



# LIGHT AIR SWITCH

Ref : 43.00009.10

## User Manuel & Troubleshooting Guide



Acknowledgement.....	P.2
Safety Warnings.....	P.2
Equipment description.....	P.2
Accessories / Associated references.....	P.2
Technical characteristics.....	P.3
Connectors.....	P.4
Set-up.....	P.5
Wiring.....	P.5
Pairing.....	P.7
Configuration.....	P.8
Troubleshooting guide.....	P.11
Terms and conditions.....	P.12
Warranty terms & after-sales.....	P.12





## Acknowledgement

We thank you for your purchase and hope that you are fully satisfied with this product.

Before you use this product, we recommend you read the instructions below carefully. This manual explains how to use and install the product in accordance with its intended use.

## Safety Warnings

### WARNING: Do not disassemble the device

Any contact with the product's internal components can cause injury. In the event of a malfunction, only a qualified technician is authorised to repair the device

### WARNING: In the event of impact

If the product falls or undergoes heavy impact, immediately contact a qualified person to ensure the device is working correctly

### WARNING: Unpacking the equipment

After unpacking the product, make sure that it is complete and in good condition. If you are not sure, immediately contact a person with the required professional qualification

### WARNING: Unpacking the equipment

Do not leave any part of the packaging within the reach of children or vulnerable adults

## Equipment description

**Light Air Switch is the perfect solution to manage and transform the organisation of your low voltage DC lighting.**

The Lighting control module is managed by wireless & battery-free switches via the 2.4Ghz antenna module (frequency usable worldwide).

These modules are designed to be easily integrated into a false ceiling or a technical gallery.

### Kit contents :

- 1 Lighting Control Module x1
- 2 2.4 Ghz Antenna module x1
- 3 CAN cable (1m) x1
- 4 120 Ω terminations x2
- 5 2-way PicoMax connectors x8
- 6 6-way PicoMax connector x1
- 7 white 1-button switch x1
- 8 white 2-button switch x1



## Accessories / Associated references

Designation	Reference
120 Ω terminations	0D.CRD399
Lighting Control Module PICOMAX connections	41.72119.XX
Coding resistances	11 references available : 50.FIL12008.00-01 [001001] to 50.FIL12008.00-11 [001001]
Connections bag	62.SAC12008B.00
BUS cables	15 references available : 0D.CRD450 : 0.4 m to 0D.CRD465 : 15 m
Switches (wireless & battery-free)	0F.INT221-2.4 / 0F.INT222-2.4
Navicolor GT2	41.68019.XX





## Technical specifications

- The luminous intensity of the 6 outputs is dimmable from 20 to 100%. Simply hold the switch button until the desired level is reached. This feature can be disabled from a Navicolor screen (Optional).
- When the outputs are reactivated after a stop, the selected light intensity before extinction is restored by default.
- Modules have up to 4 active ON or OFF inputs at 0V. These inputs can be used to control outputs directly through wired push buttons.
- An input is dedicated to bloc coding, when used in a CAN MULTIBLOC network  
(see accessories / associated references P.2 for coding resistance codes available)

## Characteristics

### LIGHTING CONTROL MODULE



### 2.4 GHZ ANTENNA MODULE



### SWITCH

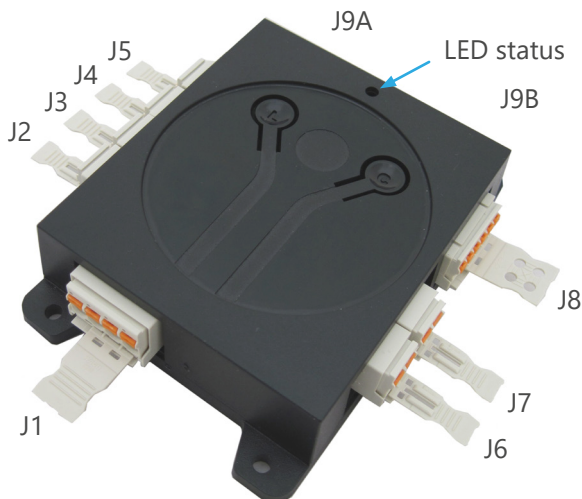


	LIGHTING CONTROL MODULE	2.4 GHZ ANTENNA MODULE	SWITCH	
REFERENCE	41.72119.XX XXXXXX	41.72120.XX XXXXXX	0F.INT221-2.4	0F.INT222-2.4
POWER SUPPLY	8-32V DC	with CAN cable - 12VDC	Kinetic energy	
INPUTS	Up to 4 digital inputs for wired switches npn type			
OUTPUTS	6 outputs	-	-	
MAX.CURRENT PER OUTPUT	5A	-	-	
TOTAL MAX. CURRENT	20A/module	-	-	
DIMMING	Light intensity regulation on each output with PWM	-	-	
SUPPLY & OUTPUTS WIRE CROSS SECTION	0.2 to 2.5mm <sup>2</sup>			
CODING & INPUTS WIRE CROSS SECTION	0.2 to 1.5mm <sup>2</sup>			
MAX. NUMBER OF PAIRING	128 (up to 4 pairings on a 2-button switch) Up to 32 2-button switches / 64 1-button switches	-	-	
CONNECTORS	BUS CAN type 6-way Micro-Fit 2-way PicoMax outputs 6-way PicoMax inputs and coding	BUS CAN type 6-way Micro-Fit Scheiber v8.0 Multibloc Protocol	-	
ANTENNA	-	PCB antenna	PCB antenna	
FIRMWARE VERSION	-	8.00 or higher	-	
NUMBER OF BUTTONS	-	-	1	2
TRANSMISSION RANGE	-	20m indoor	20m indoor	
RADIO STANDARD / DEFAULT RADIO CHANNEL	-	2.4 Ghz IEEE 802.15.4 channels 11 ... 26 / IEEE 802.15.4 radio channel 11	2.4 Ghz IEEE 802.15.4 channels 11 ... 26 / IEEE 802.15.4 radio channel 11	
DEVICE IDENTIFICATION	-	-	Individual 32 Bit Device ID (factory programmed)	
SECURITY	-	-	AES128 (CBC) with Sequence Counter	
ENERGY BOW TRAVEL/FORCE	-	-	1.8 mm / typ. 10 N (at room temperature)	
NUMBER OF OPERATIONS AT 25°C	-	-	typ. 100.000 (tested according to EN 60669 / VDE 0632)	
CERTIFICATION	CE	CE	CE	
ENVIRONMENTAL CONDITIONS	Indoor use Altitude up to 2000m Operating temperature : 0 to +50°C Humidity : 0 to 93% without condensation	Indoor use Altitude up to 2000m Operating temperature : 0 to +50°C Humidity : 0 to 93% without condensation	-25°C to + 65°C	
ELECTRICAL PROTECTION OF THE POWER LINE	Fuse or circuit breaker			
PROTECTION CALIBRE	16A if one power line in 2.5mm <sup>2</sup> 20A if two power lines in 2.5mm <sup>2</sup>			
PROTECTION POSITION	accessible and identified for the user			
DIMENSIONS (LxWxH)	110 x 77 x 26 mm	146 x 48 x 13.5	80 x 80 x 14.5 mm	
MOUNTING DISTANCE	width: 60mm height: 100mm	vertical position : 50mm horizontal position : 129mm		
WEIGHT	0.120 Kg	0.150 Kg	0.06 Kg	





Connectors



LIGHTING CONTROL MODULE

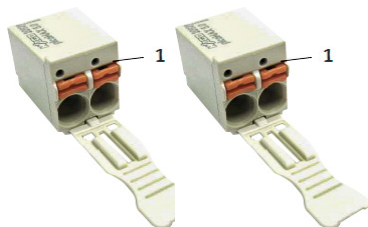


For up to 16A, you can use one DC power input on J1 (1-2, or 3-4). Above 16A, the DC power inputs must be doubled (1-4).

The voltage of the output is equal to the supply voltage.

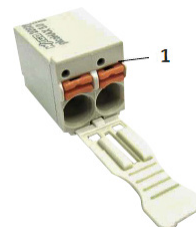
For example, if a 12V battery is connected to J1, the output voltage on J2 will be 12V.

J1- Power connector



PicoMAX 5.0 - 2-way, max 2.5mm<sup>2</sup>  
Ref. WAGO 2092-1104/002-000  
Ref. SCHEIBER OE.CON1481  
1) + BATTERY – max 16A  
2) - BATTERY – max 16A

J2/J3/J4/J5/J6/J7 - Output connector



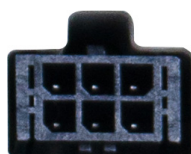
PicoMAX 5.0 - 2-way, max 2.5mm<sup>2</sup>  
Wago: 2092-1102/002-000  
Ref. SCHEIBER OE.CON1481  
1) + max 5A  
2) - max 5A

J8



PicoMAX 3.5 - 6-way, max 1.5mm<sup>2</sup>  
Ref. WAGO 2091-1106/002-000  
Ref. SCHEIBER OE.CON1485  
1) INPUT 5, ANALOGUE CODING  
2) -VDC OUTPUT  
3) INPUT 4, DIGITAL  
4) INPUT 3, DIGITAL  
5) INPUT 2, DIGITAL  
6) INPUT 1, DIGITAL

J9A / J9B



Multibloc 6-way CAN bus connector  
J9A and J9B have the same function, the connection can be done on J9A or J9B.  
Ref. SCHEIBER 0D.CRD450 (0,4M) to 0D.CRD465 (15M)



## Installation instructions



SCHEIBER

- This device must be located in a ventilated place to avoid the risk of water spatter.
- Do not install on heat-sensitive supports as carpet, PVC floor, etc...
- Imperatively install the product in a cool and dry place.

### Meaning of the lights :

Red LED : module number\*

Green LED : module status (if the green LED flashes, the operation is normal).

### Coding resistance

The coding resistance defines the module number within a network of several lighting modules. It makes it possible to identify a module quickly in a network and to know its location in the installation.

Careful! as of version V8.11: its use is not obligatory, for example if you have only one module it does not have interest.

\* To know the module number, count the number of flashes of the red LED. For module No. 3, the red LED will blink 3 times.

### WITH coding resistance

When powering up, the coding resistance defines the module number.

(if you change resistance, you have to restart the module for the new one to be taken into account)


If you are using a Navicolor, it is then possible to control functions on predefined outputs directly from the touch screen.

### WITHOUT coding resistance

- To assign a number to the module, press the Learn key. The 1st number available on the network is assigned to the module.

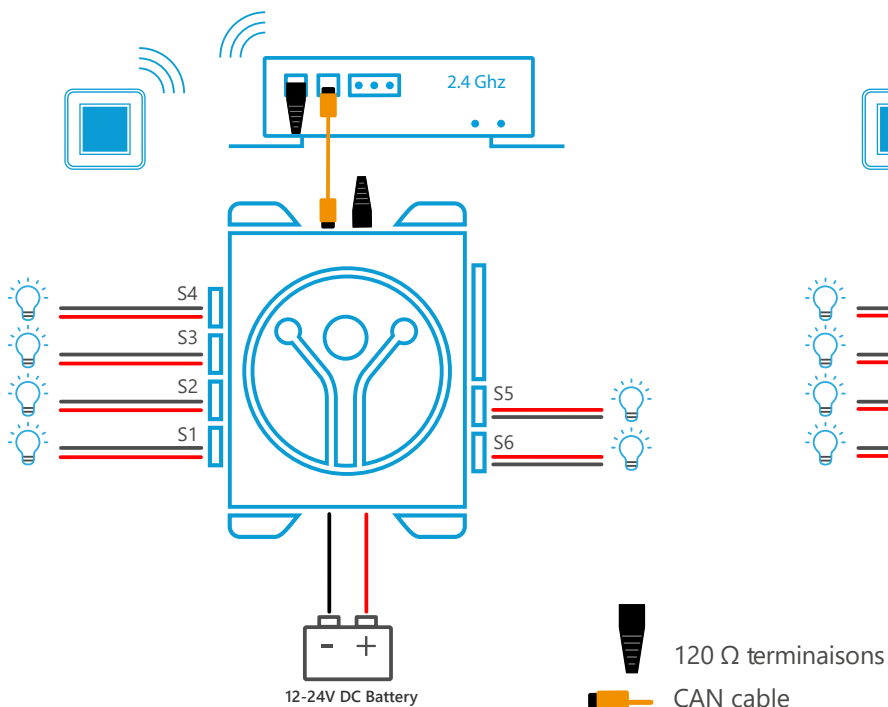
- To delete the coding number, press the Learn and Clear (L + C) keys simultaneously.

### Markings used

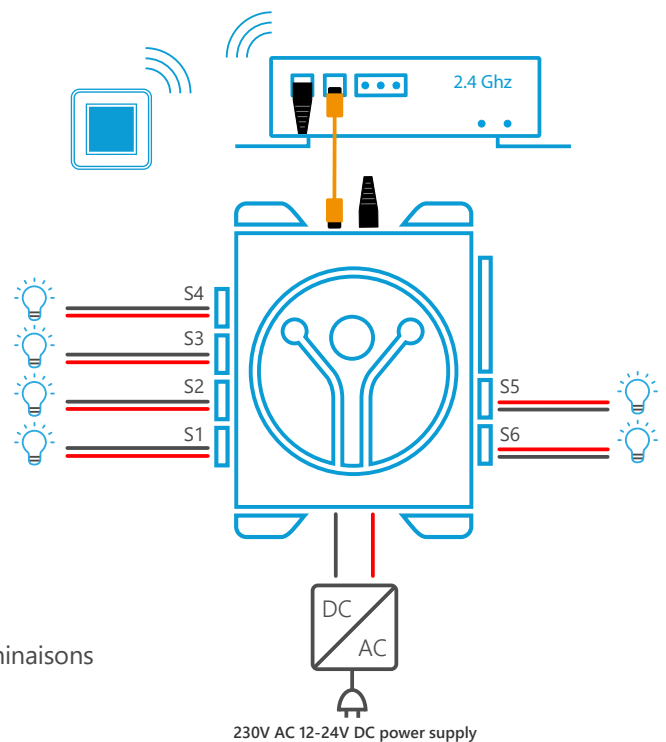
Symbols	Description
V	Volt
A	Ampere
Kg	Kilogram
DC or 	Direct current

## Wiring diagram

### Battery power 8-32V DC

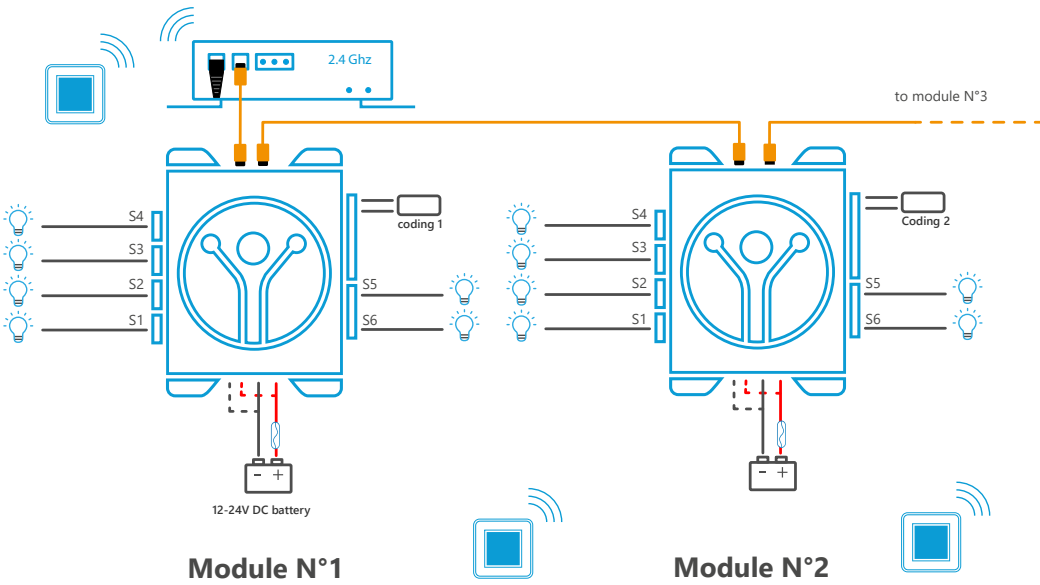


### Power supply 230 V AC / 8-32V DC



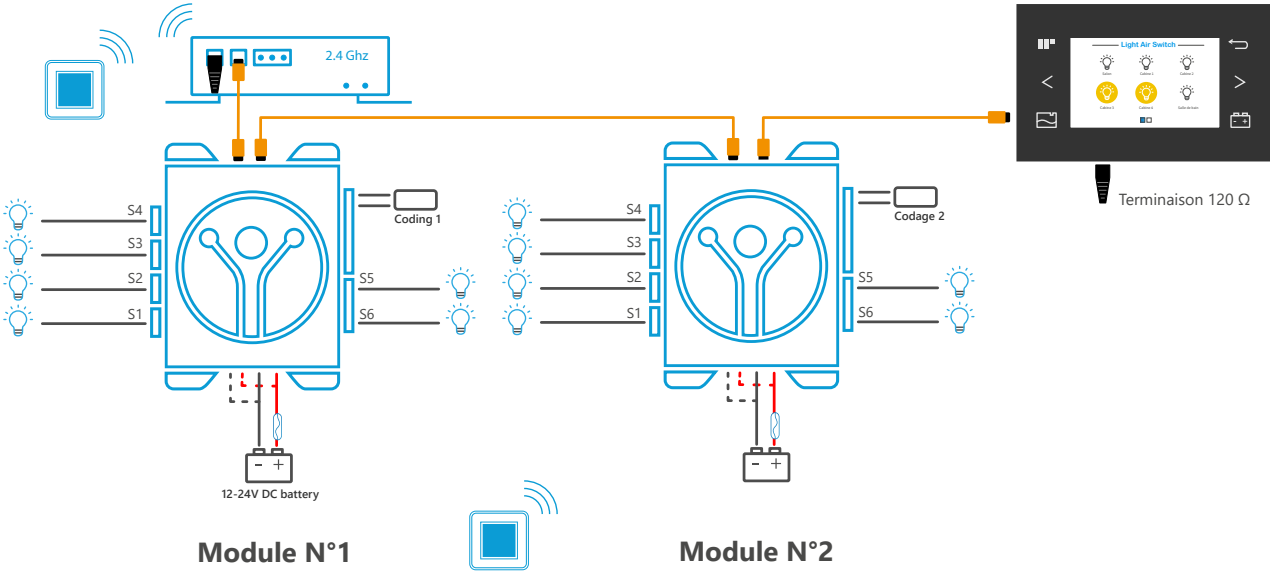
## Advanced wiring

### Connect multiple modules on the same network

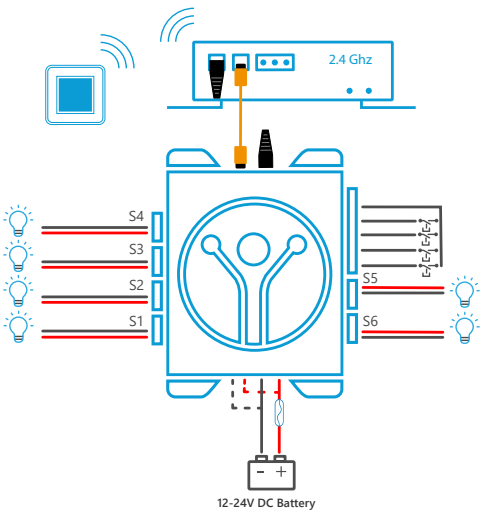


SCHEIBER

### Connect multiple modules and a Navicolor on the same network



### Connect a wired switch



## Pairing switches on the outputs



SCHEIBER

It is possible to set the switches in different ways depending on your installation.

ON = turn on the lights

OFF = turn off the lights

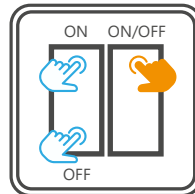
**Case 1:** The ON is commanded by a button and OFF by a second button.

Operation of the dimming in this case: by pressing the ON button, the intensity of the lighting increases. If you want to decrease the intensity, you must then press the OFF button.

**Case 2:** ON and OFF are commanded on the same button.

Operation of the lighting variation in this case: by pressing the button, the lighting varies in intensity (decreases then increases or increases then decreases).

**Case 1 : ON/OFF  
with 2 buttons**

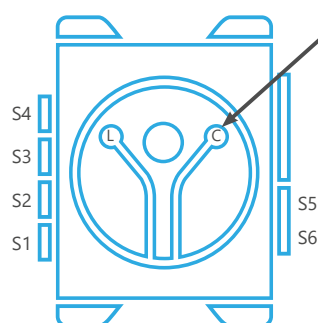
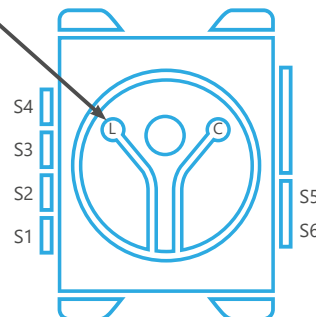


**Case 2 : ON/OFF  
with 1 button**

- A long press (1.5sec) on the L key takes you into the set-up mode.
- Output 1 (S1) flashes, briefly press the switch button you want to turn output 1 ON, then press a second time the switch button you want to turn output 1 OFF
- Each press on the L key changes the activated output. The seventh press exits the set-up mode.
- If no action is taken for 2 minutes, the module returns to normal mode.

**L key (learn)**

**To get into set-up mode and  
change the activated output**



**C key (clear)**

**To clear a set-up output or the 6 outputs  
of this lighting control module**

- **In set-up mode**, (one of the module's outputs flashes), a long press on the C key clears the setup of the selected flashing output.
- **In normal mode**, a long press (1.5 seconds) on the C key clears the set-up of all the outputs of this module.

*Note: It is also possible to remove one switch from an output (without clearing the other switches associated with that output). To do this, select the applicable output with the L key on the module. Then, when the output flashes, press the switch you want to remove until the output starts flashing again after having been off for 1 or 2 seconds.*

NOTE: 2.4 Ghz antenna module has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference's by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

According §15.21 of the CFR 47- FCC part 15:

Any changes or modifications to this equipment not expressly approved by the responsible party may cause, harmful interference and void the FCC authorization to operate this equipment.

The Block SFSP 2.4 GHz has a radio module certified

FCC ID: S2V-TCM515Z

IC ID: 5713A-TCM515Z

### EXAMPLE : ALLOCATION OF A SWITCH TO OUTPUT 2

- A long press on the L key : output 1 (S1) flashes
- A second press of the L key : output 2 (S2) flashes
- Briefly press the switch you want to turn output 2 ON : output 2 is ON
- Briefly press the switch you want to turn output 2 OFF : output 2 flashes again

An ON switch and an OFF switch are now allocated to output 2. You can continue to allocate more switches to the same output by pressing them or you can move on to setting up output 3 (S3) by pressing the L key.

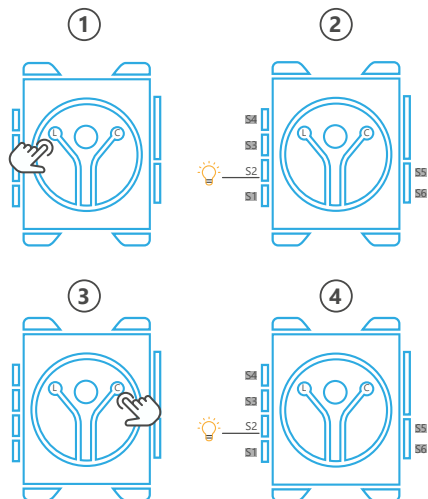




## Configuration

### A. Configure a permanent output

Example of use: connect a reading light equipped with an ON / OFF button

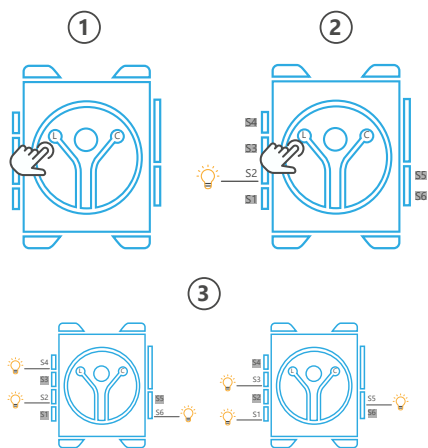


- ① Enter the setting mode (press the L key for 3 seconds)
- ② Choose an output that has not been paired and flashes to designate it as a permanent output (example: S2).
- ③ Press the C key for 2 seconds.
- ④ The output flashes quickly, it is now configured as a permanent output.

To exit setup mode, press the L key the number of times required to skip all remaining outputs.

To remove the permanent mode from the output:

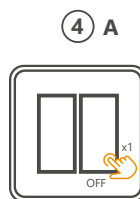
- ① Enter the configuration mode and choose this permanent output.
- ② The output flashes quickly: press C until the output goes off.
- ③ The output will flash again normally a few seconds later. It is ready to be re-parameterized.



### B. Configure the function "turn off everything" with a switch button

Example of use: turn off all outputs by leaving

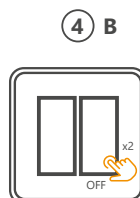
- ① Enter the setting mode (press the L key for 3 seconds)
- ② On an output of 1 to 5, press the L button for at least 4 seconds (example S2).
- ③ The outputs flash alternately.
- ④ A. Press the button of the desired switch to assign the all power off function.



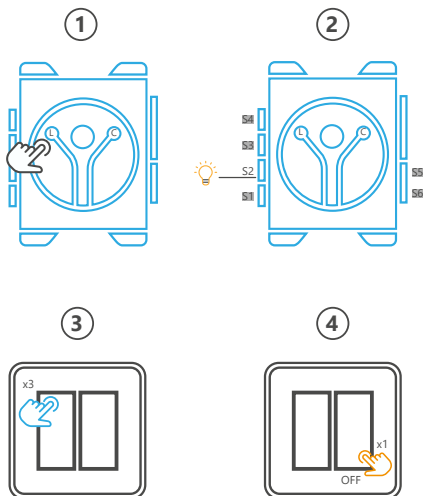
### C. Configure the function "turn off everything" with switch lock

Repeat steps 1 to 3 of the "turn off everything" configuration above.

- ④ B. Press the key of the desired switch twice to assign the function turn everything off + lock  
To unlock the switch, press the button assigned above once. Then use your switch normally.



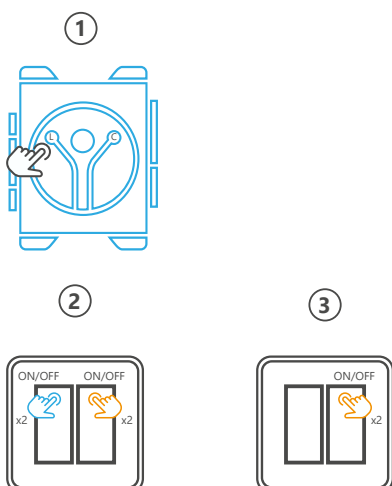




### D. Configure the extinction of several outputs

Example of use: switch off the ceiling light and various mood lighting, without switching off the bedside lighting.

- ① Enter the setting mode (press the L key for 3 seconds)
- ② Choose an unconfigured output (example S2). S2 flashes.
- ③ Assign on the same button an ON, an OFF, and a second ON (press a third time on the same button)
- ④ On another button, assign OFF (this button will be OFF for all desired outputs).
- ⑤ Repeat points 2 and 3 on the desired outputs, making sure to keep the same button for all OFF.



### E. Configure output synchronization

Example of use: the mood lighting is switched on, I want to increase the lighting level by switching on the ceiling light.

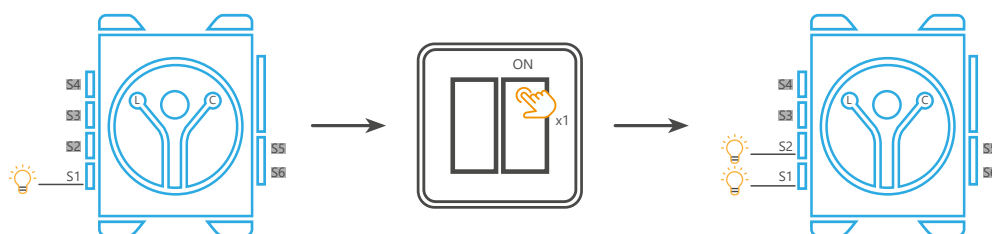
By default, ON synchronization is enabled. To change and set an OFF synchronization, it is necessary to configure from the Navicolor.

Conditions: several outputs are controlled by the same switch. At least one of the outputs can be controlled by another button.

- ① Enter the setting mode (press the L key for 3 seconds)
- ② On output 1, for example, assign an ON / OFF on **button 1** and an ON / OFF on **button 2**.
- ③ On output 2, for example, assign ON / OFF on **button 2**.

ON / OFF on **button 2** is common to outputs 1 and 2.

If output 1 is on, and you want to turn on output 2, pressing button 2 synchronizes the lights (output 2 comes on).





### **F. Save the state of the outputs in case of power failure**

By default, the output status is saved in the event of a power failure.

This function can be disabled from a Navicolor.

### **G. Configure the block alarm clock**

By default, the block wakes up when the power is turned on.

This function can be disabled from a Navicolor.

### **H. Disable light dimming**

By default, dimming is enabled on all outputs.

This function can be disabled on all outputs or only those desired from a Navicolor.



**Troubleshooting Guide**

<b>Observed dysfunction</b>	<b>Troubleshooting instructions</b>
<b>The outputs do not work</b>	<ol style="list-style-type: none"><li>1. Check the protection (fuse or circuit breaker) on the power input</li><li>2. Check the power of the uses (5 A max per output)</li><li>3. Check the voltage on the power connector</li><li>4. Check the module alarm clock (flashing green led)</li><li>5. Check the switch configuration</li><li>6. Check the range of the switch(es)</li></ol>
<b>Some outputs work</b>	<ol style="list-style-type: none"><li>1. Check the power of the uses (5 A max per output)</li><li>2. Check the adequacy between connection and configuration</li><li>3. Check that there is not twice the same affection (living room lighting on two different exits for example)</li><li>4. Check that there is ON and OFF parameterized.</li></ol>
<b>No blinking green LED</b>	<ol style="list-style-type: none"><li>1. Check the protection (fuse or circuit breaker) on the power input</li><li>2. Check the power of the uses (5 A max per output)</li><li>3. Check the alarm clock of the module (flashing green LED)</li><li>4. Change the module if the checks from 1 to 3 are in accordance</li></ol>
<b>The module does not appear on the network</b> (if presence of a NAVICOLOR)	<ol style="list-style-type: none"><li>1. Check CAN cable</li><li>2. Check CAN 120Ω BUS termination presence at each end of the CAN Network</li><li>3. Check of the alarm clock of the module (flashing green led)</li><li>4. Stop and restart the installation</li></ol>
<b>Multi SFSP display at power on</b> (if multiple modules present in the installation)	<p>Multiple modules have been detected with the same coding number</p> <ol style="list-style-type: none"><li>1. Check and differentiate the modules using the coding entry.</li><li>2. Module 1 being the one with coding entry 1 ° etc ...</li></ol>



## Terms and conditions

The manufacturer cannot be held responsible and accepts no responsibility in the event of harm to persons or property due to improper use and in reference to the warnings provided in this manual.

SCHEIBER reserves the right to change the characteristics of its products in the interest of its customers. The manual supplied with this product must not be reproduced, transmitted, stored in a search system or translated into any language, in full or in part, by any means, without the prior written consent of SCHEIBER.

Although every effort has been made to provide you full and accurate information in this manual we ask that you inform the SCHEIBER representative of your country in case of any error or omission we may have overlooked.

SCHEIBER reserves the right to change the characteristics of the hardware and software described in these manuals at any time and without prior notice.

## Warranty terms & after-sales

### **WARRANTY SUBJECT:**

The company SCHEIBER warrants all its products' range against failures or masked-failures according to the article 1641 and followings of the Civil Code. Repairs and replacement of the equipment during the warranty period do not change terms or time of this warranty which is of 2 years. Repairs and replacement of the faulty parts under warranty are made only on presentation of the invoice which certifies the warranty beginning date.

### **WARRANTY DOES NOT APPLY:**

This warranty can not be applied in case of misuse, wrong installation, repair by anyone else than a SCHEIBER authorised technician, damage arising from improper use (fuses replaced by another value), utilisation in an unsuitable environment or if the equipment has suffered from physical damages through handling, transport. It does not cover calibration or verification due to the normal age of the components. Warranty modalities: The equipment freight will be charged to the customer. If the returned equipment is not conform, our company considers it has the right to refuse the free repair and proposes an estimate.

### **RESPONSIBILITY LIMITS:**

In any case, the company SCHEIBER will not be held responsible for direct damages or damages not due to the normal use of the equipment. In case of a dispute arising between the parties, the case shall be submitted to the French Right to the court specified by the company SCHEIBER.



**SCHEIBER**  
Solutions connectées intelligentes

**Question ?**

**contact@scheiber.fr**



**Bellevue,**  
85120 • Saint-Pierre du Chemin  
France

Tél : +33 (0)2 51 51 73 21  
clients@scheiber.fr • fournisseurs@scheiber.fr  
**www.scheiber.fr**



**Marinebeam LED Lighting**

660 Riverland Dr, Ste B  
Charleston, SC 29412  
(843) 885-8644