

WORKS WITH FIBARO Z-Wave to DALI Controller

EN

Z-Wave to DALI Controller gears on a DALI circuit and can be controlled by other Z-Wave devices. It can be included and operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers and/or other applications. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

The device cannot act as Z-Wave network controller (primary or secondary), so a security enabled controller is needed to take full advantage of all functions for the device.

The encryption modes that the Z-Wave to DALI controller supports are S0, S2 Unauthenticated. When the device is being included into a Z-Wave network, you can use your primary controller/gateway to enable encryption mode or disable encryption. (The primary controller/gateway shall support encryption mode configuration).

SPECIFICATION

Radio frequency	868.42 MHz (EU)/908.42 MHz (US)/921.42MHz (ANZ) /869.0 MHz (RU)
Output	DALI signal (DALI consumption < 2mA)
Power Supply	12/24VDC
Current Consumption	10mA
Operating temperature	0-40°C
Relative humidity	8% to 80%
Dimensions (LxWxH)	45.5 x 45 x 20.3mm



WARNINGS

DO NOT install with power applied to device.
DO NOT expose the device to moisture.
Read All Instructions Prior to Installation.

INSTALLATION

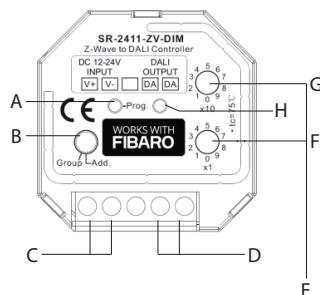
Please read carefully the enclosed user manual before installation of the Z-Wave to DALI controller, in order to ensure an error-free functioning.

ATTENTION: Prior to the assembly of the product, the voltage network has to be switched OFF and protected against re-switching.

PRODUCT DESCRIPTION

- A** - Inclusion/Exclusion button
- B** - Rotary Switch to select Group or Address control to DALI circuit
- C** - 12/24VDC power input
- D** - DALI signal output
- E** - Rotary switches for setting DALI Group number (0-15 or Address number (0-63) to be controlled, the number equals to tens position plus units position
- F** - 1*(0-9) for setting units position

G - 10*(0-9) for setting tens position
H - LED indicator



OPERATION

Inclusion (adding to a Z-Wave network)

- Set the main Z-Wave controller into adding/removing mode.
- Power on the Z-Wave to DALI controller, make sure that does not belong to any Z-Wave network.
 - When the LED indicator on the Z-Wave to DALI controller flashes quickly for 6 seconds, it means the controller does not belong to any network. Triple press the "Inclusion/Exclusion" button, it will be set in inclusion mode automatically, and waiting to be included.
 - When the LED indicator is solid on status, it means the Z-Wave to DALI controller has already been included in a network. First, you have to set it into exclusion mode, once excluded, it will be set into inclusion mode automatically, and waiting to be included.

The LED indicator stays solid 3 s to indicate successful inclusion.

Exclusion (removing from a Z-Wave network)

There are two exclusion methods:

Method 1: Exclusion from the primary controller/gateway as follows:

- Set the primary controller/gateway into an exclusion mode (Please refer to your primary controller manual on how to set your controller into exclusion).
- Triple press the "Inclusion/exclusion" button, the Z-Wave to DALI controller will be set to exclusion mode, the LED indicator will flash quickly for 6 seconds, and waiting to be excluded, then the LED indicator stays solid 3 s to indicate successful exclusion.

There are 3 methods for the Z-Wave to DALI controller to quit "exclusion mode". Once it quits "exclusion mode", the LED indicator will stop the fast flash status.

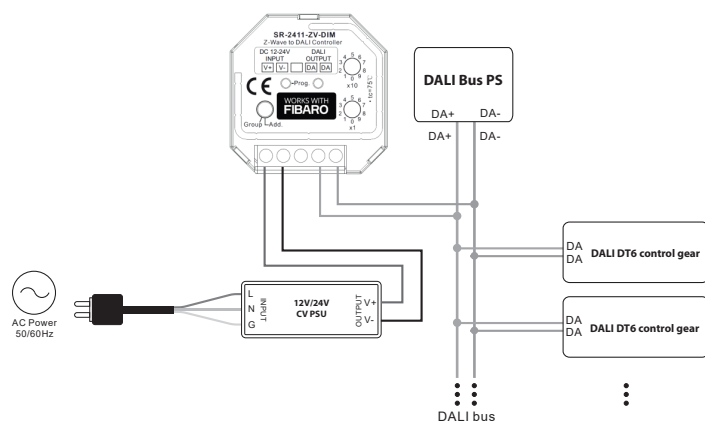
- Automatically quits after successful exclusion.
- Quits after 10 seconds timeout.
- Power off and power on the Z-Wave to DALI controller. (Note: When the Z-Wave to DALI controller already included in a network, triple press "Inclusion/exclusion" button, it will be set into exclusion mode and quit exclusion mode alternatively.)

Method 2: Factory reset the Z-Wave to DALI controller will force it to be excluded from a network. (Please refer to the part "Factory Reset" of this manual)

Note: Factory reset is not recommended for exclusion, please use this procedure only if the primary controller/gateway is missing or otherwise inoperable.

How to check whether the Z-Wave to DALI controller already included in a network

There is a method to check whether the Z-Wave to DALI controller already included in a network: Power it off and power it on. If the LED indicator flashes quickly for 6 seconds, it means the Z-Wave to DALI controller to any network. When the LED indicator is solid on status, it means



the Z-Wave to DALI controller has already been included in a network.

Factory Reset

Press and hold down "Inclusion/exclusion" button for over 10 seconds, the LED indicator stays solid for 3 s to indicate a successful factory reset.

ASSOCIATION

Z-Wave devices, control other Z-Wave devices. The relationship between one device controlling another device is called association.

In order to control a different device, the controlling device needs to maintain a list of devices that will receive controlling commands. These lists are called association groups and they are always related to certain events (e.g. button pressed). In case the event happens all devices stored in the respective association group will receive a common wireless command.

Association Group

Group Identifier: 1

Group Name: Lifeline

Max Nodes: 5

Description:

- Z-Wave to DALI controller Factory Reset, send Command Class "Device Reset Locally Notification V1" to associated devices of this group to report factory reset information when factory reset the controller.
- When Z-Wave to DALI controller ON/OFF or light intensity value changes, send Command Class "Basic Report" to associated devices of this group to report ON/OFF or light intensity value information.

Set and unset associations:

(Note: All association information will be cleared automatically once the Z-Wave to DALI controller is excluded from a network.)

Set association by operating primary controller/gateway to send packets to the Z-Wave to DALI controller:

The primary controller/gateway sends packets to the Z-Wave to DALI using "Command Class ASSOCIATION"

Operating the device

Short press inclusion/exclusion button on the Z-Wave to DALI controller to switch ON/OFF the DALI control gears on the DALI circuit.

Node Information Frame

The Node Information Frame contains information about the device type and the technical capabilities. The inclusion and exclusion of the device are confirmed by sending out a Node Information Frame. Beside this, it may be needed for certain network operations to send out a Node Information Frame.

How to send out Node Information Frame:

When the Z-Wave to DALI controller is set to inclusion/exclusion mode again, it will send out Node Information

Frame, there are 2 kinds of operation as follows:

- When the LED indicator on the Z-Wave to DALI controller is solid on status, triple press the "Inclusion/exclusion" button, the Z-Wave to DALI controller will be set to inclusion/exclusion mode, then send out Node Information Frame.
- When the LED indicator on the Z-Wave to DALI controller is a fast flashing status for 6 seconds, it means the Z-Wave to DALI controller is under inclusion mode. There are two kinds of operation:

- Triple press inclusion/exclusion button, the Z-Wave to DALI controller will be set to inclusion mode again, and send out Node Information Frame.
- Power off and power on the Z-Wave to DALI controller, it will be set to inclusion mode automatically, and send out Node Information Frame.

Technical Data

Wireless Range	Outside, on average up to 40 m inside buildings
Radio Frequency	868.42MHz(EU) 908.42 MHz(US) 921.42MHz (ANZ) 869.0 MHz (RU) 6.71.01
SDK	Yes
Explorer Frame Support	Yes
Device Type	Light Dimmer Switch
Generic Device Class	Switch Multilevel
Specific Device Class	Power Switch Multilevel
Routing	Yes
FLIRS	No

Z-Wave Plus Info

Parameter	Value
Z-Wave Plus Version	1
Role Type	Slave Always On
Node Type	ZWAVEPLUS
Installer Icon Type	0x0600 (ICON_TYPE_GENERIC_LIGHT_DIMMER_SWITCH)
User Icon Type	0x0600 (ICON_TYPE_GENERIC_LIGHT_DIMMER_SWITCH)

Manufacturer Specific

Parameter	Value (hex)
Manufacturer ID	0x0330

Product Type ID	0x0200(EU), 0x0201(US), 0x0202(ANZ), 0x021A(RU)
Product ID	0xD002

SUPPORTED COMMAND CLASS

Node Info		Support
COMMAND_CLASS_ZWAVEPLUS_INFO	V2	
COMMAND_CLASS_SECURITY	V1	
COMMAND_CLASS_SECURITY_2	V1	
COMMAND_CLASS_TRANSPORT_SERVICE	V2	
COMMAND_CLASS_SUPERVISION	V1	
COMMAND_CLASS_MANUFACTURER_SPECIFIC	V2	YES
COMMAND_CLASS_VERSION	V2	YES
COMMAND_CLASS_SWITCH_MULTILEVEL	V4	YES
COMMAND_CLASS_SCENE_ACTIVATION	V1	YES
COMMAND_CLASS_SCENE_ACTUATOR_CONF	V1	YES
COMMAND_CLASS_NOTIFICATION	V8	YES
COMMAND_CLASS_CONFIGURATION	V2	YES
COMMAND_CLASS_ASSOCIATION	V2	YES
COMMAND_CLASS_ASSOCIATION_GRP_INFO	V3	YES
COMMAND_CLASS_POWERLEVEL	V1	YES
COMMAND_CLASS_DEVICE_RESET_LOCALLY	V1	YES
COMMAND_CLASS_FIRMWARE_UPDATE_MD	V4	YES

Parametr nr	Size	Description	Default Value
2	1	Info: Saving load state before power failure 0-shutoff load 1-turn on load 2-save load state before power failure	0
3	1	Info: Enable/disable to send the basic report to the Lifeline when the load state changed (When value set as 1, re-power on the Z-Wave to DALI controller, it will send Basic report automatically) 0-Disable to send Basic report 1-Enable to send Basic report	1
5	1	Info: Choose a cool light stage mode Choose a cool light stage mode 0=inactive of light stage mode 1=fade in and fade out mode, colors set by parameter 8 2=flash mode, colors set by parameter 8	0x00
6	1	Info: Speed of stage mode 0-0xFF: 0 is the slowest, 255 is the fastest	0xF3

Parametr nr	Size	Description	Default Value
7	1	Info: Execution times of stage mode 0: unlimited times 1-0xFF: execution times 1-255	0x00
8	1	Info: The hue of stage mode The hue is only valid for fade in and fade out mode, flash mode 0-0xFF: hue	0x00

Remarks: parameter number 5-8 is united parameters, it is recommended to use the Configuration Bulk Set to configure synchronously.

Parameter Number Definitions

Parameter number 2 defines the load state after re-power on it:

- Value 0 is off state.
- Value 1 is on state.
- Value 2 is the state before re-power on.

Parameter number 3 enables/disables to send Basic report to the Lifeline when load state changed:

- Value 0 disables to send .
- Value 1 enables to send.

Parameter number 7 defines execution times of stage mode:

- Value 0 is unlimited times.
- Value 1-0xFF is 1-255 times.

Parameter number 8 defines the hue of stage mode:

- Value 0-0xFF is hue 0-255.

Select DALI Address/Group Control Mode

1) A rotary switch is used to select Address/Group control mode.

2) When the rotary switch arrow is at Add. Position, address control mode is selected.

3) When the rotary switch arrow is at Group position, group control mode is selected.

Select DALI Address to be Controlled

1) When Address control mode is selected, use the two rotary switches for setting the address number (00-64) to select the DALI address (00-63) you would like to control, the number equals to tens positions plus the units position.

2) Set the address number as 0, all DALI devices on the circuit will be controlled through broadcast.

3) Set the address number as X except 0 (01-64), control gear with DALI address X-1 will be controlled.

Note: if X is set as 64, control gears with DALI address 63 will be controlled by the controller.

Please refer to the detailed Address setting table as follows:

Address Number Setting	DALI Address Selected
0	Broadcast
1	0
2	1
3	2
4	3
...63	...62

Select DALI Group to be Controlled

1) When Group control mode is selected, use the two rotary switches for setting a group number to select the DALI group (0-15 selectable) you would like to control, the number equals to tens position plus units position.

2) This DALI controller enables on/off and dimming commands to be sent to 1 Group of devices on the DALI circuit.

3) When group number is set as 0, all DALI devices on the circuit will be controlled through broadcast.

4) When group number is set as the X except 0 (1-15), the controller will control DALI Group X-1.

Note: Please first group all DALI control gears on the circuit by a master controller.

Please refer to the detailed Group setting table as follows:

Group Number Setting	DALI Group Selected
0	Broadcast
1	0
2	1
3	2
4	3
...15	...14

WARRANTY TERMS AND CONDITIONS

1. FIBAR GROUP S.A. with its registered office in Wysogotowo, ul. Serdeczna 3, 62-081 Wysogotowo, entered into the Register of Entrepreneurs of the National Court Register maintained by the District Court for Poznań-Nowe Miasto and Wilda in Poznań, VIII Commercial Division of the National Court Register (KRS) under number: 553265, NIP 7811858097, REGON: 301595664, share capital PLN 1,182,100 paid in full, other contact information is available at: www.fibaro.com (hereinafter „the Manufacturer”) guarantees that the device sold (hereinafter, „the Device”) is free from material and manufacturing defects.

2. The Manufacturer shall be responsible for malfunctioning of the Device resulting from physical defects inherent in the Device that cause its operation to be incompatible with the specifications within the period of:

- 24 months from the date of purchase by the consumer,
- 12 months from the date of purchase by a business customer (the consumer and business customer are further collectively referred to as „Customer”).

3. The Manufacturer shall remove any defects revealed during the guarantee period, free of charge, by repairing or replacing (at the sole discretion of the Manufacturer) the defective components of the Device with new or regenerated components. The manufacturer reserves the right to replace the entire Device with a new or regenerated device. The Manufacturer shall not refund money paid for the device.

4. Under special circumstances, the Manufacturer may replace the Device with a different device most similar in technical characteristics.

5. Only the holder of a valid guaranty document shall be entitled to make claims under guarantee.

6. Before making a complaint, the Manufacturer recommends using the telephone or online support available at <https://www.fibaro.com/support/>.

7. In order to make a complaint, the Customer should contact the Manufacturer via the email address given at <https://www.fibaro.com/support/>.

8. After the complaint has been properly filed, the Customer will receive contact details for the Authorized Guarantee Service („AGS”). The customer should contact and deliver the Device to AGS. Upon receipt of the Device, the manufacturer shall inform the Customer of the return merchandise authorization number (RMA).

9. Defects shall be removed within 30 days from the date of delivering the Device to AGS. The guarantee period shall be extended by the time in which the Device was kept by AGS.

10. The faulty device shall be provided by the Customer with

complete standard equipment and documents proving its purchase.

11. The cost of transporting the Device in the territory of the Republic of Poland shall be covered by the Manufacturer. The costs of the Device transport from other countries shall be covered by the Customer. For unjustified complaints, AGS may charge the Customer with costs related to the case.

12. AGS shall not accept a complaint claim when:

- the Device was misused or the manual was not observed,
- the Device was provided by the Customer incomplete, without accessories or nameplate,
- it was determined that the fault was caused by other reasons than a material or manufacturing defect of the Device
- the guarantee document is not valid or there is no proof of purchase,

13. The guarantee shall not cover:

- mechanical damages (cracks, fractures, cuts, abrasions, physical deformations caused by impact, falling or dropping the device or other object, improper use or not observing the operating manual);
- damages resulting from external causes, e.g.: flood, storm, fire, lightning, natural disasters, earthquakes, war, civil disturbance, force majeure, unforeseen accidents, theft, water damage, liquid leakage, battery spill, weather conditions, sunlight, sand, moisture, high or low temperature, air pollution;

- damages caused by malfunctioning software, attack of a computer virus, or by failure to update the software as recommended by the Manufacturer;

- damages resulting from: surges in the power and/or telecommunication network, improper connection to the grid in a manner inconsistent with the operating manual, or from connecting other devices not recommended by the Manufacturer.

- damages caused by operating or storing the device in extremely adverse conditions, i.e. high humidity, dust, too low (freezing) or too high ambient temperature. Detailed permissible conditions for operating the Device are defined in the operating manual;

- damages caused by using accessories not recommended by the Manufacturer

- damages caused by faulty electrical installation of the Customer, including the use of incorrect fuses;

- damages caused by Customer's failure to provide maintenance and servicing activities defined in the operating manual;

- damages resulting from the use of spurious spare parts or accessories improper for given model, repairing and introducing alterations by unauthorized persons;

- defects caused by operating faulty Device or accessories.

14. The guarantee shall not cover natural wear and tear of the Device and its components listed in the operating manual and in technical documentation as such elements have a defined operational life.

15. The Device Guarantee shall not exclude, limit or suspend the Customer's warranty rights.

16. The Manufacturer shall not be liable for damages to property caused by defective device. The Guarantor shall not be liable for indirect, incidental, special, consequential or punitive damages, or for any damages, including, inter alia, loss of profits, savings, data, loss of benefits, claims by third parties and any other damages arising from or related to the use of the Device.

Simplified EU declaration of conformity:
Hereby, Fibar Group S.A. declares that the device is in compliance with Directives 2014/53/EU and 2011/65/EU, 2015/863.

WEEE Directive Compliance:
Device labelled with this symbol should not be disposed with other household wastes. It shall be handed over to the applicable collection point for the recycling of waste electrical and electronic equipment.

