SL-PPREC01RGB

12 - 48V DC RGB Receiver

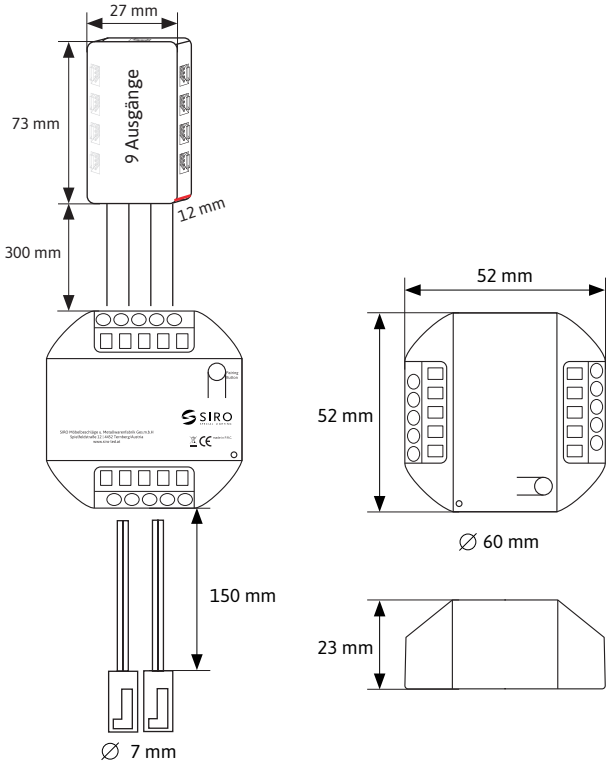
PRODUCT FEATURES

- 12 - 48V DC RGB receiver as receiver for PUSHPOWER switch
- Ready to plug in for connecting SIRO RGB LED lights incl. 9-way distribution box
- The receiver can store up to ten buttons.
  This means, for example, that you can connect both buttons with a 2-way switch and up to four buttons with a 4-way switch.
  A total of up to ten different commands are possible.
- Radio-based range up to 80 meters (in open areas).
- Functions: ON - OFF - DIMMING - setting the COLOUR
- **2 Modes:** **1) Static mode:** manual colour adjustment
  2) Dynamic mode (RGB PLAY): automatic colour change mode
- Product has a memory function (last colour and light setting)

ASSEMBLY

- The product can be stuck on or placed individually

TECHNICAL DRAWING



DIMENSIONS

- Housing dimensions (LxDxH): 52 x 52 x 23 mm
- Distributor box dimensions (LxWxH): 73 x 27 x 12 mm

TECHNICAL FEATURES

- Transfer protocol: RF 433 mhz
- Range: 30 meters (indoors)
- IP Rating: IP20
- Entrance: 12 - 48V DC
  2 x 150 mm connection cable (AWG 20) with SIRO plug
  (each plug 3A = max 72 watts @ 24V DC)
- Output power: 144 watts @ 24V DC
  1 x 300 mm connection cable (2 x 0,75 mm²) with 9-way distribution box
  3A per connection = 72 watts @ 24V DC
  6A total = 144 watts @ 24V DC
- Receiver Sensitiy: -110dBm
- Dimming method: PWM 1000 Hz
- Operating temperature: 0°C to 55°C

SAFETY AND INSTALLATION INSTRUCTIONS

- This product is not a toy and is not suitable for children!
- The SIRO LED system is only suitable for indoor use.
- Unprotected outdoor use is not permitted.
- Contact with moisture must be avoided at all costs!

CE

Darf nicht in den Hausmüll entsorgt werden.
Must not be disposed of in household waste.

SIRO Beschläge- und Metallwarenfabrik Ges.m.b.H.
Spielfeldstraße 12
4452 Ternberg, Austria

Tel . +43 (0)7256.6020.0
Fax . +43 (0)7256.8932
E-Mail office@siro.at
Web . www.siro.at

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Ideally combinable with the following SIRO PushPower products:

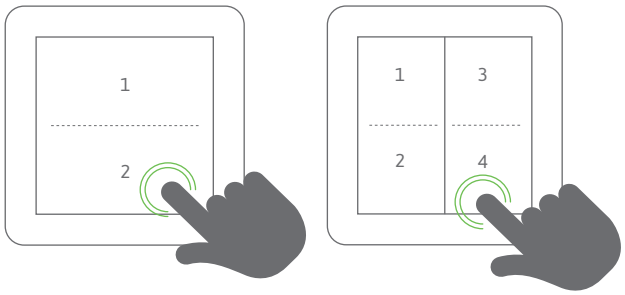
Switch: SL-PP55W2K1, SL-PP55W2K60, SL-PP55W4K1, SL-PP55W4K60, SL-PPA55W2K1, SL-PPA55W2K60, SL-PPA55W4K1, SL-PPA55W4K60, SL-PPI55W2K1, SL-PPI55W2K60, SL-PPI55W4K1, SL-PPI55W4K60, SL-PP40W2K1, SL-PP40W2K60, SL-PP86IPW2K1, SL-PP86IPW2K1

only ON/OFF - no colour change possible with: SL-PP62K1, SL-PP62K60, SL-PP40K1, SL-PP40K60

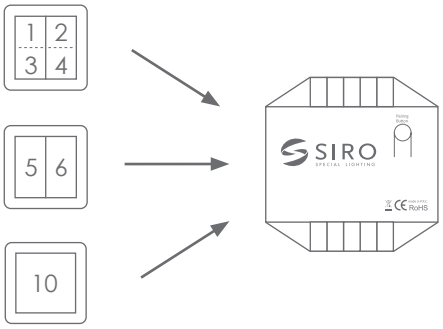
GENERAL FUNCTIONS

1, 2, 3, 4	1-, 2- or 4-way buttons
Single click:	Switching on or off
Click and hold button 1:	Dimming 5 - 100%
Click and hold button 2:	Colour adjustment

with 1-way button no colour setting possible, only ON/OFF!

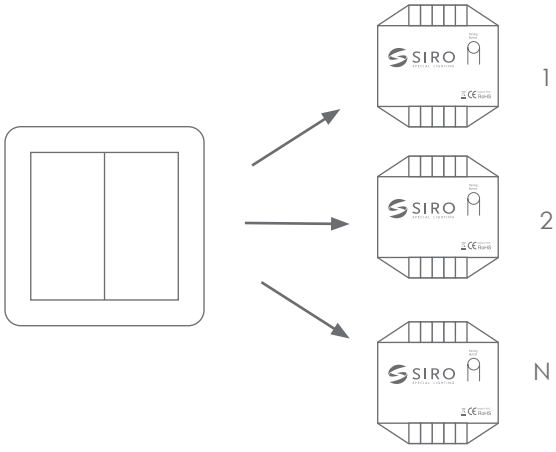


POSSIBLE COMBINATIONS



More controls on one receiver

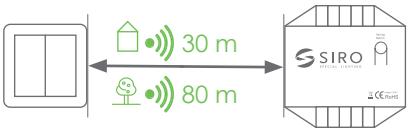
a maximum of 10 PushPower buttons (sensors, push buttons, etc.) can be connected to one receiver.



One control on several receivers

1 PushPower control unit can control any number of receivers.

Radio range (depending on the local conditions) up to 30 m indoors and up to 80 m outdoors.



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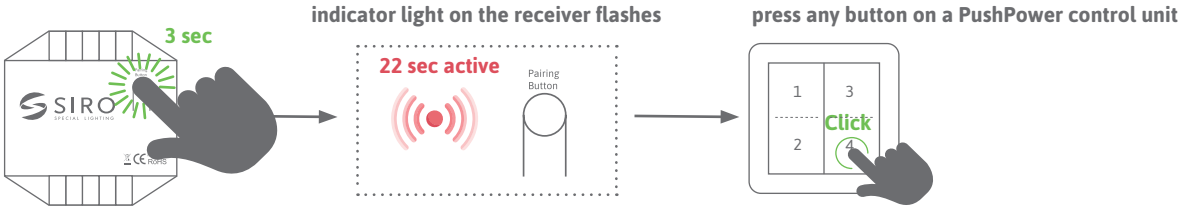
Web . www.siro.at

FUNCTIONS IN DETAIL

CONNECT (TEACH-IN) CONTROL UNIT (SWITCH) & RECEIVER

This is how you establish communication between the switch and your receiver:



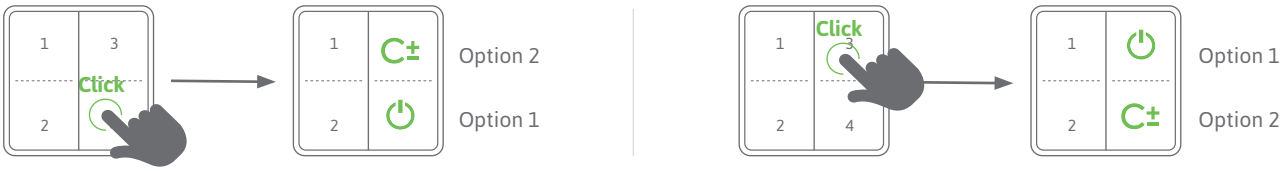
4-way switch (4 options)

press and hold for 3 seconds

The activity mode remains active for 22 seconds, after which the teach-in process is canceled and the light switches off.

The learning process can be canceled by disconnecting the power.

Each button/option (1&2) can be assigned its own function/option. If it is not assigned, this is a space bar.



With the RGB system, activating the first button (option 1) switches it to ON/OFF and the other button (option 2) automatically becomes the color controller. When activating several switches, they act as toggle switches.

SINGLE CLICK - ON/OFF

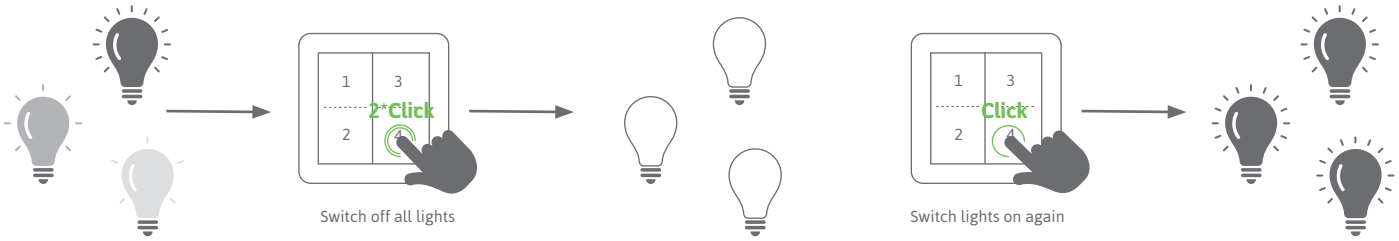
A single click refers to a single, brief press of the light switch.

With SIRO light switches, a single click is used to switch the connected light source on or off.

This corresponds to the basic function of a switch, where a single click changes the status of the lighting.

DOUBLE CLICK - SYNCHRONIZE

A double click refers to pressing the light switch twice in quick succession.



All lights are switched off. This function is used to synchronize several lights when they are running asynchronously.

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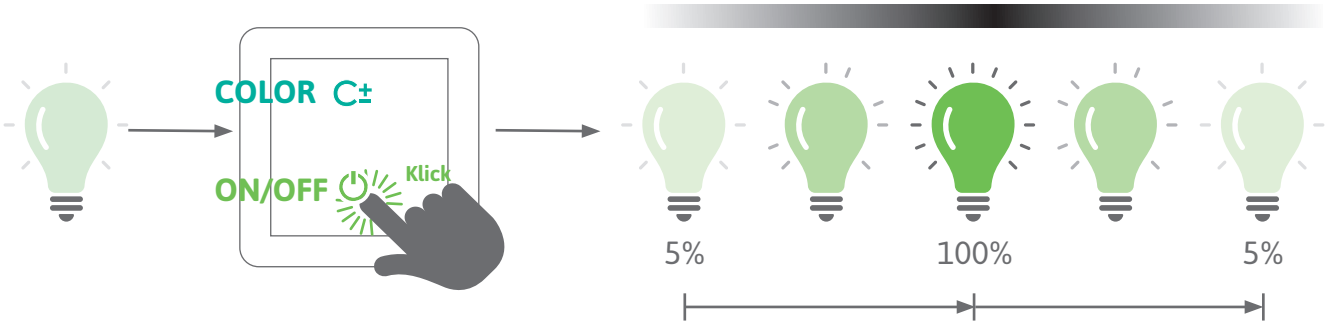
2 MODI:

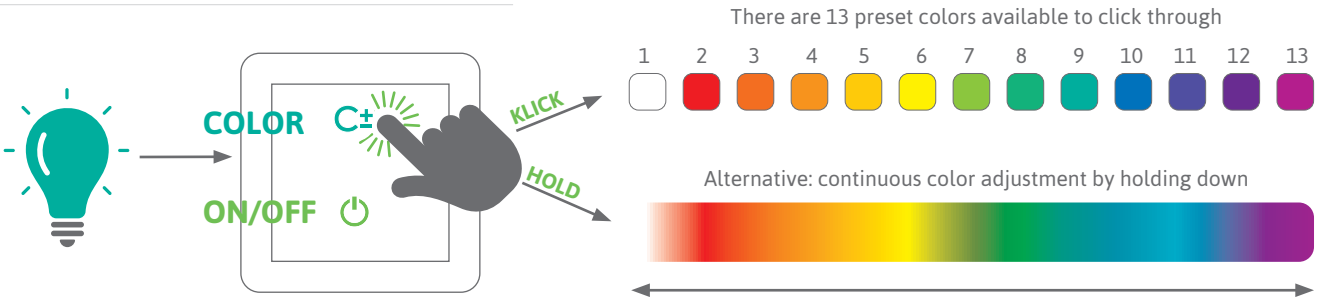
1) STATIC MODE (short click on ON/OFF when the light is off):



You select a specific color—either from 13 predefined shades or continuously at the touch of a button. The color remains constant until you change it. After the learning process, the receiver's static mode automatically starts when you click the ON/OFF button.

DIMMING: A long press of the ON/OFF function button while the light is on continuously increases or decreases the brightness. This allows for precise adjustment of the lighting to individual preferences. The switch opposite the selected, learned ON/OFF switch automatically becomes a color changer. This starts with white light or at the last selected light level (memory function).

STATIC MODE COLOR SETTING:



Pressing the ON/OFF switch for a longer period (2 seconds) when the device is switched off starts the dynamic mode.

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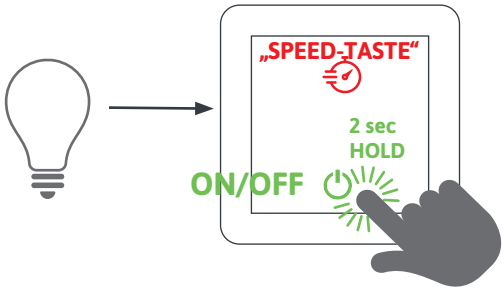
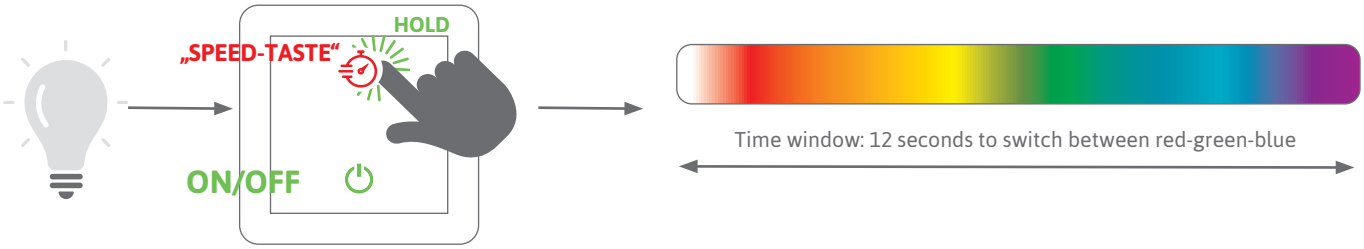
2) DYNAMIC MODE (long CLICK on ON/OFF when light is off):



The light changes color automatically – smoothly and smoothly across the entire RGB color space. The speed can be individually adjusted. After the learning process, the receiver's **static mode** starts automatically. A long press of the ON/OFF switch with the light off switches to dynamic RGB PLAY mode. This automatically creates a color gradient from RED-GREEN-BLUE.

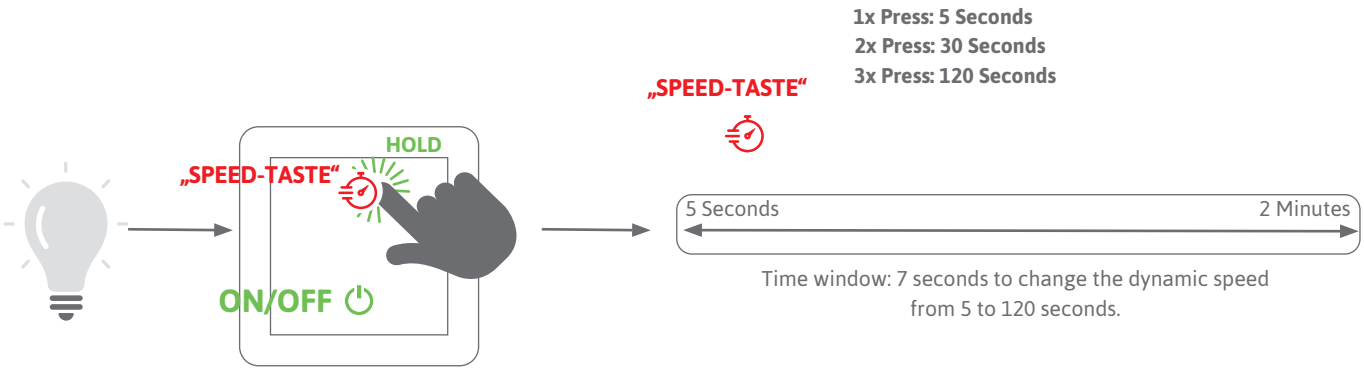
DYNAMIC MODE SPEED SETTING:



There are **3 speed levels** in RGB PLAY mode. The adjustable speed increments for the dynamic color change are:
5 seconds, 30 seconds, and 2 minutes per color interval.
By holding down the „Speed“ button, the speed changes continuously from 5 seconds to 120 seconds and vice versa.

Further details:
The first activation of the Speed button starts with 5 seconds and starts with red. This is important for synchronizing multiple receivers.

Each time the Speed button is held down, the direction changes between 5 seconds and 120 seconds. You have 7 seconds to change the speed.



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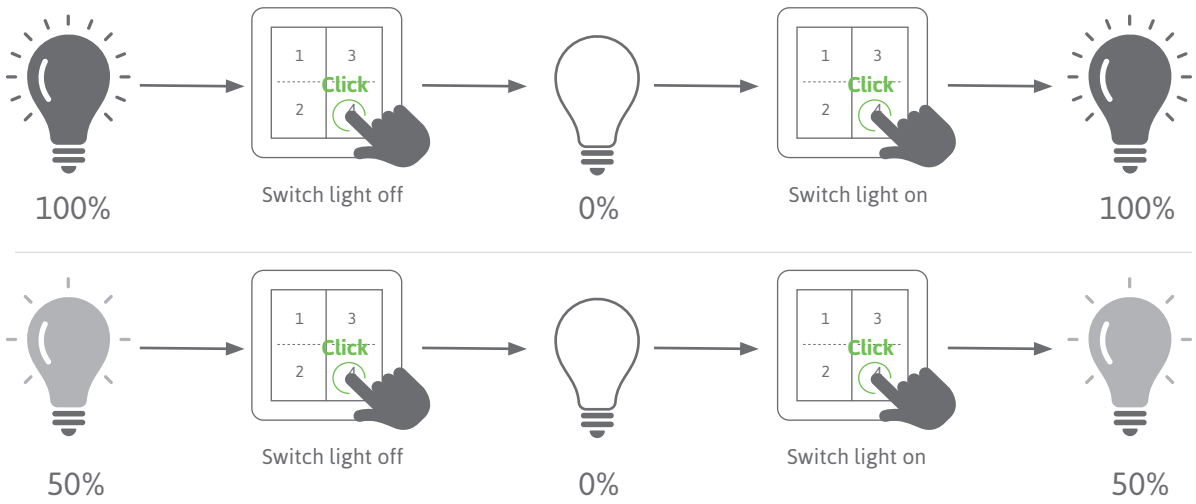
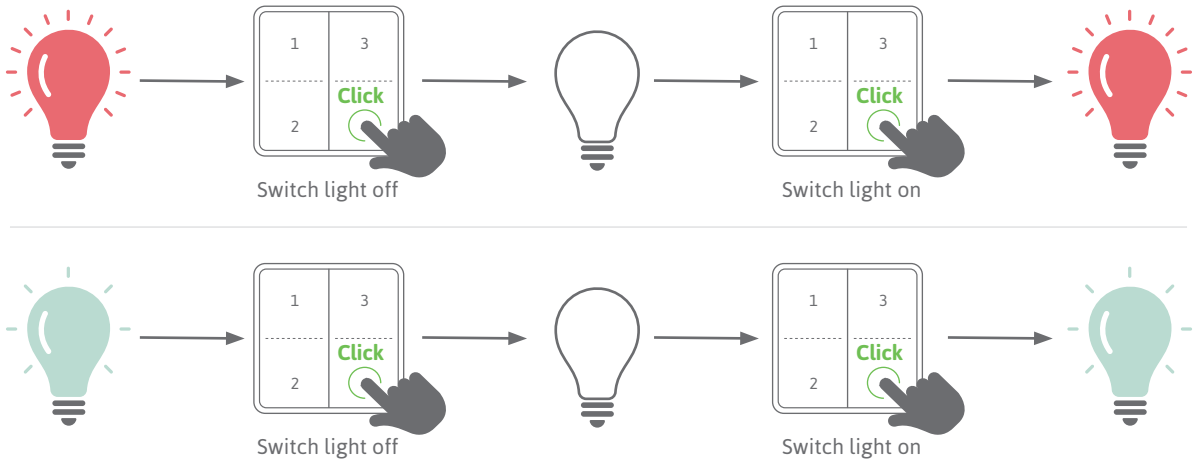
MEMORY FUNCTION

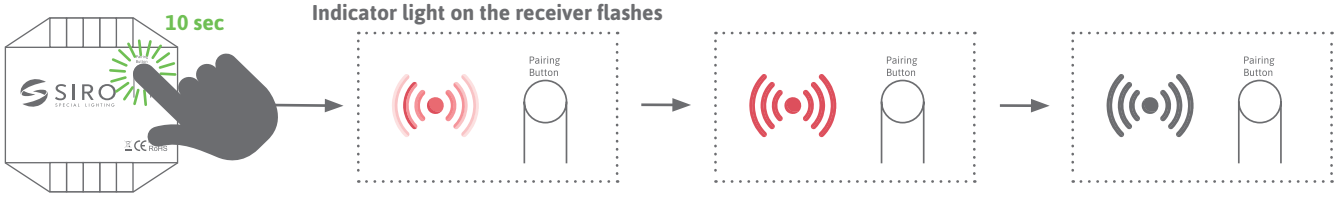
The system always remembers the last setting of the lighting situation before switching off. (power failure)



Behavior of the color mood with RGB Receiver: Here the system remembers the set color in addition to the brightness.



RESET RECEIVER / FACTORY STATUS



Press and hold for 10 seconds. All connections are now deleted and the receiver is ready for a new link.

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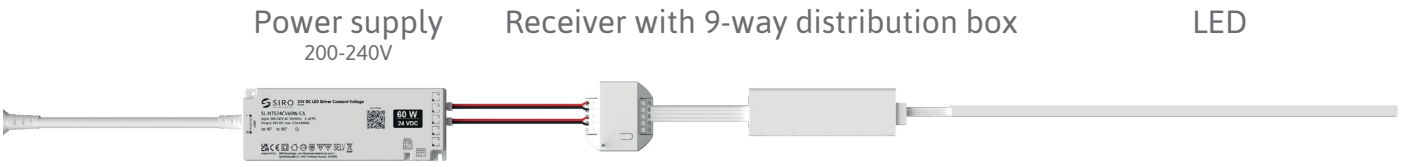
CONSTRUCTION OF A CORRECT SIGNAL CHAIN

POWER SUPPLY (TRANSFORMER) - RECEIVER - LIGHT SOURCE (LED strips)

Correct installation of the signal chain ensures reliable operation of your SIRO light switch.
Make sure your light sources are compatible with the power supply. Be sure to test the functionality before installation.



POWER SUPPLY (power source):

A power supply is a device that converts electrical energy from a wall outlet into a form that can be used by electronic devices.

1) Connect the power supply:

- Connect the power supply to a suitable power source (socket).
- Make sure that the power outlet and power supply cable are equivalent to the technical requirements.

2) Voltage adjustment:

- Dimension the power supply to suit the light sources used.
- We recommend dimensioning the power supply up to 20% larger than the achieved system performance.
- It is important that the total load of the connected devices is 20% below the maximum load of the power supply/receiver.

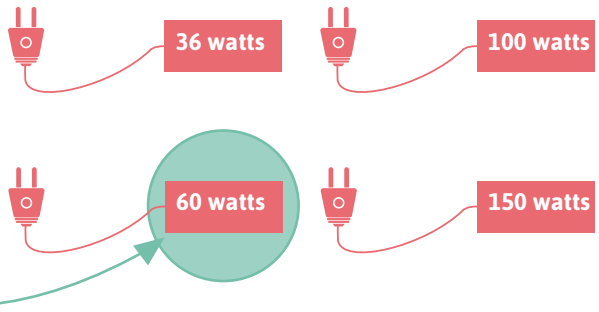
2) Safety measures:

- Make sure the power supply is protected from moisture and located in a well-ventilated area.

CALCUTATION EXAMPLE 1:

For a project, we use three 11W/m LED strips SL-2M8C11W27-5MA: 1 x 220 cm and 2 x 90 cm.

1 x 220 cm	--> 2,2	x 11	= 24,2 watts
2 x 90 cm	--> (0,9+0,9)	x 11	= 19,8 watts
	calculated system power		44,0 watts
	+20% system buffer		52,8 watts



We therefore recommend a 60-watt power supply.
e.g.: SL-NTS24CV60W-CA

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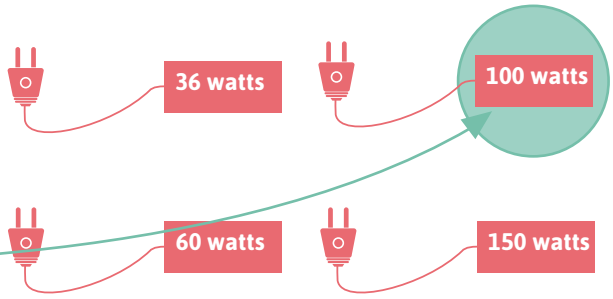
CALCUTATION EXAMPLE 2:

For a project we use three recessed spotlights SL-SPOT06-DUO3W with 2.5 watts and a 4m LED strip SL-2M8C11W27-5MA with 11 watts/m

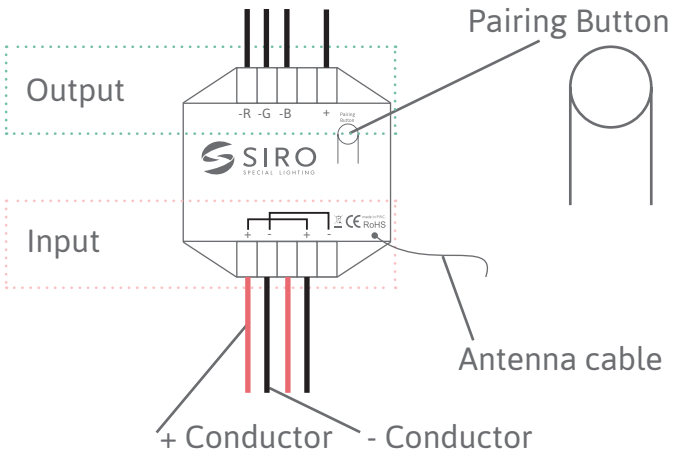
3 x 2,5 watts	= 7,5 watts
1 x 400 cm --> 4 x 11	= 44,0 watts
calculated system power	51,5 watts
+20% system buffer	61,8 watts



We therefore recommend a 100-watt power supply.
e.g.: SL-NTS24CV100W-CA

RECEIVER:

The SIRO PUSHPOWER Receiver is a device that wirelessly receives signals from the light switch and converts them into control commands for the connected light source. It enables wireless control of the lighting and serves as the „brain" of the system.



1) Establish connection:

- Connect the SIRO PUSHPOWER receiver to the power supply.
- For optimal voltage distribution, both connections are plugged in.
- Make sure the connection is secure and tight.

2) Check LED display:

- After connecting the receiver, check the LED indicator on the receiver.
- The illuminated LED indicates that the power supply is correct.

2) More connections:

- If multiple receivers are used, connect them accordingly.

Make sure the power supply is protected from moisture and located in a well-ventilated area.

LIGHT SOURCE:

The light source refers to the lamp or light source you want to control with the SIRO light switch.
This could be, for example, a SIRO LED strip, a SIRO spotlight, or another lamp.

1) Connection of the light source:

- Connect your light source (e.g. LED strip) to the output of the 9-way distribution box.
  Ensure the connections are secure and properly seated.

2) Check the tightness of the connections:

- Make sure all cables are firmly plugged into the 9-way distribution box to ensure a stable connection.
- If necessary, pull on the cables gently to test the strength of the connections.

2) Functional test:

- Press the SIRO light switch to ensure that the light source responds and functions properly.
- Make sure the power supply is protected from moisture and located in a well-ventilated area.
- Note the possibility of the changeover switch function when using multiple switches.

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