

SHLM10000 / SHLM10010 **ABUS Z-Wave RGBW/LED Bulb**



Important information and FAQs about this product and other products can be found on the website

www.abus.com





Introduction

Dear customer.

We are pleased that you have chosen our product and thank you for your trust! You made a good choice.

This Bulb (hereinafter referred to as the "device") has been developed and manufactured with the utmost care. Please read these operating instructions completely and observe all operating and safety instructions, as this ensures the best possible handling of the device. This document is an installation and maintenance manual.

If you have any questions, please contact your specialist trade partner or contact our customer service:

Mail: ABUS Support, Linker Kreuthweg 5, 86444 Affing, Germany E-mail: support@abus-sc.com
Phone: +49 8207 959 90 888

Hotline opening hours: Mon-Thu: 08 - 17 h; Fri: 08 - 14 h

ABUS Security-Center hereby declares that the enclosed product comply with the requirements of the following directives

RED Directive (2014/53/EU), EMC Directive (2014/30/EU), Low Voltage Directive (2014/35/EU) and RoHS Directive (2011/65/EU). The full EU Declaration of Conformity text can be found at:

www.abus.com/product/SHLM10000 www.abus.com/product/SHLM10010

It can also be obtained at the following adress:

ABUS Security-Center GmbH & Co. KG, Linker Kreuthweg 5, 86444 Affing, GERMANY

All contained company names and product designations are trademarks of the respective owners. All rights reserved.



Disclaimer of Liability

These operating instructions have been prepared with the greatest care. Should you nevertheless notice omissions or inaccuracies, please inform us in writing at the above address.

Your rights are limited to the repair or replacement of this product as delivered. ABUS Security Center assumes no liability for any special, incidental or consequential damages, including but not limited to loss of revenue, loss of profit, restrictions in the use of the software, loss or recovery of data, costs for replacement equipment, downtime, property damage and claims of third parties, as a result of and in connection with the use of the software.a. warranty, contractual, legal or claims for damages notwithstanding other limited or implied warranty provisions or in the event that the limited warranty does not apply, the scope of liability of ABUS Security Center is limited to the purchase price of the product.

The contents of this manual are subject to change without notice.

© ABUS Security-Center GmbH & Co. KG, 09/2018

Important Safety Informations

Intended Use

Only use the device for the purpose for which it was built and designed. Any other use is considered unintended.

All guarantee claims are invalid in the event of damage caused by non-compliance with this safety information. We cannot be held liable for resulting damage.

Unboxing

Handle the device with extreme care when unpacking it.

Packaging and packaging aids can be reused and, as far as possible, should be sent for recycling.

If the original packaging has been damaged, inspect the device first. If the device shows signs of damage, return it in the original packaging and inform the delivery service.

Installation location / operating environment

Do not place any heavy objects on the device. The device is only designed for operation in spaces with appropriate temperatures or humidity (e.g. not for bathrooms). Do also not place the device in areas with excessive accumulation of dust. Please refer to the individual devices' technical data for more detailed information. Ensure that: adequate ventilation is always guaranteed; no direct sources of heat can affect the device; interior devices are not exposed to direct sunlight or strong artificial light; the device is not in the immediate vicinity of magnetic fields (e.g. loudspeakers); no naked flames (e.g. lit candles) are placed on or next to the device; sprayed or dripping water is prevented from coming into contact with interior devices and caustic fluids are avoided; the device is not operated in the vicinity of water, in particular, the device should never be submerged (do not place objects containing fluids, e.g. vases or drinks, on or near the device); no foreign bodies penetrate the device; the device is not exposed to wide temperature variations, as otherwise there may be condensation from humidity causing electrical short circuits; the device is not exposed to excessive shock or vibration.

Children

Keep electrical devices out of reach of children. Never allow children to use electrical devices unsupervised. Children may not always properly identify possible hazards. Small parts may be fatal if swallowed. Keep packaging film away from children. There is a risk of suffocation. This device is not intended for children. If used incorrectly, parts under spring tension may fly out and cause injury to children (e.g. to eyes).

Information on handling batteries

- Make sure that batteries are kept away from small children. Children may put batteries in their mouths and swallow them. This can cause serious harm to their health. If this happens, consult a doctor immediately.
- Do not charge normal batteries, heat them up or throw them into naked flames (they may explode).
- The battery must not be directly exposed to heat or sunlight, and must not be stored in a place with a very high temperature.
- The battery must not come into contact with water.
- The battery must not be dismantled, pierced or otherwise damaged.
- The battery contacts must not be short-circuited.
- Change low batteries in good time.
- Always change all the batteries at the same time and use batteries of the same type.
- Leaky or damaged batteries can cause chemical burns on contact with the skin. In this case, wear protective gloves. Clean the battery compartment with a dry cloth.

Important information on battery disposal



Batteries with this label do not contain harmful substances such as cadmium, lead and mercury. However, used batteries must not be disposed of along with household waste in accordance with the battery directive. To protect natural resources and promote the recycling of materials, separate the batteries from other waste and deposit them at a local recycling center. An additional label with the chemical symbols for Hg, Cd or Pb means that the batteries contain quantities of mercury, cadmium or lead which exceed the restrictions set by the EU Directive 2006/66/EG. If batteries are not disposed of

properly, these substances can cause harm to human health or the environment

Cleaning

- Dusty devices must be cleaned. You can clean dust from the air vents using a vacuum cleaner or compressed air. If necessary, you can remove the dust with a brush.
- You can clean the surface using a cloth slightly dampened in soapy water. Only use suitable microfiber cloths for high-gloss surfaces.
- Do not allow water to penetrate the device.
- Do not clean the device in a dishwasher.
- Do not use sharp, pointed, abrasive or corrosive cleaning materials or hard brushes.
- Do not use chemicals.
- Do not use flammable liquids for cleaning the device.

Information on device disposal



Important: The EU Directive 2012/19/EU regulates the proper return, treatment and recycling of used electronic devices. This symbol means that in the interest of environmental protection the device must be disposed of separately from household or industrial waste at the end of its service life in accordance with applicable local legal guidelines. Disposing of used devices can be done at official recycling centers in your country. Obey local regulations when disposing of material. Further details on returns (also for non-European countries) can be obtained at your local authority. Separate

collection and recycling saves natural resources and ensures that all the provisions for protecting health and environment are observed when recycling the product.

Table of contents

1. P	Product introduction	6
1.1	1. Scope of Delivery	6
1.2	2. Operating principle	6
1.3	3. Performance Features	6
1.4	4. Use in systems of different manufacturers	6
2. C	Overview of functions	7
2.1	1. Inclusion / Add Device	7
2.2	2. Operating	8
2.3		
2.4	4. Reset (Factory-Reset)	8
3. A	Advanced Z-Wave Parameter	9
3.1	1. Association Group Information	9
3.2	2. Overview Configuration Parameter	9
3.3	3. Command Classes	9
4. T	Technical Specifications	10

1. Product introduction

1.1. Scope of Delivery

- ABUS Z-Wave RGBW/LED Bulb
- Quickguide & Safety instructions

1.2. Operating principle

The SHLM100x0 was developed for use in home automation systems that use the Z-Wave wireless standard. The LED bulb fits into any standard E27 socket and can be dimmed individually. Via app you also have the choice of over a thousand colours (SHLM10000)

In conjunction with configurable scenes, smart functions can be initiated, e.g. when light on after 8 pm, with 30% brightness on, if before 8 pm with 90% brightness.

1.3. Performance Features

Die ABUS Z-Wave SHLM10000/SHLM10010...:

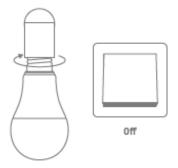
- ...is an smart Radio-LED-Bulb
- ...is Z-Wave PLUS compatible & certified
- ...has an adjustable dimming range
- ... has five colour channels: red, blue, green, warm white. cool white (SHLM10000)
- ...can be switched on/off manually or via radio/gateway
- ...was developed for indoor installation

1.4. Use in systems of different manufacturers

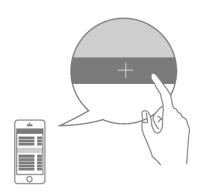
Communication is via the Z-Wave EU frequency (868.42 Mhz). You can integrate the device into any Z-Wave network with a certified Z-Wave gateway, regardless of manufacturer. All non-battery powered nodes in the network act as repeater to increase the durability of the network.

2. Overview of functions

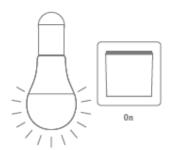
2.1. Inclusion / Add Device



Screw the LED bulb into a standard E27 socket



Click the + (Add) button in your Z-Wave App and follow the further instructions



Turn the light-switch on.

The App will show if the Add device process was successful and the LED-bulb will flash once

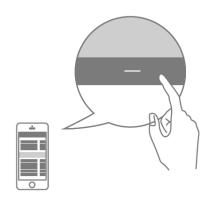
Repeat the inclusion process if it was not successful.

2.2. Operating

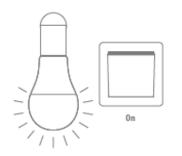
Do not dim the LED bulb via the supply voltage (e.g. dimmer switch) but use the App or compatible Z-Wave wireless switches/dimmer.

Make sure that the power supply of the LED lamp is always switched on (e.g. wall switch ON), as this is the only way the device can function.

2.3. Exclusion / Remove Device



Click the - (Remove) button in your Z-Wave App and follow the further instructions

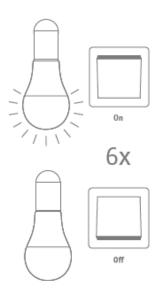


Switch the LED bulb on.

The App will show if the Remove device process was successful. The LED bulb will flash once and then dim to 5%

Repeat the exclusion process if it was not successful.

2.4. Reset (Factory-Reset)



Switch the Power supply oft he LED bulb ON and OFF 6 times in a row. (Interval of 0.5 to 2 seconds)

When switched on for the 7th time, the LED bulb flashes twice indicating successful reset to factory settings.

Note:

This procedure should only be used if the primary gateway is not capable of acting.

If the device is set to the factory setting, the status is set to "not included", the association settings and possible configurations are reset to default.

3. Advanced Z-Wave Parameter

3.1. Association Group Information

Z-Wave devices can control other devices directly. This direct control is called in Z-Wave association. For this purpose, the device ID of the device to be controlled must be stored in the controlling devices. This is done in so-called association groups. An association group is always linked to an event in the controlling device (pressing a key or triggering a sensor). When this event occurs, a control command - usually a BASIC SET - is sent to all devices stored in an association group.

The device supports the following association group:

Group Number	Maximum Devices	Transmitted Content
Group 1	1 (0x01)	Z-Wave Plus Lifeline

3.2. Overview Configuration Parameter

Z-Wave products can be used in the network immediately after inclusion. Through configuration settings, however, the behaviour of the device can be adapted even better to the requirements of the application and additional functions can be activated.

Para- meter	Byte- size	Funktion	Default-Value (Decimal)	Description	
1	1	Temperature of NTC	- This parameter can only be read and not set.		
255	4	Reset	-	This parameter cannot been read, but only set 2290649224 = Reset to factory configuration and removed the Z-Wave network. 2281701376 = Reset Configuration parameter to default value. (Hexadezimal: 0x88888888 / 0x88000000)	

3.3. Command Classes

- 1. Association Group Information V1
- 2. Association V2
- 3. Basic V1
- 4. Color Switch V1
- 5. Configuration V1
- 6. Device Reset Local V1
- 7. Firmware Update MD V2
- 8. Manufacturer Specific V2
- 9. Multilevel Switch V2
- 10. Power level
- 11. Security V1
- 12. Switch All V1
- 13. Version V2
- 14. Z-Wave Plus Info V2

4. Technical Specifications

Parameters Unit SHLM10000 SHLM10010 Dimensions mm 6 x 6 x 11,5 6 x 6 x 11,5 Weight g 135 70 Operating Temperature °C -20 - 40 -20 - 40 Max. Humidity % 95 95 IP Class 20 20 Radio frequency MHz 868,42 (Z-Wave PLUS, Europe) 868,42 (Z-Wave PLUS, Europe) Modulation FSK (BFSK/GFSK) FSK (BFSK/GFSK) Transmission power db < 4,5 < 4,5 Power supply VAC 220 - 240 220 - 240 Luminous Flux Im 806 806 Color temperature Kelvin 2700 - 6500 2700 Dim factor % 5 - 100 5 - 100 Beam angle ° 240 240 Lamp Life h 25000 25000 Socket E27 E27 Power consumption W >9,5 Ø >9,0 Ø Max. Range (building) m<	•			
Weight g 135 70 Operating Temperature °C -20 - 40 -20 - 40 Max. Humidity % 95 95 IP Class 20 20 Radio frequency MHz 868,42 (Z-Wave PLUS, Europe) 868,42 (Z-Wave PLUS, Europe) Modulation FSK (BFSK/GFSK) FSK (BFSK/GFSK) Transmission power db < 4,5	Parameters	Unit	SHLM10000	SHLM10010
Operating Temperature °C -20 - 40 -20 - 40 Max. Humidity % 95 95 IP Class 20 20 Radio frequency MHz 868,42 (Z-Wave PLUS, Europe) 868,42 (Z-Wave PLUS, Europe) Modulation FSK (BFSK/GFSK) FSK (BFSK/GFSK) Transmission power db < 4,5	Dimensions	mm	6 x 6 x 11,5	6 x 6 x 11,5
Max. Humidity % 95 95 IP Class 20 20 Radio frequency MHz 868,42 (Z-Wave PLUS, Europe) 868,42 (Z-Wave PLUS, Europe) Modulation FSK (BFSK/GFSK) FSK (BFSK/GFSK) Transmission power db < 4,5	Weight	g	135	70
P Class	Operating Temperature	°C	-20 – 40	-20 – 40
Radio frequency MHz 868,42 (Z-Wave PLUS, Europe) 868,42 (Z-Wave PLUS, Europe) Modulation FSK (BFSK/GFSK) FSK (BFSK/GFSK) Transmission power db < 4,5	Max. Humidity	%	95	95
Modulation FSK (BFSK/GFSK) FSK (BFSK/GFSK) Transmission power db < 4,5	IP Class		20	20
Transmission power db < 4,5 < 4,5 Power supply VAC 220 - 240 220 - 240 Luminous Flux Im 806 806 Color temperature Kelvin 2700 - 6500 2700 Dim factor % 5 - 100 5 - 100 Beam angle ° 240 240 Lamp Life h 25000 25000 Socket E27 E27 Power consumption W <0,5	Radio frequency	MHz	868,42 (Z-Wave PLUS, Europe)	
Power supply VAC 220 - 240 220 - 240 Luminous Flux Im 806 806 Color temperature Kelvin 2700 - 6500 2700 Dim factor % 5 - 100 5 - 100 Beam angle ° 240 240 Lamp Life h 25000 25000 Socket E27 E27 Power consumption standby W <0,5	Modulation		FSK (BFSK/GFSK)	FSK (BFSK/GFSK)
Luminous Flux Im 806 806 Color temperature Kelvin 2700 - 6500 2700 Dim factor % 5 - 100 5 - 100 Beam angle ° 240 240 Lamp Life h 25000 25000 Socket E27 E27 Power consumption standby W <0,5	Transmission power	db	< 4,5	< 4,5
Color temperature Kelvin 2700 - 6500 2700 Dim factor % 5 - 100 5 - 100 Beam angle ° 240 240 Lamp Life h 25000 25000 Socket E27 E27 Power consumption standby W <0,5	Power supply	VAC	220 - 240	220 - 240
Dim factor % 5 - 100 5 - 100 Beam angle ° 240 240 Lamp Life h 25000 25000 Socket E27 E27 Power consumption standby W <0,5	Luminous Flux	lm	806	806
Beam angle ° 240 240 Lamp Life h 25000 25000 Socket E27 E27 Power consumption standby W <0,5	Color temperature	Kelvin	2700 - 6500	2700
Lamp Life h 25000 25000 Socket E27 E27 Power consumption standby W <0,5	Dim factor	%	5 - 100	5 - 100
Socket E27 E27 Power consumption standby W <0,5	Beam angle	0	240	240
Power consumption standby W <o,5< a=""> <a< td=""><td>Lamp Life</td><td>h</td><td>25000</td><td>25000</td></a<></o,5<></o,5<></o,5<></o,5<></o,5<></o,5<></o,5<></o,5<></o,5<></o,5<></o,5<></o,5<>	Lamp Life	h	25000	25000
Standby Power consumption W Power consumption Yes Yes Yes Yes Yes Yes Yes Ye	Socket		E27	E27
Max. Range (building)m< 40< 40Firmware updateableYesYesSupport Z-Wave BeamingYesYesSmartStart supportedNoNoZ-Wave Network SecurityYesYesZ-Wave AES-128 SecurityYesYesZ-Wave PlusYesYesSecurity S2 ClassesNoNoZ-Wave Chip Generation500500Z-Wave Sensor-TypeOpen/Closed (Binary)Open/Closed (Binary)Zwave library typeEnhanced 232 SlaveEnhanced 232 Slave	•	W	<0,5	<0,5
Firmware updateable Support Z-Wave Beaming SmartStart supported No Z-Wave Network Security Yes Yes Yes Yes Yes Yes Yes Ye	Power consumption	W	>9,5 Ø	>9,0 Ø
Support Z-Wave Beaming SmartStart supported No No No Z-Wave Network Security Yes Yes Yes Z-Wave AES-128 Yes Security Yes Yes Yes Yes Z-Wave Plus Yes Yes Yes Security S2 Classes No No Z-Wave Chip Generation Soo Z-Wave Sensor-Type Open/Closed (Binary) Zwave library type Enhanced 232 Slave SmartStart supported No No Open/Closed (Binary) Enhanced 232 Slave	Max. Range (building)	m	< 40	< 40
BeamingTesTesSmartStart supportedNoNoZ-Wave Network SecurityYesYesZ-Wave AES-128 SecurityYesYesZ-Wave PlusYesYesSecurity S2 ClassesNoNoZ-Wave Chip Generation500500Z-Wave Sensor-TypeOpen/Closed (Binary)Open/Closed (Binary)Zwave library typeEnhanced 232 SlaveEnhanced 232 Slave	Firmware updateable		Yes	Yes
Z-Wave SecurityNetwork SecurityYesYesZ-Wave AES-128 SecurityYesYesZ-Wave PlusYesYesSecurity S2 ClassesNoNoZ-Wave Chip Generation500500Z-Wave Sensor-TypeOpen/Closed (Binary)Open/Closed (Binary)Zwave library typeEnhanced 232 SlaveEnhanced 232 Slave			Yes	Yes
SecurityYesYesZ-Wave SecurityYesYesZ-Wave PlusYesYesSecurity S2 ClassesNoNoZ-Wave Chip Generation500500Z-Wave Sensor-TypeOpen/Closed (Binary)Open/Closed (Binary)Zwave library typeEnhanced 232 SlaveEnhanced 232 Slave	SmartStart supported		No	No
SecurityYesYesZ-Wave PlusYesYesSecurity S2 ClassesNoNoZ-Wave Chip Generation500500Z-Wave Sensor-TypeOpen/Closed (Binary)Open/Closed (Binary)Zwave library typeEnhanced 232 SlaveEnhanced 232 Slave			Yes	Yes
Security S2 ClassesNoNoZ-Wave Chip Generation500500Z-Wave Sensor-TypeOpen/Closed (Binary)Open/Closed (Binary)Zwave library typeEnhanced 232 SlaveEnhanced 232 Slave			Yes	Yes
Z-Wave Chip Generation 500 500 Z-Wave Sensor-Type Open/Closed (Binary) Open/Closed (Binary) Zwave library type Enhanced 232 Slave Enhanced 232 Slave	Z-Wave Plus		Yes	Yes
Z-Wave Sensor-Type Open/Closed (Binary) Open/Closed (Binary) Zwave library type Enhanced 232 Slave Enhanced 232 Slave	Security S2 Classes		No	No
Zwave library type Enhanced 232 Slave Enhanced 232 Slave	Z-Wave Chip Generation		500	500
2.21	Z-Wave Sensor-Type		Open/Closed (Binary)	Open/Closed (Binary)
	Zwave library type		Enhanced 232 Slave	Enhanced 232 Slave
Device Type / Role type Light Dimmer Switch / Always on Light Dimmer Switch / Slave Always on Slave	Device Type / Role type		Light Dimmer Switch / Always on Slave	Light Dimmer Switch / Always on Slave