)
0051562	Programming handset for lux level sensing and dimming detectors







Dimensions (mm)

110



Zone 3 🔣 💌 🛨



0041568*



0041570*



0041546



0041559



• Switching detectors

- Adjustable time delay
- Dual sensitivity: independently configurable ON and OFF motion sensitivity
- Holds load on until occupant is no longer detected Self-contained unit
- No external control boxes, minimises installation time
- Voltage free contact option

Microwave detectors - Ceiling-mounted

Code	Description	Load rating at 230 vac R/I/F & CF	Load rating at 230 vac Time Delay
Occupancy	-linked detectors with lux level sensing		
0041568*	Microwave occupancy detector with lux	10A	15 sec to 30 min
	level sensing and time delay function		
0041570*	As 0041548*, plus suitable for	10A	15 sec to 30 min
-	damp environments (IP66) rating		

^{*} Note that these products are only suitable for use in the following country(ies): France, Portugal, Switzerland. Other countries by request.

Special voltage to order R = Resistive; I = Incandescent; Fluorescent; CF = Compact Fluorescent

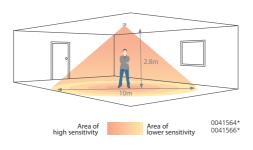
Code	Description
0041546	Handheld programming device
0041559	User override remote handset on/off (lux level sensing & dimming models)
0041560	User override remote handset, off only (lux level sensing & dimming models)
0041561	User handset override on/off; lux up/lux down (lux level sensing & dimming models)
0051562	Programming handset for lux level sensing and dimming detectors

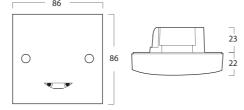


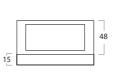
0041561

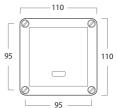


0051562









Dimensions (mm)



Zone 4 💳 💌 🛨



0041567*



0041561

0041569*



0041546



0041559



0041560

- Switching detectors
- Adjustable time delay
- Dual sensitivity: independently configurable ON and OFF motion sensitivity
- Holds load on until occupant is no longer detected Self-contained unit
- No external control boxes, minimises installation time
- Voltage free contact option

Microwave detectors - Ceiling-mounted

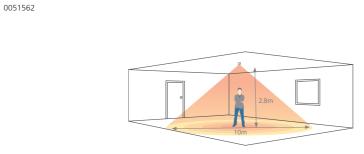
Code	Description	Load rating at 230 vac R/I/F & CF	Load rating at 230 vac Time Delay
Occupancy	-linked detectors with lux level sensing		
0041572*	Microwave occupancy detector with lux	10A	15 sec to 30 min
	level sensing and time delay function		
0041574*	As 0041548*, plus suitable for damp	10A	15 sec to 30 min
	environments (IP66) rating		

^{*} Note that these products are only suitable for use in the following country(ies): Germany, Austria, Slovak Republic. Other countries by request.

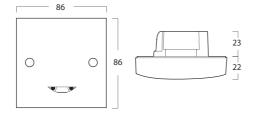
Special voltage to order R = Resistive; I = Incandescent; Fluorescent; CF = Compact Fluorescent

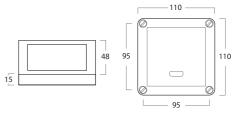
Accessories

Code	Description
0041546	Handheld programming device
0041559	User override remote handset on/off (lux level sensing & dimming models)
0041560	User override remote handset, off only (lux level sensing & dimming models)
0041561	User handset override on/off; lux up/lux down (lux level sensing & dimming models)
0051562	Programming handset for lux level sensing and dimming detectors



Area of high sensitivity





Dimensions (mm)





0041476*



0041561

0051562

0041546*



0041546



0041559



0041560

- Switching detectors
- Adjustable time delay
- Dual sensitivity: independently configurable ON and OFF motion sensitivity
- Holds load on until occupant is no longer detected Self-contained unit
- No external control boxes, minimises installation time
- Voltage free contact option

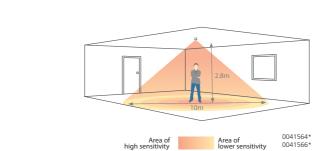
Microwave detectors - Ceiling-mounted

Code	Description	Load rating at 230 vac R/I/F & CF	Load rating at 230 vac Time Delay
Occupancy	r-linked detectors with lux level sensing		
0041476*	Microwave occupancy detector with lux	10A	15 sec to 30 min
	level sensing and time delay function		
0041478*	As 0041548*, plus suitable for damp environments (IP66) rating	10A	15 sec to 30 min

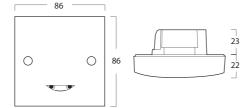
Zone 5 🔣

Accessories

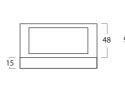
Code	Description
0041546	Handheld programming device
0041559	User override remote handset on/off (lux level sensing & dimming models)
0041560	User override remote handset, off only (lux level sensing & dimming models)
0041561	User handset override on/off; lux up/lux down (lux level sensing & dimming models)
0051562	Programming handset for lux level sensing and dimming detectors

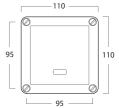


Area of high sensitivity



Area of lower sensitivity





Dimensions (mm)

^{*} Note that these products are only suitable for use in the following country(ies): Ireland. Other countries by request. Special voltage to order R = Resistive; I = Incandescent; Fluorescent; CF = Compact Fluorescent

SYLVANIA

0

0041556, 0041557



0041551*, 0041552*, 0041553*









0041546 0041561



0041558 / 0041560



0041559

0041592



0041591 0041593 / 0041594

Microwave detectors - Ceiling-mounted and tilt adjustable

Zone 1

Switching detectors



- Occupancy detection and switching with lux level sensing
- Time delay function (10 second 99 minutes)
- Dual sensitivity: independently configurable ON and OFF motion sensitivity, presence or absence detection functionality
- Programmable via remote handsets: 0041546 or 0041562
- User handset available to control
- Accessory enables surface mounting
- The wall mounting bracket enables the adjustable microwave sensor, installed within a surface mounting back box, to be attached at a lower height than the ceiling, for example in a position below the level of direct/indirect luminaires
- Switching versions may be connected in parallel for larger areas, e.g. 'L shaped corridors'

Dimming detectors



- DSI, DALI or 1-10V dimming versions
- Two channel flexibility: one switched, one dimming on DALI version
- Step-down illumination
- Scene setting and recall
- Lamp burn-in
- Control capacity: digital detectors up to 20 DALI dimming ballasts (10 if channel 1 relay used), analogue detectors up to 10 dimming ballasts
- Can also control heating and ventilation loads

Description

Area of high sensitivity Area of lower sensitivity Area of lower sensitivity

Load rating at 230 vac

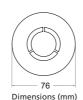
Load rating at 230 vac

Microwave detectors - Ceiling-mounted and tilt adjustable

Code	Description	R/I/F & CF	Time Delay
Occupancy	linked detectors with lux level sensing		
0041551*	Adjustable head microwave presence/absence detector with lux	10A	10 sec to 99 min
	level sensing, infrared override and time delay function		
0041556	Ceiling-mounted microwave detector switched	-	-
Occupancy	-linked detectors with lux level sensing and dimming		
0041552*	Adjustable head microwave presence/absence detector with	10A	10 sec to 99 min
	dimming and time delay function. DALI dimming output.		
0041553*	Adjustable head microwave presence/absence detector for 1-10V	10A	10 sec to 99 min
	analogue dimming output		
0041557	Ceiling-mounted microwave detector Direct Dim, DALI / DSI	-	-

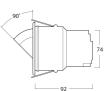
^{*} Note that these products are only suitable for use in the following country(ies): UK. Other countries by request.

Code	Description
0041546	Handheld programming device
0041558	Surface mounting back box
0041559	User override remote handset on/off (lux level sensing & dimming models)
0041560	User override remote handset, off only (lux level sensing & dimming models)
0041561	User handset override on/off; lux up/lux down (lux level sensing & dimming models)
0051562	Programming handset for lux level sensing and dimming detectors
0041591	Surface mounting back box for adjustable microwave sensor
0041592	Wall mounting bracket
0041593	Surface mounting back box extender ring for adjustable microwave sensor
0041594	Surface mounting back box extender ring









R = Resistive; I = Incandescent; Fluorescent; CF = Compact Fluorescent

Microwave detectors - Ceiling-mounted and tilt adjustable



Area of high sensitivity Area of lower sensitivity

2.6m

sitivity set to maximum ector head position set to 80°

sitivity set to maximum ector head position set to 0°

Area of high sensitivity Area



0041556, 0041557



0041579*, 0041580*,0041581*









0041546 0041561



0041558 / 0041560



0041559 0041592



0041591 0041593 / 0041594

Switching detectors WIFH LUX SHOUND SWITCHING SWITCHING



- Occupancy detection and switching with lux level sensing
- Time delay function (10 second 99 minutes)
- Dual sensitivity: independently configurable ON and OFF motion sensitivityPresence or absence detection functionality
- Programmable via remote handsets: 0041546 or 0041562
- User handset available to control
- · Accessory enables surface mounting
- The wall mounting bracket enables the adjustable microwave sensor, installed within a surface mounting back box, to be attached at a lower height than the ceiling, for example in a position below the level of direct/indirect luminaires
- Switching versions may be connected in parallel for larger areas, e.g. 'L shaped corridors'

Dimming detectors



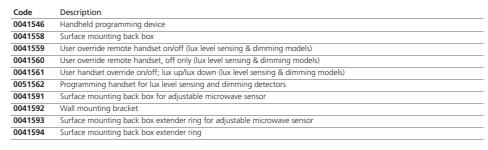
- DSI, DALI or 1-10V dimming versions
- Two channel flexibility: one switched, one dimming on DALI version
- Step-down illumination
- Scene setting and recall
- Lamp burn-in

- Control capacity: digital detectors up to 20 DALI dimming ballasts (10 if channel 1 relay used), analogue detectors up to 10 dimming ballasts
- Can also control heating and ventilation loads

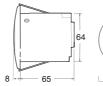
Microwave detectors - Ceiling-mounted and tilt adjustable

Code	Description	Load rating at 230 vac R/I/F & CF	Load rating at 230 vac Time Delay
Occupancy	linked detectors with lux level sensing		
0041579*	Adjustable head microwave presence/absence detector with	10A	10 sec to 99 min
	lux level sensing, infrared override and time delay function		
0041556	Ceiling-mounted microwave detector switched	-	=
Occupancy	-linked detectors with lux level sensing and dimming		
0041580*	Adjustable head microwave presence/absence detector with	10A	10 sec to 99 min
	dimming and time delay function. DALI dimming output		
0041581*	Adjustable head microwave presence/absence detector for	10A	15 sec to 30 min
	1–10V analogue dimming output		
	·		

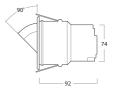
^{*} Note that these products are only suitable for use in the following country(ies): UK. Other countries by request.













R = Resistive; I = Incandescent; Fluorescent; CF = Compact Fluorescent

SYLVANIA

0041556, 0041557



0041582*, 0041583*, 0041584*





0041561





0041546



0041558 / 0041560



0041559



0041591



0041592



0041593 / 0041594

Microwave detectors - Ceiling-mounted and tilt adjustable

Zone 3 🚺 👂 🛨



- Occupancy detection and switching with lux level sensing
- Time delay function (10 second 99 minutes)
- functionality
- Programmable via remote handsets: 0041546 or 0041562
- User handset available to control
- The wall mounting bracket enables the adjustable microwave sensor, installed within a surface mounting back box, to be attached at a lower height than the ceiling, for example in a position below the level of direct/indirect luminaires
- Switching versions may be connected in parallel for

Dimming detectors



- DSI, DALI or 1-10V dimming versions
- DALI version
- Step-down illumination

- detectors up to 10 dimming ballasts
- Can also control heating and ventilation loads

- Dual sensitivity: independently configurable ON and OFF motion sensitivityPresence or absence detection
- · Accessory enables surface mounting
- larger areas, e.g. 'L shaped corridors'

- Two channel flexibility: one switched, one dimming on
- Scene setting and recall
- Lamp burn-in
- Control capacity: digital detectors up to 20 DALI dimming ballasts (10 if channel 1 relay used), analogue

Description

Load rating at 230 vac

load rating at 230 vac

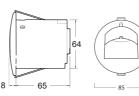
Microwave detectors - Ceiling-mounted and tilt adjustable

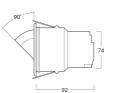
	·	R/I/F & CF	Time Delay
Occupancy	linked detectors with lux level sensing		
0041582*	Adjustable head microwave presence/absence detector with	10A	10 sec to 99 min
	lux level sensing, infrared override and time delay function		
0041556	Ceiling-mounted microwave detector switched	-	-
Occupancy-	-linked detectors with lux level sensing and dimming		
0041583*	Adjustable head microwave presence/absence detector with	10A	10 sec to 99 min
	dimming and time delay function. DALI dimming output.		
0041584*	Adjustable head microwave presence/absence detector for	10A	15 sec to 30 min
	1–10V analogue dimming output		
0041557	Ceiling-mounted microwave detector Direct Dim, DALI / DSI	-	-

^{*} Note that these products are only suitable for use in the following country(ies): France, Portugal, Switzerland. Other countries by

Code	Description
0041546	Handheld programming device
0041558	Surface mounting back box
0041559	User override remote handset on/off (lux level sensing & dimming models)
0041560	User override remote handset, off only (lux level sensing & dimming models)
0041561	User handset override on/off; lux up/lux down (lux level sensing & dimming models)
0051562	Programming handset for lux level sensing and dimming detectors
0041591	Surface mounting back box for adjustable microwave sensor
0041592	Wall mounting bracket
0041593	Surface mounting back box extender ring for adjustable microwave sensor
0041594	Surface mounting back box extender ring







R = Resistive; I = Incandescent; Fluorescent; CF = Compact Fluorescent

Microwave detectors - Ceiling-mounted and tilt adjustable





0041556, 0041557



0041585*. 0041586*. 0041587*









0041546



0041558 / 0041560



0041559



0041591

0051562

0041592



0041593 / 0041594



- Occupancy detection and switching with lux level sensing
- Time delay function (10 second 99 minutes)
- Dual sensitivity: independently configurable ON and OFF motion sensitivityPresence or absence detection functionality
- Programmable via remote handsets: 0041546 or 0041562
- User handset available to control
- · Accessory enables surface mounting
- The wall mounting bracket enables the adjustable microwave sensor, installed within a surface mounting back box, to be attached at a lower height than the ceiling, for example in a position below the level of direct/indirect luminaires
- Switching versions may be connected in parallel for larger areas, e.g. 'L shaped corridors'

Dimming detectors



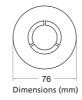
- DSI, DALI or 1-10V dimming versions
- Two channel flexibility: one switched, one dimming on DALI version
- Step-down illumination
- Scene setting and recall
- Lamp burn-in
- Control capacity: digital detectors up to 20 DALI dimming ballasts (10 if channel 1 relay used), analogue detectors up to 10 dimming ballasts
- Can also control heating and ventilation loads

Microwave detectors - Ceiling-mounted and tilt adjustable

Code	Description	Load rating 230 vac R/I/F & CF	Load rating 230 vac Time Delay
Occupancy	linked detectors with lux level sensing		
0041585*	Adjustable head microwave presence/absence detector with	10A	10 sec to 99 min
	lux level sensing, infrared override and time delay function		
0041556	Ceiling-mounted microwave detector switched	-	-
Occupancy	-linked detectors with lux level sensing and dimming		
0041586*	Adjustable head microwave presence/absence detector with	10A	10 sec to 99 min
	dimming and time delay function. DALI dimming output.		
0041587*	Adjustable head microwave presence/absence detector for	10A	15 sec to 30 min
	1–10V analogue dimming output		
0041557	Ceiling-mounted microwave detector Direct Dim, DALI / DSI	-	-

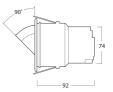
* Note that these products are only suitable for use in the following country(ies): Germany, Austria, Slovak Republic. Other countries by

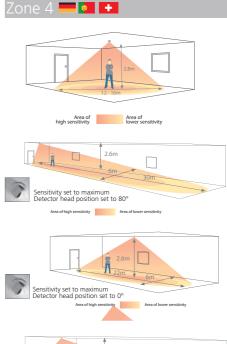
Code	Description
0041546	Handheld programming device
0041558	Surface mounting back box
0041559	User override remote handset on/off (lux level sensing & dimming models)
0041560	User override remote handset, off only (lux level sensing & dimming models)
0041561	User handset override on/off; lux up/lux down (lux level sensing & dimming models)
0051562	Programming handset for lux level sensing and dimming detectors
0041591	Surface mounting back box for adjustable microwave sensor
0041592	Wall mounting bracket
0041593	Surface mounting back box extender ring for adjustable microwave sensor
0041594	Surface mounting back box extender ring

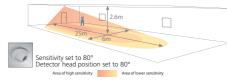












R = Resistive; I = Incandescent; Fluorescent; CF = Compact Fluorescent

SYLVANIA



0041556, 0041557



0041588*, 0041589*, 0041590*









0041546



0041561



0041558 / 0041560



0051562



0041559



0041592



0041591



0041593 / 0041594

Microwave detectors - Ceiling-mounted and tilt adjustable

Switching detectors



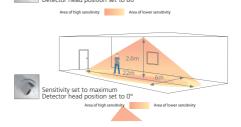
- Occupancy detection and switching with lux level sensing
- Time delay function (10 second 99 minutes)
- Dual sensitivity: independently configurable ON and OFF motion sensitivityPresence or absence detection functionality
- Programmable via remote handsets: 0041546 or 0041562
- User handset available to control
- · Accessory enables surface mounting
- The wall mounting bracket enables the adjustable microwave sensor, installed within a surface mounting back box, to be attached at a lower height than the ceiling, for example in a position below the level of direct/indirect luminaires
- Switching versions may be connected in parallel for larger areas, e.g. 'L shaped corridors'

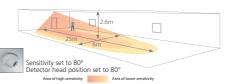
Dimming detectors



- DSI, DALI or 1-10V dimming versions
- Two channel flexibility: one switched, one dimming on DALI version
- Step-down illumination
- Scene setting and recall
- Lamp burn-in
- Control capacity: digital detectors up to 20 DALI dimming ballasts (10 if channel 1 relay used), analogue detectors up to 10 dimming ballasts
- Can also control heating and ventilation loads

Zone 5 🛘





Microwave detectors - Ceiling-mounted and tilt adjustable

Code	Description	Load rating 360 vac R/I/F & CF	Load rating 360 vac Time Delay	
Occupancy	linked detectors with lux level sensing			
0041588*	Adjustable head microwave presence/absence detector with	10A	10 sec to 99 min	
	lux level sensing, infrared override and time delay function			
0041556	Ceiling-mounted microwave detector switched	-	-	
Occupancy-linked detectors with lux level sensing and dimming				
0041589*	Adjustable head microwave presence/absence detector with	10A	10 sec to 99 min	
	dimming and time delay function. DALI dimming output.			
0041590*	Adjustable head microwave presence/absence	10A	15 sec to 30 min	
	detector for 1–10V analogue dimming output			
0041557	Ceiling-mounted microwave detector Direct Dim, DALI / DSI	-	-	

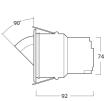
^{*} Note that these products are only suitable for use in the following country(ies): Ireland. Other countries by request.

Code	Description
0041546	Handheld programming device
0041558	Surface mounting back box
0041559	User override remote handset on/off (lux level sensing & dimming models)
0041560	User override remote handset, off only (lux level sensing & dimming models)
0041561	User handset override on/off; lux up/lux down (lux level sensing & dimming models)
0051562	Programming handset for lux level sensing and dimming detectors
0041591	Surface mounting back box for adjustable microwave sensor
0041592	Wall mounting bracket
0041593	Surface mounting back box extender ring for adjustable microwave sensor
0041594	Surface mounting back box extender ring









R = Resistive; I = Incandescent; Fluorescent; CF = Compact Fluorescent

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