

# **Light Management Systems:** Components.

Non-system-specific components for expanding, connecting or installing light management products.



## Expand, connect and install with non-systemspecific components.

Everything from a single source. The complete OSRAM LMS range offers products for almost all types of modern lighting control – and the appropriate accessories for simple expansion, connection and installation of our innovative light management systems.

#### This includes:

- Signal repeaters
- Signal amplifiers
- Signal converters
- Radio-controlled components
- Connectors
- Installation kits





## Signal repeaters/amplifiers.

DALI® repeaters provide the expanding DALI® systems. They are addressable, which means that the repeaters can be individually controlled and configured within an installation. The ECGs connected to the repeater operate automatically as a group with a uniform dimmer setting. In Touch DIM® mode, the repeater operates as an independent controller for manual control of any DALI® ECG, using standard switches. Using a DMX signal repeater means increasing the number of DMX devices and extend the length of the DMX signal cable. Signal amplifiers operate in conjunction with controllers, enabling a larger number of ECGs to be connected to the controller.

#### DALI® REP LI.

- Expansion of DALI® systems by 64 ECGs each time
- Device for luminaire installation (independent installation possible with LMS CI BOX)
- Extends the DALI® line by 300 m
- Touch DIM® control of 64 DALI® ECGs
- Power input: max. 4W

#### DALI® REP SO.

- Expansion of DALI® systems by 64 ECGs each time
- DIN rail housing
- Extends the DALI® line by 300 m
- Touch DIM® control of 64 DALI® ECGs
- Standby consumption: max. 1 W
- Integrated load contact for disconnecting the ECG supply on standby (Greenswitch)

#### DMX ISOLATED REPEATER.

- Increase signal cable length > 300 m
- Increase number of DMX devices by 32
- Integrated isolated barrier and galvanic separation between lighting zones
- Repetition of DMX (one way) and RDM (bi-directional) signals
- Supply voltage: 9-48 V DC

#### DIM SA.

- Signal amplifier for 1...10V controllers and sensors
- Supports large luminaire groups and long control lines
- Load capacity of the signal output: max. 100 mA/100 OSRAM 1...10 V ECGs or 33 further DIM SA signal amplifiers

















#### Converters.

DALI® converters are multifunctional units. They convert digital DALI® signals to analog 1...10V signals. Alternatively, the separate Touch DIM® input allows single-switch control of the connected 1...10V ECG. DALI® converters can also be used purely as DALI® switching actuators. The DMX to DALI® converter allows easy integration of DALI® ballasts in DMX installations. Non-dimmable loads are also be integrable.

#### DALI® CON 1...10 LI.

- Converter for installation in luminaires
- Load capacity of the signal output: max. 100 mA/100 OSRAM 1...10 V ECGs or 33 DIM SA signal amplifiers or 0...10 V max. 5 mA active
- Switchable characteristic: linear/logarithmic
- Load capacity of switching contact: 5 A

#### **DALI® CON 1...10 SO.**

- Converter for snap-on
- Load capacity of the signal output: max. 100 mA/100 OSRAM 1...10 V ECGs or 33 DIM SA signal amplifiers or 0...10 V max. 5 mA active
- Switchable characteristic: linear/logarithmic
- Load capacity of switching contact: 5 A

#### DMX CONVERTER DALI® SO.

- DIN RAIL housing
- 6 DALI® broadcast output channels for up 96-ECG
- Manual and auto DMX addressing mode
- Immediate ignition of FL lamps by user selectable permanent filament preheating (in combination with QTi DALI® ECG)
- Number of DMX channels (1-6) to be converted
- Automatic amplification of DMX output signal

#### DALI® SWITCH SO.

- DIN rail housing
- 3 independent load contacts
- Up 6A ohmic load
- Supplied by 24 V DC (e.g. 24 V power supply for DIN rail mounting PS30)





## Radio receiver.

#### Touch DIM® RC.

- Radio receiver for batteryless EnOcean radio switches for 2 lighting groups
- Dimming without a control line by means of maintenance-free radio technology
- Power draw: max. 1.5 W
- Frequency band: 868.3 MHz
- 2 floating semiconductor relay outputs: max. 45 mA/240 V
- Up to 15 QTi DALI® ECGs, OTi DALI® ECGs or HTi transformers can be connected per output
- Up to 30 wall transmitters can be trained

#### SWITCH RC.

- Suitable for all OSRAM control elements and sensors with EnOcean radio technology
- Choice of 5 different operating modes
- Adjustable switch-off delay: 1 to 20 min
- Range: up to 30 m (up to 5 walls) or 100 m (no walls)
- Switching by means of maintenance-free EnOcean radio technology
- Frequency band: 868.3 MHz
- Up to 8 sensors and 8 wall-mounted/hand-held transmitters can be trained
- Up to 14 ECGs can be connected





### Radio transmitters.

#### Touch DIM® WCU - 2-channel radio switch.

- Batteryless radio switch for up to 2 lighting groups
- Dimming without a control line by means of maintenance-free radio technology
- Frequency band: 868.3 MHz
- Output power: 10 mW
- Batteryless operation thanks to inductive power generation

#### Touch DIM® RMC - 4-channel radio remote control.

- Batteryless radio remote control for up to 4 lighting groups
- Dimming without a control line by means of maintenance-free radio technology
- Frequency band: 868.3 MHz
- Output power: 10 mW
- Batteryless operation thanks to inductive power generation





#### Y-connectors.

Y-connectors are used to link multiple controllers and connect additional system components.

#### Y-CONNECTOR.

- Passive distributor
- Connections: 3 × modular 4p4c socket
- 2 connecting cables included, modular 4p4c connector on both ends, length 2.1 m
- Enables synchronization of multiple EASY control units and connection of further EASY system components
- Enables parallel connection of multiple sensors to a MULTleco/MULTI 3 system
- Option for adhesive pad mounting

#### Y-CONNECTOR SCREW.

- Passive distributor
- Connections: 2 × four-pin screw terminal, 2 × modular 4p4c socket
- 2 connecting cables included, modular 4p4c connector on both ends, length 2.1 m
- Enables multiple MULTleco/MULTI 3 systems to be connected to central presence detection.
- Enables standard cables to be used for EASY, MULTI 3 and MULTIeco systems
- Option for adhesive pad mounting



## PS 30/100-240/24 SO.

Power supply for 24 V components.

- DIN rail housing
- 1.3A output current
- Input voltage 100...240 V AC



## DALI® MAGIC.

Testing, analysis and programming of DALI® ballasts and DALI® installations.

- Standard interface DALI®/USB
- Central control, analysis and programming of DALI® systems (e.g. reading and writing of DALI® device configurations) by using "DALI® wizard" software
- "DALI®-Spy" functionality for recording data flow on the DALI® line by means of software "DALI® wizard"
- Programming of OSRAM ECGs with 3DIM functionality by using "3DIM Tool" software



## LMS CI BOX.

• Cable clamp casing for independent mounting of all OSRAM controllers with dimensions 189 × 30 × 21 mm (L × W × H)



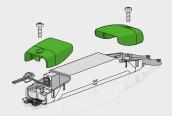
## SENSOR KIT.

• Adapter for surface mounting sensor elements with a diameter of 50 mm



## **MOUNTING ADAPTER.**

• Adapter for surface mounting sensor elements with a diameter of 116 mm



## ECO CI KIT.

 Cable clamp kit for independent mounting of all OSRAM controllers with dimensions of 118 × 30 × 21 mm (L × W × H)

Graphic	Technical drawing	Product reference	Order reference	Product number	Dimensions
TO MANAGEMENT SHE WITH THE PARTY OF THE PART	Įh	DALI® Repeater LI	DALI® REP LI	4008321 <b>292599</b>	189 × 30 × 21 mm (L × W × H)
TO THE STATE OF TH	a w	DALI® Repeater SO	DALI® REP SO	4008321 <b>301093</b>	72 × 96 × 62 mm (L × W × H)
C C CHRACE I		DMX Isolated Repeater	DMX ISOLATED REPEATER	4008321 <b>621832</b>	80 × 71 × 24 mm (L × W × H)
Transfer on the state of the st		Signal amplifier	DIM SA	4008321 <b>097095</b>	189 × 30 × 30 mm (L × W × H)
(C )	[h	DALI® converter Luminaire installation	DALI® CON 110 LI	4050300 <b>638973</b>	190 × 30 × 27 mm (L × W × H)
000000 F	98999000 98999000 98999000	DALI® converter (4TE) Snap-on	DALI® CON 110 SO	4050300 <b>639802</b>	72 × 90 × 64 mm (L × W × H)
The state of the s		DMX converter DALI® SO	DMX CONVERTER DALI® SO	4008321 <b>532336</b>	107 × 76 × 59 mm (L × W × H)
######################################	h h	DALI® Switch SO	DALI® SWITCH SO	4008321 <b>533364</b>	96 × 54 × 62 mm (L × W × H)
THE CHAPTER OF A PARTY		2-channel radio receiver	Touch DIM® RC	4008321 <b>031938</b>	189 × 30 × 21 mm (L × W × H)
CC const	w 6666	1-channel radio receiver	SWITCH RC	4008321 <b>385642</b>	45 × 37 × 23 mm (L × W × H)
Ged : 2: NONE		2-channel radio switch	Touch DIM® WCU	4008321 <b>032737</b>	80 × 80 × 20 mm (L × W × H)
: : :		4-channel radio remote control	Touch DIM® RMC	4008321 <b>183033</b>	82 × 49 × 20 mm (L × W × H)
		Y-connector	Y-CONNECTOR	4008321 <b>803135</b>	34×18×16 (L×W×H)
0000		Y-connector with screw terminals	Y-CONNECTOR SCREW	4008321 <b>916686</b>	40 × 20 × 16 mm (L × W × H)

Graphic	Technical drawing	Product reference	Order reference	Product number	Dimensions
Neilly .		Power supply	PS 30/24V	4008321 <b>555311</b>	90 × 54 × 58 mm (L × W × H)
CELL STATE OF STATE O		Analysis and programming tool	DALI® MAGIC	4008321 <b>582768</b>	120 × 79 × 28 mm (L × W × H)
		Installation kit	LMS CI BOX	4008321 <b>083692</b>	261 × 71/35 × 27 mm (L × W × H)
0.0		Adapter for surface mounting	SENSOR KIT	4008321 <b>916662</b>	80 × 25 mm (Ø × H)
		Mounting adapter	MOUNTING ADAPTER	4008321 <b>480798</b>	116 × 19 mm (Ø × H)
		Installation kit	ECO CI KIT	4008321 <b>392091</b>	

## **SYSTEMS**

Components	Sensors	Touch DIM® (TD)	MULTIeco	MULTI 3	EASY Color Control	MCU	DALI® BASIC	DALI® PROFESSIONAL
DALI® REP LI			-	-	-	=		-
DALI® REP SO				-	=	-	-	=
DMX ISOLATED REPEATER								
DIM SA			-	-		-		
DALI® SWITCH SO							-	
DALI® CON 110 LI		-	•	-		-	-	-
DALI® CON 110 SO		-	•	-		-	-	-
DMX CONVERTER DALI® SO								
Y-CONNECTOR			-	-				
Y-CONNECTOR SCREW			-	-				
LMS CI BOX		-		-				
SENSOR KIT			-	-				
MOUNTING ADAPTER								
ECO CI KIT								
PS 30/24V								
DALI® MAGIC							-	
TOUCH DIM® RC		-		-			-	
SWITCH RC		-					-	-
TOUCH DIM® WCU		-		-	•		-	-
TOUCH DIM® RMC		-			-			•

#### System guarantee.

#### Only from OSRAM: System<sup>+</sup> Guarantee for unique security and quality.

OSRAM offers an extensive three-stage guarantee for light management systems and ECG/lamp systems from OSRAM. All the details on the relevant products, registration and the guarantee requirements can be found at: www.osram.com/system-guarantee



#### The perfect solution: the OSRAM LMS product portfolio.

To reflect the principal application requirements, OSRAM's LMS product portfolio is structured in the following five categories:

#### **Energy saving**

→ For energy-saving daylight-dependent and presence-dependent lighting

#### **Ambience**

→ EASY Color and white light control for shop and hospitality

#### **Scenes**

→ For multifunctional management of lighting groups and lighting scenes

#### Components

→ For expanding, connecting or installing light management products

#### **Light Source Control Gears**

→ For safe, efficient and reliable lamp/luminaire operation

#### LMS from OSRAM: LMS folder.

Compilation of product brochures on every LMS topic, including a poster, an application matrix and a CD-ROM, bundled in a folder.



