

#### DGOZ-DSW30x-xx - RAPIX DALI-2 Modular Switches

Suitable for direct connection to a DALI line for switching, dimming, timing, group and scene control and similar functions.

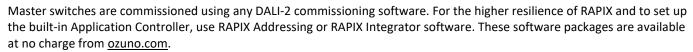
#### **Product summary and capabilities**

This family of Switches comprises Master and Slave units, that are compatible with the aperture used in common wall (grid) plates.

Master switches are available in three styles, connect directly to the DALI line, and are powered from the DALI line. Master switches work with DALI-2 Application Controllers and expose 4 instances. Master switches can also act as RAPIX DALI Application Controllers and can perform switching, dimming, timing, group control, scene control and similar functions. Each Master switch can connect to a single Slave switch. Slave switches are also available in three styles and include a cable and connector to allow it to be connected to a Master switch.

Master and Slave switch styles can be mixed in any combination, for example a push button master can be used with a rotary slave.

Master and Slave units have white LED indicators. A range of accessory packs allow bezels to be changed if different colours are desired.



# Important notes and safety information



**WARNING** – Electric shock may result in serious injury or death. Follow all warnings in this guide and on the product. Work in accordance with the latest electrical safety practices.

- The Master switches are powered only from DALI.
- DALI system wiring is only single insulated from mains. Treat DALI wiring and the Master switch the same as mains wiring.
- The Slave switches have no isolation from DALI. Treat Slave switches and their wiring the same as mains wiring.
- Master switches: The Slave connections do not provide any power source. Connect these only to RAPIX Modular Slave Switches. Do not connect any part of the Master switch or any of its connectors to mains, neutral, earth, or any other power source.
- Slave switches: These are designed to be connected only to a RAPIX Master switch. Do not connect a Slave switch to mains power or any other power source.
- There are **no user serviceable parts** inside Master or Slave switches. Do not attempt to disassemble or operate the device with any covers removed.
- This product family is intended for **indoor use only**.

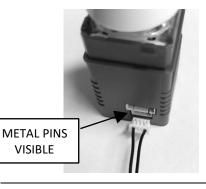
### Connecting to a DALI Line

A DALI Line cable has two conductors that are not polarity sensitive. DALI Line cabling must be double-insulated and mains rated.



This product has only single insulted wiring. The wiring must only be used inside a wall box. Metal wall boxes should be earthed.

Each DALI Line requires an external DALI or DALI-2 compliant power supply to be connected before it will operate. A suitable product is the RAPIX DALI Power Supply, order code **DGLMPS01** (purchased separately).



The DALI line is connected using the small connector with 2 wires.

The shiny metal pins should be visible for connection using the orientation shown.









## Connecting a Slave to a Master

Slave switches have an integral flying lead with a female connector. Masters have a matching plug.



#### To connect a Slave to a Master:

- Check carefully the connector orientation. The RED STRIPE on the cable from the Slave should be oriented toward the outside edge of the master switch body.
- 2. Push the cable from the slave carefully into the socket. It is a tight fit but does not require excessive force. Make sure the plug is fully pushed into the socket.

#### To disconnect a Slave from a Master:

- 1. Very carefully and gently use the cables to pull the connector out, using a little force side to side using a slight rocking motion.
- 2. Do not pull hard, this will damage the wiring into the connector.

# **Specifications**

Parameter	Specification	Specification		
Power source	DALI line			
Compatibility	DALI and DALI-2			
DALI operating voltage	16 V dc (nominal), with suitable operation from 9.5V – 22.5 V			
DALI Line Current Draw	4 mA			
Mains tolerance	The DALI connection of Master switches is mains voltage tolerant			
Connection type	Master switch: connector with flying leads terminated in ferrule			
Wire length supplied	120 mm for Master switch / 120 mm for Slave switch			
LED Indicators	White LED indicator, configured in the RAPIX software tools			
Number of Slaves which can be	Master Switch Type		Slave (any type)	
connected to a Master	Classic		1	
	Diva		1	
	Rotary		1	
Ambient operating temperature	0 to 50° C			
Ambient storage temperature	-10 to 70° C			
Humidity	0% to 95% RH non-condensing			
Ingress protection	IP20			
Materials	Enclosure, buttons and dials: Flame retardant Polycarbonate, UL 94V-0			
Weight	Switch Type	Master		Slave
	Classic	65 g		11 g
	Diva	65 g		11 g
	Rotary	ary 75 g		24 g
DALI addresses used	One DALI-2 Control Device Short Address, no Control Gear Short Addresses			
RAPIX Application Controller DALI addressing types supported	Control Gear Short Addresses, Group Addresses, Scenes, Broadcast			
Additional Addressing Types*	RAPIX Zones, RAPIX Flags, RAPIX Operating Properties			
Approvals	DALI	· 🕭 (	Ξ €	UK RÖHS Z

<sup>\*</sup> RAPIX features and additional addressing types work with other RAPIX products.

# **DALI-2 Instances**

All master switches in this range have 4 instances. Instances 0 and 1 are DALI-2 Instance Type 1 Push Button corresponding to master and slave. Instances 2 and 3 are Instance Type 2 Absolute Input instances with resolution 8 bits, corresponding to master and slave rotaries. When a slave is not connected, instances 1 and 3 are present but not active. Instances 2 and 3 (Absolute Input) only generate events and input values when rotary controls are used.



# **Indicator Control**

This product range includes LED indicators for each switch. The following indicator control options are supported:

- RAPIX Templates: the indicators will be controlled by the template that was selected, no additional settings needed;
- DALI-2 Feature Type 332: an external Application Controller can activate the indicators of the master and slave switches. This feature type applies to Push Button Instances 0 and 1 only. Feature 332 is only active if the built-in Application Controller is disabled. Feature 332 brightness control only permits ON and OFF.
- **Disabled:** Indicators can be completely disabled by (1) Disabling the Application Controller and (2) Setting Operating Mode to 0xA0 (160).

## RAPIX Zero-Commissioning: Out-of-box Functions

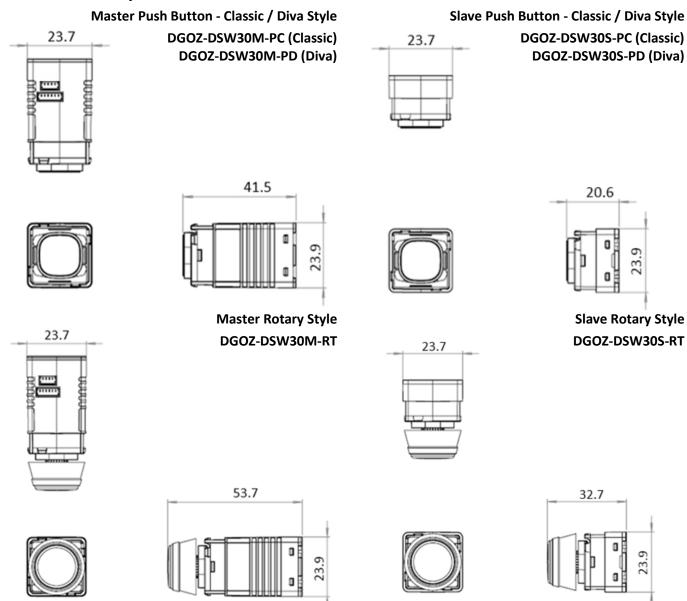
This product supports RAPIX Zero-Commissioning out of-box functions. All RAPIX Zero-Commissioning behaviour becomes automatically disabled when a DALI-2 Control Device Short Address is assigned or RAPIX software is used to commission the built-in Application Controller of this product.

RAPIX Zero-Commissioning behaviour for this product transmits DALI Broadcast commands, as shown:

**Function: ON / OFF / DIMMING:** (All types) Push / release to transmit Broadcast ON/OFF. Push and hold to DIM UP/DOWN. Release to terminate the dimming.

(Rotaries) Rotate the dial to DIM UP/DOWN, push/release to switch off or set maximum.

## **RAPIX DSW30 Family Modular Switch Dimensions**





## Standards and Compliance

The product is meets or exceeds the following Australian and International standards:

#### **EMC and Electrical Safety Frameworks and Standards**

EN 55015, AS/NZS CISPR 15, AS CISPR 15 EN 55032 AS/NZS CISPR 32 EN 61347-1, EN-61347-2-11 AS/NZS 60950.1

#### **DALI-2 Standards and Compliance**

IEC 62386-101 Ed 2 & IEC 62386-103 Ed 2 (DALI-2)
IEC 62386-301, -302 and -332. (DALI-2, Instance Types 1, 2 and feature type 32)

**EU Directives** 

2014/35/EU Low Voltage

2014/30/EU Electromagnetic Compatibility (EMC)

2015/863 Restriction of Hazardous Substances (RoHS) in Electrical and Electronic Equipment

#### Warranty

This product has a TWO YEAR warranty against manufacturing defects. The warranty applies from the date of purchase.

Refer to ozuno.com for the full conditions for warranty and returns process. A summary of the process:

- 1. Contact the seller of the goods, or in their absence contact Ozuno to request a return goods authorisation.
- 2. When a return is authorised, the goods must be returned to Ozuno at the owners' expense for technical evaluation.
- 3. The warranty claim will be evaluated by Ozuno and accepted if the goods are found to be faulty or rejected if the fault was caused by conditions beyond the responsibility of Ozuno. Considerations of installation, removal, return, freight and testing are not the responsibility of Ozuno.

The Australian Consumer Law requires the inclusion of the following statement with this Warranty:

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Ozuno Trading Pty Ltd (Ozuno) reserves the right to alter the specifications, designs or other features of any items and to discontinue any items at any time without notice and without liability. While every effort is made to ensure that all information in this user and installation guide is correct, no warranty of accuracy is given and Ozuno shall not be liable for any error.

#### **Trademarks**

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DALI and DALI-2 are trademarks of the Digital Illumination Interface Alliance.

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