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## Version


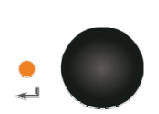
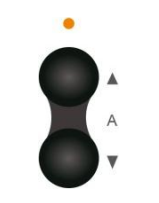
Version No.	Release Date	Description
V1.0	March 8 <sup>th</sup> , 2018	1 <sup>st</sup> Release

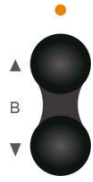
## Notice

1. Please read this user manual carefully before using the product.
2. This product is used in indoor environment and installed in electrical control box.
3. Please install this product in a dry and ventilated place.
4. Before power on, please confirm the input voltage according to the manual; after power on please confirm the normal output voltage before connecting to the control bus.
5. Please make sure the secure shell is in good condition, if the shell is damaged, please stop using to avoid accident.
6. This product is NOT a toy, please make sure it is out of children touch.
7. Only be suitable for EIB/KNX system bus.
8. Others: The below sign indicates this product can't be dealt as ordinary family rubbish, in order to avoid the possible environment and human health harm caused by the electrical waste, this product must follow recovery processing. Please contact the local recycling department after this product is scrapped, to make sure it can go as the right waste processing procedure.



## 1. Technical Parameters

Power Supply	Operating voltage	85 ~265VAC 50/60Hz
	KNX BUS power	DC 21V~31V
	Static bus current	< 6mA
	EIB/KNX bus	It is required to use the KNX standard double stranded cable (0.8mm in diameter) and the KNX bus terminal
DALI Parameters	Number of CH	1independent channel, 1 broadcast channel
	Number of DALI devices	128(Single Channel and Broadcast) /64(Single Channel)
	DALI cable length	1.5mm <sup>2</sup> max 300m
		1.0mm <sup>2</sup> max 200m
0.75mm <sup>2</sup> max 150m		
	0.5mm <sup>2</sup> max 100m	
Operation and display interface	Programming button	Button assigns physical address
	Programming LED	Light on means device is in programming status
		In the case of a fault query, press the button shortly will return to the previous level or exit the fault query, the LED light will not change; Press the button longer than 3 seconds to enter manual mode, LED indicator light is on; Press the button longer than 3 seconds to exit manual mode, LED indicator light is off;
		In the case of fault status, press the button shortly will enter the fault query or enter the next level, the LED light will not change; In the non-manual mode, press the button longer than 5 seconds to start the search and records the number of DALI devices. The LED lights are blinking in the search process, and the LED lights are off after the search is completed. In manual mode, press the button longer than 5 seconds to enter the addressing mode, LED light is on;
	Channel A up-down button: fault query, up-down switch device NO. or fault status; In manual mode, press the button shortly to switch on-off, press the button more than 1 second to dim; dimming > 0% LED light on, dimming = 0% LED light off: In programming mode, press the up button more than 1 second to address automatically for all of the devices in channel A, press the down button longer than 5 seconds to delete all of the devices address in channel A.	

		<p>Channel B up-down button: fault query, up-down switch device NO. or fault status; In manual mode, press the button shortly to switch on-off, press the button more than 1 second to dim;</p> <p>dimming &gt; 0% LED light on, dimming = 0% LED light off; In programming mode, press the up button more than 1 second</p> <p>to address automatically for all of the devices in channel A, press the down button longer than 5 seconds to delete all of the devices address in channel B.</p>
Protection type	IP20	EN60529
Protection class	II	EN61140
	Operation	-5°C...+45°C
	Storage	-25°C...+55°C
	Transport	-30°C...+70°C

## 2. Function Overview

The SATIION® EIB / KNX DALI-Gateway GW2303 is a modular installation device with a module width of 4 units in proM design for installation in the distribution board. The connection to the SATIION is established using the bus connecting terminal at the front of the device. The assignment of the physical addresses as well as the parameter, SATIION is carried out with the Engineering Tool Software ETS.

The 1-fold DALI-Gateway (DALI = Digital Addressable Lighting Interface) is used for controlling DALI equipment (ballasts, transformers, LED converters, actuators, etc.) via EIB / KNX.

The DALI addresses are allocated individually and automatically by the GW2303. A change of the DALI addresses is possible if required with the ETS. The 64 DALI devices connected to the main channel A can be directly switched, dimmed or controlled with a brightness value using just one EIB / KNX communication object. The scanning of the individual lamp or ballast fault, as well as the activation of a burn-in time or slave operation for every device is implemented using coded address-based control with two communication objects. All 64 DALI devices connected to a second auxiliary channel B can be individually controlled using broadcast mode or address-

based control. Primarily, auxiliary channel B is a broadcast channel which is used to control all devices from a common source. Furthermore, the setting of 15 light scenes via the ETS or via the EIB / KNX communication object is possible via a push button. The light scene can be combined from any of the 128 DALI devices connected to the gateway.

Both channels can be controlled or scanned independently of each other via broadcast commands. The lamp burn-in time can be activated individually via coded control or commonly for all 128 devices. Group assignment of the DALI devices is implemented with the EIB / KNX group functions.

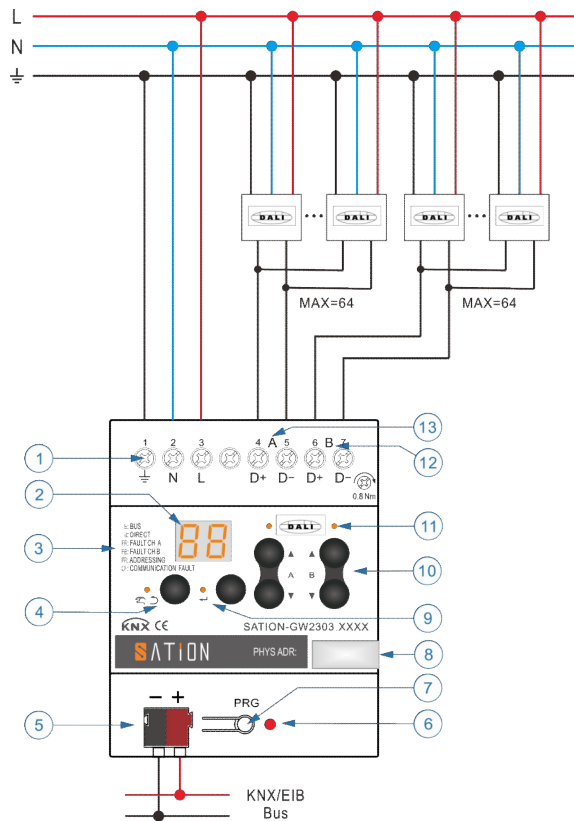
The main functions are as follows:

- 1) Short address assignment: automatic assignment, manual assignment and address deletion;
- 2) General functions: power-on action setting, power-down action setting, communication failure action setting, aging function setting;
- 3) Operation mode:
  - 3.1) Normal mode:  
Support switch on-off, absolute dimming, and relative dimming;  
Supports the setting of the brightness value range, setting the lighting brightness value;  
Support switching on-off time, absolute dimming time and relative dimming time separately;  
Support switch state feedback, dimming brightness value feedback;
  - 3.2) Dynamic mode:  
Supports setting of the brightness value range; Support to set the startup scene, start the holding time;  
Support setting the ending scene and ending the holding time;
  - 3.3) Slave mode:  
The switch and relative dimming functions are disabled on the basis of the normal mode, and the others are unchanged;
- 4) General control function:  
Support for turning on the brightness value setting;  
Support switching time, absolute dimming time and relative dimming time separately
- 5) Scene function:  
Supports up to 15 scene functions;  
Support scene call and scene learning functions;  
Each scene supports total of 128 devices on the A and B channels;  
Each scene supports dimming time set individually;
- 6) Status function:  
Support to select device dimming status and fault status sending settings;  
Support DALI drive device fault status setting and sending;  
Support lamp fault status setting and sending;  
Support DALI device communication fault status sending;

Support fault status response setting;  
Support message receiving and sending communication timeout settings;

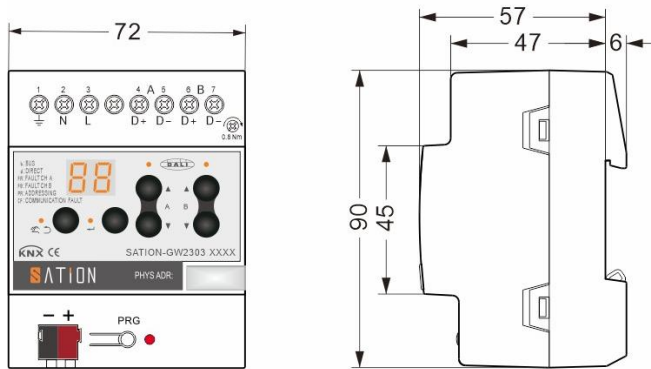
Note: The dynamic operation mode can realize the corridor light application scene;

### 3. Circuit Wiring



- |                                  |                              |
|----------------------------------|------------------------------|
| 1: Operating voltage             | 2: Code Display              |
| 3: Code Meaning                  | 4: Return Button and LED     |
| 5: EIB / KNX connection terminal | 6: EIB / KNX programming LED |
| 7: EIB / KNX programming button  | 8: Label carrier             |
| 9: Enter button and LED          | 10: A/B up & down button     |
| 11: A/B Channels LED             | 12: B DALI output            |
| 13: A DALI output                |                              |

### 4. Product Dimensions



## 5. Status Code Display

### Status Code Display

b	Bus control mode
d	Manual mode
CF	Communication telegraph failure status
FA	DALI A channel device failure status
FB	DALI B channel device failure status
PA	DALI device addressing mode
bd	Detect and explore DALI drive device mode

### Code display in addressing mode:

PS	Address successfully, display time is shorter, then back to manual mode
PF	Address failed, display time is shorter, then back to manual mode

### Code display in failure status query mode:

F1	DALI drive device failure status
F2	Light failure status
F3	DALI communication failure status
01-64	Fault devices, the number 01~64 of device corresponds to DALI device with short address 00~63, for example: the number 01 of device corresponds to DALI device with short address 00;