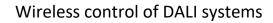
wDALI Controls

Datasheet

DALI RF Remote Control





combo transmitter/receiver:

Art. Nr. 86459534-W+T (Remote white +Tr.)
Art. Nr. 86459534-B+T (Remote black +Tr.)
Art.Nr. 89453848+T (MC +Tr.)
Art.Nr. 86459541-W+T (Switch white +Tr.)
Art.Nr. 86459541-B+T (Switch black +Tr.)

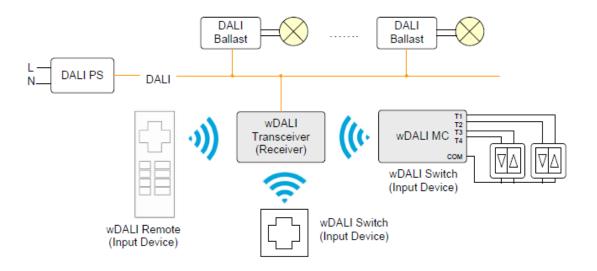


wDALI Controls Wireless DALI Controls

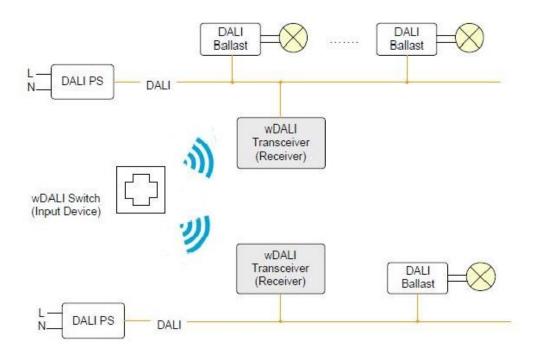
Overview

- Wireless control of a DALI-line
- A wDALI control consist of at least two components – the freely placeable user interface (input device) and a transceiver, which has to be connected to the DALI signal line
- Available input devices: Remote (12 buttons), Switch (4 Buttons) and MC, a pushbutton coupler with 4 potentialfree inputs (pushbuttons only)
- Up to 4 effective ranges, switching mode and DALI-command can be assigned to each pushbutton.
- Factory default setting offers basic control functions
- Individual addresses (0-63), group addresses (0-15) or broadcast can be set as effective range.
- Various switching modes (short, long press; toggle; stairways function etc.) can be assigned to each pushbutton.
- DALI DT8 support for adjustable white luminaires

- Configurable power up function
- Memory function for brightness
- Simple installation and configuration with the DALI-Cockpit software tool
- Multiple input devices can be paired with the same transceiver (FW-Version 2.0 and higher), each paired device has the same function.
- A input device can be paired with several transceivers in order to control multiple DALI-lines
- Multiple wDALI-transceivers can be used on the same DALI signal line.
- The transmitter part (input device can be placed anywhere in the radio receiver range.
- The transceiver must not be connected to the mains. It is supplied directly via the DALI signal line.



typical installation (several input devices, one transceiver)



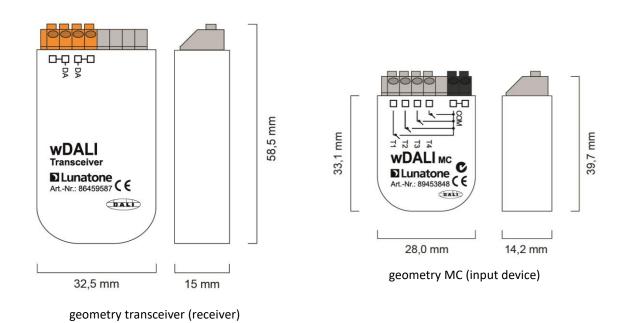
typical installaiton (one input device, simultanous conrol of multiple DALI-lines)

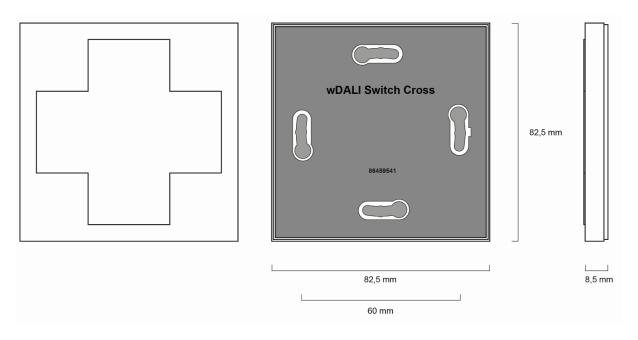
Specification, Characteristics

type	wDALI Transceiver
article number	86459587-TR
electrical data:	
supply	via DALI signal-line
typ.current consumption	3.8mA
output	DALI
function after power return	programmable
frequency range	2,4 Ghz
receiving range	up to 300m (outdoors) in buildings typically 10-20m
technical data:	
dimensions	59mmx33mmx15mm
housing/mounting	back box
connecting wire cross section	0.5 to 1.5 mm ²
storing and transportation temperature	-20°C+75°C
operational ambient temperature	-20°C+75°C
protection class	IP20

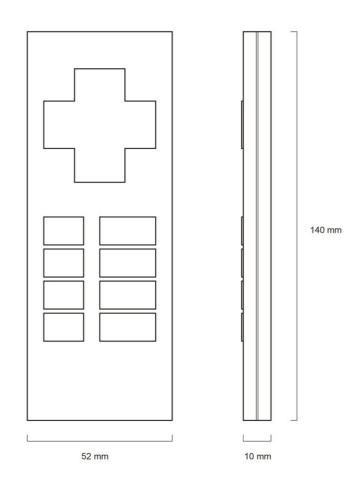


type	wDALI Switch Cross	wDALI Remote	wDALI MC
article number	86459541-W (white) 86459541-B (black)	86459534-W (white) 86459534-B (black)	89453848
electrical data:			
supply		battery	
estimated battery lifetime		6 years	
output		2,4Ghz RF	
inputs	4 pushbuttons	12 pushbuttons	4 potential free inputs for pushbuttons
technical data:			
dimensions	82mmx82mmx8,5mm	140mmx52mmx10mm	40mmx28mmx15mm
housing	wall mounting	-	back box
connecting wire cross section		-	0.5 to1.5 mm ²
storing and transportation temperature	-20°C+75°C		
operational ambient temperature	0°C+50°C		
protection class	IP20		





geometry switch (input device)



geometry remote (input device)



Installation

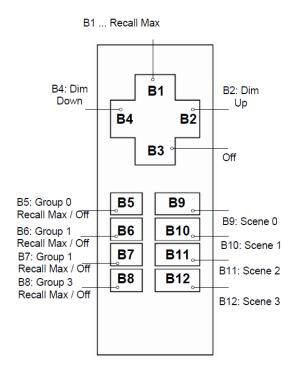
- wDALI Transceiver is supplied by the DALI-line (typ. current consumption 3.8mA)
- the connection to the DALI-line is polarity free
- the DALI-input is protected against overvoltage (up to mains voltage)
- the wDALI transceiver is suitable for back box mounting
- input devices can be placed within the receiver range (dependent on structural conditions, outdoors up to 300m, indoor typically 10m-20m)

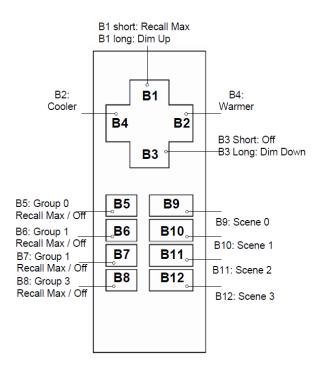
Function

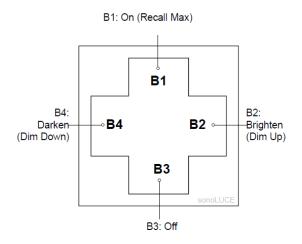
- Simple addressing and configuration with the DALI Cockpit software tool
- Simple Pairing/Unpairing of additional input devices
- The function assigned to a button can be recalled by each of the paired input devices (Switch&MC: Button 1-4, Remote: Button 1-12)
- Factory setting (Preset1) can be restored at any time
- Preset 2 for tunable white mode can be configured quickly
- Individual configuration for each button
- Command selection from DALI command set, predefined and customized macros
- Predefined macros for dynamic and sequential recall of scenes, tunable white control and memory function
- Adjustable power up function (no change, Off, scene 0-15)
- Operating modes for interacting with a central control unit

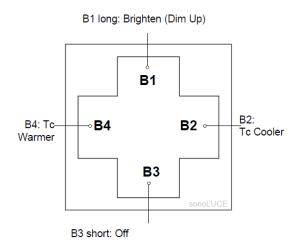


Hint: only pushbuttons may be connected to the wDALI MC. Do not connect switches!









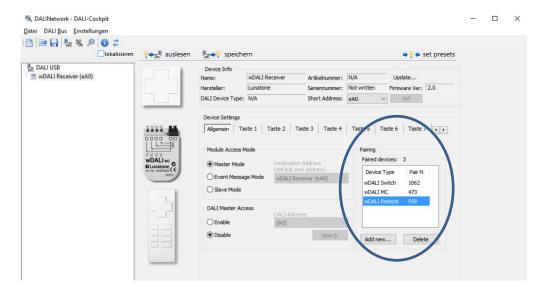
B1 short: On (Recall Max)

B3 long: Darken (Dim Down)

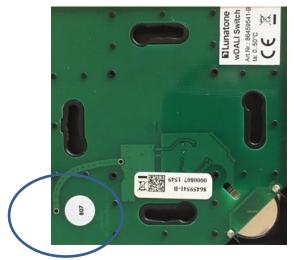
MC – input 1 short: Recall Max
MC – input 1 long: Dim Up
MC – input 2: Cooler
MC – input 3 short : Off
MC – input 3 long: Dim Down
MC – input 4: Warmer



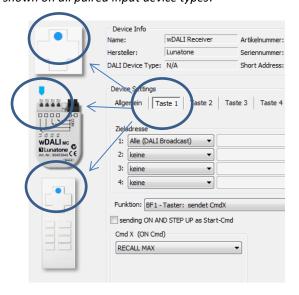
Pairing (supported by firmware 2.0 and higher): Add/Remove input device, all paired input devices are shown in the DALI Cockpit



The pairing number of the input device can be found on the round sticker on the backside of the input device (e.g. see DALI Switch below):

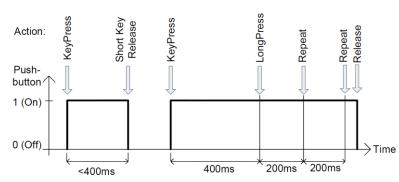


The active button is always shown on all paired input device types:





Settings for Switching function of a pushbutton:



Definition:

Key	Duration		
Definition	min	max	
short	40 ms	400 ms	
long	>400 ms		

button- function	key press	release after short press	long press	repeat	remarks
0	-	-	-	-	-
1	CmdX	=	-	-	sends CmdX on key press
2	CmdX	-	CmdY	-	sends CmdX on key press
					sends CmdY after long press delay
3	CmdX	-	CmdY	CmdY	sends CmdX on key press
					sends CmdY with 200ms repetition after long
					press delay
4	CmdX /	-	-	-	sends CmdX and CmdY alternating on key press
	CmdY toggle				
5	CmdX /	-	-	-	CmdX/Y depending on bus status
	CmdY toggle				
6	-	CmdX / CmdY	ON and	UP / DOWN	CmdX/Y depending on bus status, UP/DOWN
		toggle	STEPUP		alternating, ON AND STEPUP, if bus state is OFF
					before UP
7	-	-	-	-	-
8	-	-	-	-	-
9	CmdX	-	-	-	Staircase control. CmdY is sent after a
					programmable delay.
10	-	CmdX	CmdY	CmdY	CmdX after short press, CmdY for repeat
11	CmdX	-	-	CmdY	CmdX with repeat; repeats CmdY without long
					press delay
12	CmdX	CmdY	-	CmdX	CmdX with repeat; if button is released within
					short press time, CmdY is finally sent



Hint: When using overlapping areas a correct evaluation of the state of the areas cannot be guaranteed



Hint: DALI commands are always sent to all effective ranges assigned to a key.

Settings for CmdX/CmdY

CmdX and CmdY represent DALI commands or sequences of DALI commands which are sent on the DALI-line after the corresponding switching action has occurred. CmdX and CmdY can be:



- DALI commands
- Predefined macros (command sequences)
- Custom macros

DALI-Commands:

CmdNr	Command name	function
	DIRECT ARC POWER	Direct set of the light level in %
0	OFF	Off
1	UP	Dim up (using faderate)
2	DOWN	Dim down (using faderate)
3	STEP UP	Increases light level by one increment
4	STEP DOWN	Decreases light level by one increment
5	RECALL MAX	Recalls maximum value
6	RECALL MIN	Recalls minimum value
7	STEP DOWN AND OFF	Decreases light level by one increment, if light level is already at minimum switch off
		Switch on light to minimum if it is off, otherwise increase level by one
8	ON AND STEP UP	increment
	GOTO LAST ACTIVE	Switch to last active level (supported by DALI2 compatible ballasts, firmware
10	LEVEL (DALI 2)	version 2.0 and higher)
16-31	GO TO SCENE	Recall scene 0-15

Macros:

MacroNr	Macro (required	
	memory)	Function
M1	Go Home	Light dims down to DAP 0 with predefined fade time, then fade time is set
	(2 Byte)	back to a programmable value
M2	Sequential Scenes	
	(3Byte)	Selectable scenes (or OFF) will be sent sequentially with each button press
M3	Dynamic Scenes	Dynamic sequence of up to 16 scenes, fadetimes and delays (0254s) can
	(33 Byte)	be configured, stops with next button press
M4	DALI-Reset	
	(1 Byte)	Sends DALI-Reset (address can be deleted optionally)
M5	User Defined Cmd-List	
	(5 Byte je Befehl,	
	19 Befehle max.)	A user defined macro file can be loaded
M6	3x Cooler (DT8)	
	(0 Byte)	Activates DT8 and sends STEP COOLER command 3x
M7	3x Warmer (DT8)	
	(0 Byte)	Activates DT8 and sends STEP WARMER command 3x
M8		MEMORYFUNCTION
	Memory Switch On	recalls last used level, only works in combination with Switch Off macro
	(4 Byte)	(firmware version 1.8 and higher)
M9		MEMORYFUNCTION
	Memory Switch Off	Stores the actual value in the ballast and switches off (firmware version
	(3 Byte)	1.8 and higher)
M10	Memory Dim Up	MEMORYFUNCTION
	(after Switch Off)	Macro for dimming up if Switch Off Macro has been used before (firmware
	(3 Byte)	version 1.8 and higher)





Hint: The available macro memory of 96 bytes per button (button 1-4) must not be exceeded. For button 5-8 and button 9-12 a total macro space of 192 bytes is available (the required memory for each macro is mentioned in the second column of the macrotable)

Memory Function

wDALI-Controls support different methods of memory function for brightness.

Method 1: Macro M8-M10, the actual level is stored as MAX-Level before the ballast is switched off. When switching on by using Recall Max the stored level (=last active level) is recalled. The old Max-value is restored finally.

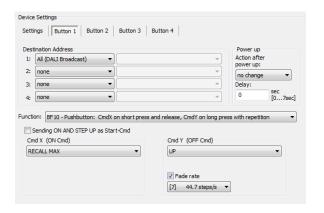
Method 2: Support of DALI 2.0 command Nr. 10 - GOTO LAST ACTIVE LEVEL. Suitable only for Ballast, which already support this command (firmware 2.0 and higher)

Method 3: As alternative scenes can be used for storing the last level temporary. Before switching off the actual value has to be stored as scene value. Switching on to the last active level can then be realised with recalling the corresponding scene.

DALI-Cockpit

With the help of the DALI Cockpit the mentioned functions can be configured for each button separately.

In the settings for each button there are 2 parts: the effective range (destination address) and the function (button function and its configuration options)



Operating Modes

Three operation modes are supported, one of them for direct control of DALI ballasts (master mode) and 2 others for operation in combination with a central controller (slave mode, event message mode).

Master Mode (Default)

In this operating mode the wDALI-device acts as DALI control device on the DALI-line and sends event based DALI-commands directly to the ballasts (as configured).

Event Message Mode

In this mode predefined proprietary commands are sent on the DALI-line on button press. They can be evaluated by a central controller. In this mode DALI-commands are not sent directly to the ballasts.



Hint: Any command (DALI or proprietary extension) can be generated in master mode using user defined command lists (macro M5). Hence a custom solution for event messaging can be realized.



Slave Mode

The slave mode is a passive operating mode. The wDALI Control does not send commands by its own, it only replies on requests.

The operating mode can be set in the DALI-Cockpit.



Purchase Information

Transceiver:

Art.Nr. 86459587-TR wDALI Transceiver, base unit – connected to the DALI-line, can be paired with several input devices

Input devices:

Art. Nr. 86459534-W Remote white, 12 buttons

Art. Nr. 86459534-B Remote black, 12 buttons

Art.Nr. 89453848 MC, 4 inputs

Art.Nr. 86459541-W Switch white, 4 buttons Art.Nr. 86459541-B Switch black, 4 buttons

Combination (Transceiver and Input devices):

Art. Nr. 86459534-W+T Remote white+Trans.

Art. Nr. 86459534-B+T Remote black +Trans.

Art.Nr. 89453848+T MC+Transceiver

Art.Nr. 86459541-W+T Switch white+Trans. Art.Nr. 86459541-B+T Switch black+Trans.

Additional Information

Datasheets and manuals https://jumitech/produkter

DALI-Cockpit – free configuration tool from Lunatone for DALI systems http://lunatone.at/en/downloads/Lunatone

Contact

DALI-Cockpit.zip

Technical Support: support@jumitech.dk

Requests: salg@jumitech.dk

www.jumitech.dk







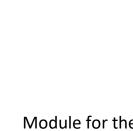
Disclaimer

Subject to change. Information provided without guarantee. The datasheet refers to the current delivery.

The function in installations with other devices must be tested for compatibility in advance.

wDALI GR-Transmitter GR-Receiver PS20





Module for the wireless integration of spatially separated DALI ballasts in a DALI system

Art.Nr. 86459587-GRTM (Transmitter)
Art.Nr. 86459587-GRRPS (Receiver)

0-9 9-0

wDALI GR-Receiver PS20

■Lunatone (€

₽₽₽₽ \$ \$

wDALI GR-Transmitter

■Lunatone (€

DALI

wDALI GR Transmitter/Receiver Wireless DALI

Overview

- Module for the wireless integration of spatially separated DALI ballasts in a DALI system
- For the wireless connection at least two components are required: one transmitter and one receiver
- range of wireless connection up to 300m outdoors, indoors typically 10m-20m
- Easy group assignment to G0...G15
 with the help of a rotary group
 selector on the receiver: all
 commands sent to the selected group
 or broadcast are forwarded to the
 receiver subnet

- The commands are sent broadcast on the subnet
- The transmitter is supplied from the DALI-line, the receiver is supplied by mains and provides a 20mA DALI bus power supply for the subnet
- A DALI-Expander can be used on the subnet for higher DALI loads
- A transmitter can control finitely many DALI subnets with a separate transceiver for each subnet
- Double DALI terminals the DALI signal line is connected through

Specification, Characteristics

Туре	wDALI GR-Transmitter
article number	86459587-GRTM

electrical data transmitter:

supply	via DALI-line
typ. current consumption	3.8 mA
input	DALI
function	Forwarding of DALI-commands via RF-connection
RF range	2,4 Ghz

technical data transmitter:

dimensions	59mmx33mmx15mm
type of housing	back box
connecting wire cross-section	0.5 to 1.5 mm ²
storing and transportation temperature	-20°C+75°C
operational ambient temperature	-20°C+75°C
protection class	IP20



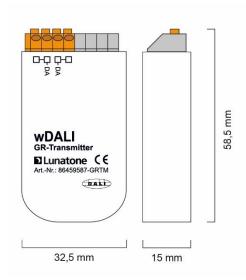
Туре	wDALI GR-Receiver PS20
article number	86459587-GRRPS

electrical data receiver:

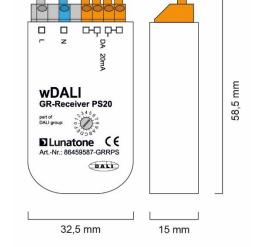
supply	210-250VAC / 50-60Hz
output	DALI, 20mA (for up tp 10 standard DALI-ballasts)
	receiving DALI-commands via RF
function	group selection with rotary switch
	broadcast-forwarding of commands to selected group on DALI subnet
RF range	2,4 Ghz

technical data receiver:

dimensions	59mmx33mmx15mm
housing type	back box
connecting wire cross-section	0.5 to 1.5 mm ²
storing and transportation temperature	-20°C+75°C
operational ambient temperature	-20°C+60°C
protection class	IP20



dimensions wDALI GR-Transmitter



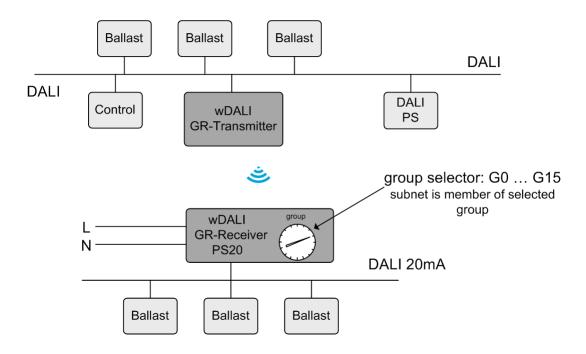
dimensions wDALI GR-Receiver PS20



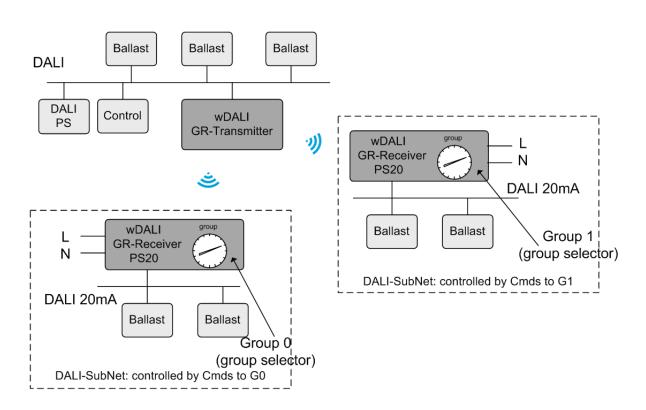
connection plan wDALI GR-Transmitter



connection plan wDALI GR-Receiver PS20



Typical application: integration of spatially separated DALI-ballasts



Typical application: integration of multiple spatially separated areas, control via commands to group 0 and group 1



Installation

The wDALI GR-Transmitter is supplied by the DALI-line (typical current consumtion: 3.8mA). The connection to the DALI-line is polarity free and protected against overvoltage (mains).

The wDALI GR-Receiver PS20 is supplied by mains and provides a 20mA DALI power supply for a small DALI subnet. For higher loads a DALI-Expander can be installed on the subnet.

The double DALI-terminals of both components provide easy wiring.

The receiving range depends on the structural conditions, outdoors it is up to 300m, indoors the range is typically 10m-20m.

The DALI-subnet of a transceiver can be assigned easily to each of the 16 DALI-groups G0...G15 with the rotary switch on the wDALI GR-Receiver.

Function

The wDALI GR group transmitter/receiver allows the integration of spatially separated DALI ballasts in a DALI-line without the need of being physically connected.

The DALI-commands are transmited via group the receiver filters and forwards the commands broadcast to the subnet.

Only commands to the selected group and broadcast are forwared to the subnet.

The scene values can be set up easily with the PC-software tool DALI-Cockpit.

Purchase Information

Art. Nr. 86459587-GRTM: wDALI GR-

Transmitter, back box

Art. Nr. 86459587-GRRPS: wDALI GR-Receiver PS20, integrated 20mA bus power supply for DALI subnet, back box

Additional Information

Datasheets and manuals https://jumitech/produkter

DALI-Cockpit – free configuration tool from Lunatone for DALI systems http://lunatone.at/en/downloads/Lunatone DALI-Cockpit.zip

Contact

Technical Support: support@jumitech.dk

Requests: salg@jumitech.dk

www.jumitech.dk





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wDALI RM8 0-10V PWM

Datasheet

wDALI interface to 0-10V with switch-on relay

wireless expansion of a DALI-system with 0-10V ballast

Art.Nr. 89453852 (RM8 0-10V PWM)

wDALI RM8 0-10V PWM Interface

Overview

- Wireless DALI-line espansion for ballasts with PWM control input
- The ballasts can be switched on and off by DALI-commands
- 2 components: a transmitter unit connected to the DALI-line and a receiver module with 0-10V PWM output and relay
- Integrated relay for switching ballast supply
- advantage of fail-safe digital signal data communication compared to types with analog output voltage, suitable for electronic ballast with PWM control input (e.g. Meanwell HLG, HLN, NPF or LPF series)

- transformation of DALI light level into PWM output signal from 0% to 100%
- DALI DT5: selection of linear or logarithmic dimming curve
- DALI DT5: output range selection (0-100% / 10-100% PWM)
- maximum output current of 1mA (current sink)
- the relay contact depends on the light level, at 0 the relay is opened, at any other value it is closed
- The transmitter unit is powered directly by the DALI-line, the receiver is powered by mains
- configuration via DALI-Cockpit software tool

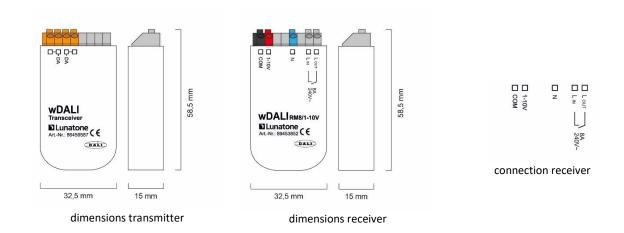
Specification, Characteristics

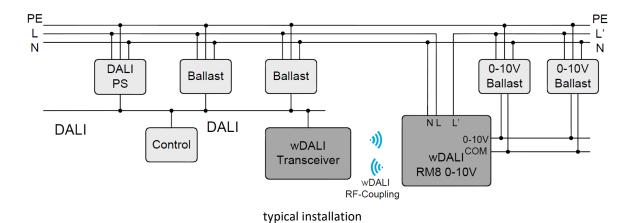
type	wDALI RM8 0-10V PWM
article number	89453852
electrical data transmitter:	
	via DALLlina
supply	via DALI-line
typ. current consumption	3.8mA
input	DALI
	programmable, here the Power On is the return of the DALI-line
power on behaviour	supply voltage
frequency-range	2.4 GHz
technical data transmitter:	
dimensions	59mmx33mmx15mm
housing	back box
connecting wire cross section	0.5-1.5 mm ²
storing and transportation temperature	-20°C +75°C
operational ambient temperature	-20°C +75°C
protection class	IP20



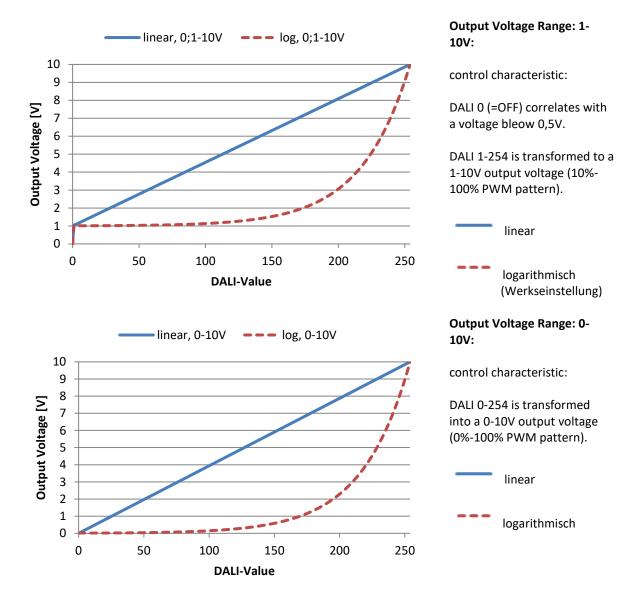
electrical data receiver:

supply	210-250VAC / 50-60Hz
output	0-100% PWM (16Bit, 488Hz), current sink 1mA
nominal load	1000VA
max. switching current	8A
max. inrush current	80A
relay data	1 n/o, max. 30000 switching cycles at nominal load (resistive) max. switching frequency 1Hz
frequency range	2,4 Ghz
technical data receiver:	
dimensions	59mm / 33 mm / 15mm
Housing	Dose
connecting wire cross section	0.5-1.5 mm ²
storing and transportation temperature	-20°C +75°C
operational ambient temperature	-20°C +60°C
protection class	IP20









Note: the voltage values given in the control characteristics are valid only in the case that 10VDC are applied to the output

Installation

- the transmitter is supplied by the DALI-line (typical current consumption is 3.8mA)
- the connection to the DALI-line is polarity-free
- the DALI-input is protected against overvoltage (up to mains voltage)
- the receiver unit can switch load currents of up to 8A and is suitable for loads up to 1000VA
- The 0-10V PWM control output is suitable for sink currents up to 1mA

- at the terminals wires with crosssection from 0,5 to 1,5mm² can be connected
- the components of the wDALI RM8 0-10V are suitable for back box mounting
- receiver range depending on structural conditions (outdoors up to 300m)



Function

- Simple addressing and configuration with the DALI Cockpit software tool
- Switching on/off of to the DALI-line wirelessly connected ballasts
- DALI Device Type 5 support: linear and logarithmic control characteristic, selectable output voltage range 0-10V / 1-10V
- The relay contact is coupled to the light level. If light level is 0, relay is open, at any other value (1-254) the relay is closed
- At system failure the 0-10V output keeps the last level. After power cycling the receiver the 0-10V signal goes to the last active level.

Purchase Order Information

Art. Nr. 89453852: wDALI RM8 0-10V PWM, DALI DT5, PWM-output 1mA, relay: 1000VA/8A/80A, 1 no, back box

Additional Information

Datasheets and manuals https://jumitech/produkter

DALI-Cockpit – free configuration tool from Lunatone for DALI systems http://lunatone.at/en/downloads/Lunatone DALI-Cockpit.zip

Contact

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wDALI RM8





Datasheet wDALI Relay

Wireless expansion of a DALI-system for switched ballasts

Art.Nr. 86459542 (wDALI RM8)

wDALI RM8 Interface

Overview

- Wireless DALI-line expansions for switched ballast without DALI-input
- The ballasts can be switched on and off by DALI-commands
- 2 components: a transmitter unit connected to the DALI-line and a receiver module with relay
- The transmitter is supplied directly by the DALI-line, the receiver is supplied by mains
- The module can be addressed and assigned to groups and scenes
- Simple installation and configuration with the DALI-Cockpit software tool

Specification, Characteristics

type	wDALI RM8
article number	86459542

electrical data transmitter:

supply	via DALI-line
typ. current consumption	3.8mA
input	DALI
power on behaviour	programmable, here the Power On is the return of the DALI-line supply voltage
frequency-range	2,4 Ghz

technical data transmitter:

dimensions	59mmx33mmx15mm
housing	back box
connecting wire cross section	0.5 to 1.5 mm ²
storage and transportation temperature	-20°C+75°C
operational ambient temperature	-20°C+75°C
protection class	IP20

electrical data receiver:

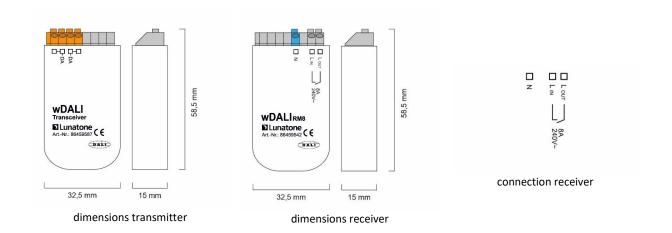
supply	210-250VAC / 50-60Hz
nominal load	1000VA

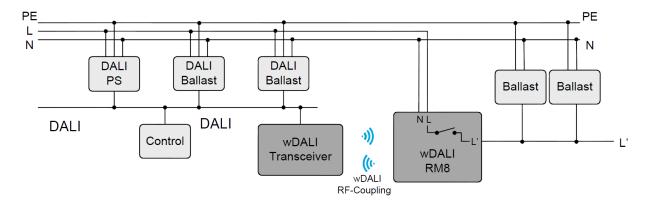


max. switching current	8A
max. inrush current	80A
relay data	1 n/o, max. 30000 switching cycles at nominal load (resistive) max. switching frequency 1Hz
frequency range	2,4 Ghz

technical data receiver:

dimensions	59mmx33mmx15mm
Housing	back box
connecting wire cross section	0.5 to 1.5 mm ²
storage and transportation temperature	-20°C+75°C
operational ambient temperature	-20°C+60°C
protection class	IP20





typical installation



Installation

- the transmitter is supplied by the DALI-line (typical current consumption is 3.8mA)
- the connection to the DALI-line is polarity-free
- the DALI-input is protected against overvoltage (up to mains voltage)
- the receiver unit can switch load currents of up to 8A and is suitable for loads up to 1000VA
- at the terminals wires with crosssection from 0,5 to 1,5mm² can be connected
- the components of the wDALI RM8 are suitable for back box mounting
- receiver range depending on structural conditions (outdoors up to 300m)

Function

- Simple addressing and configuration with the DALI Cockpit software tool
- Switching on/off of to the DALI-line wirelessly connected ballasts

Purchase Information

Art. Nr. 86459542: wDALI RM8 (transmitter included), 1000VA/8A/80A, 1 n/o, back box

Additional Information

Datasheets and manuals https://jumitech/produkter

DALI-Cockpit – free configuration tool from Lunatone for DALI systems

http://lunatone.at/en/downloads/Lunatone

http://lunatone.at/en/downloads/Lunatone DALI-Cockpit.zip

Contact

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www.jumitech.dk





Disclaimer

Subject to change. Information provided without guarantee. The datasheet refers to the current delivery.

The function in installations with other devices must be tested for compatibility in advance.