



5 Button Light Remote

WSB5B, is a BLE mesh operated switch device that controls ON/OFF, intensity, and temperature of individual or group of lights.



Key Features

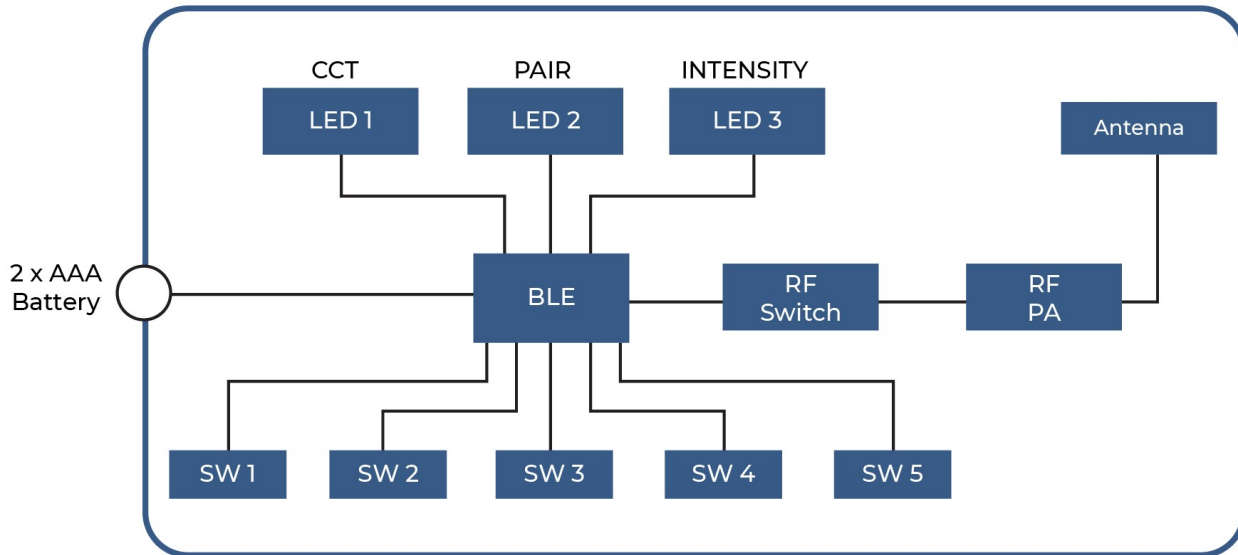
- **2AAA battery** powered switch
- **BLE4.2** based non-flooding intelligent **Mesh**
- **5 buttons** are used -

One to indicate **CCT**, **Intensity**, and **On/OFF** function selection,
one for ON or OFF and **pairing mode** selection,
one for **selecting CCT**, and one for **selecting intensity**.

Table of Contents

| | |
|--------------------------------|---|
| 1. Block Diagram | 3 |
| 2. General Specifications..... | 3 |
| 3. Device Dimension(mm)..... | 4 |
| 4. Operation Scenarios..... | 5 |

1. Block Diagram



SW1 - Intensity Up / CCT Up / Warm

SW2 - ON / OFF

SW3 - Intensity Down / CCT Down / Cool

SW4 - CCT Select

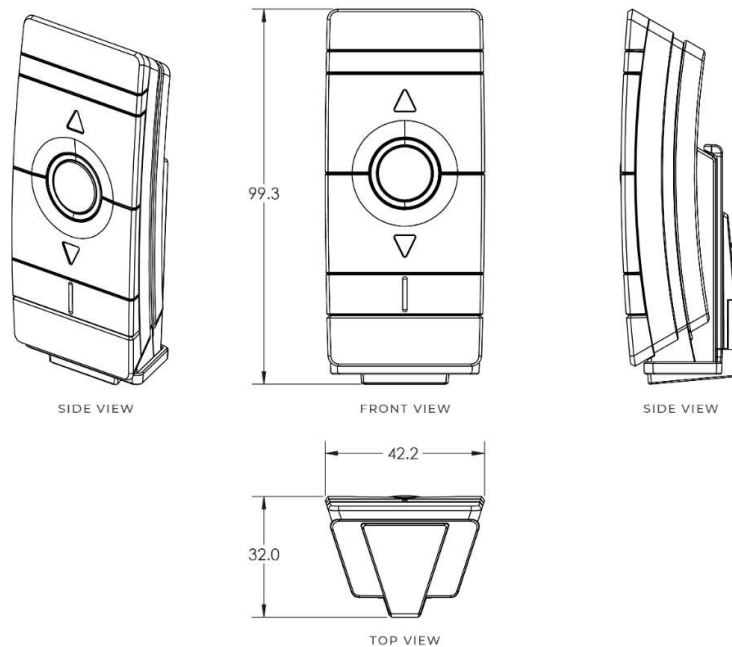
SW5 - Intensity Select

2. General Specifications

| Connection | Symbol | Min | Typ. | Max. | Unit. | Remarks |
|--|----------|-----|------|------|-------|---|
| Connection Distance (Device to Device) | | 10 | 20 | 50 | m | In an open office environment |
| Number of Devices (Mesh Connection) | | | | | ea | In an open office environment (within mesh network) |
| Environmental | | | | | | |
| Operating Temperature | t_j | -20 | | 50 | °C | |
| Storage Temperature | t_s | -20 | | 55 | °C | Limited by PIR optics discoloration |
| Relative Humidity | RH | 20 | | 95 | % | Non-condensing application only |
| IP Rating | | | IP20 | | | Indoor use only |
| Electrical | | | | | | |
| Input Voltage | V_{in} | 2 | 3 | 3.3 | Vdc | 2xAAA batteries in series |
| Input Current | I_{in} | 1 | 3 | 33 | mA | @3Vdc, Max RF transmitting |
| Output Current | | | | 5 | mA | Per channel |

| Control | | | | | |
|--------------------------|------------------------|--------------------|------|--------------------------------------|-----------------------------|
| Dimming Output | 0 | 100 | % | 1% resolution | |
| Programming Interface | Smartphone Application | | | Android/iOS | |
| Mechanical | | | | | |
| Dimension | L x W x H | 99.3 x 42.2 x 32.0 | | mm | |
| Net Weight | TBD | | g | Including two batteries and a cradle | |
| Bluetooth | | | | | |
| Frequency Range | 2402 | 2402 - 2480 | 2480 | MHz | |
| TX Power | 6 | 8 | | dBm | Conductive |
| Frequency Drift(Max) | -25 | | 25 | kHz | dF2 |
| Frequency Deviation | ±225 | | ±275 | kHz | |
| Carrier Frequency Offset | 30 | | 150 | kHz | |
| TX current | | | 48 | mA | Total current@ Max Tx power |
| Receive Frequency | 2402 | 2402 - 2480 | 2480 | MHz | |
| Rx Current | | | -37 | mA | Total Current @Rx Mode |
| Receiver Sensitivity | -86 | | -75 | dBm | |

3. Device Dimension(mm)



4. Operation Scenarios

1. For Pairing



SW 2 - **Long press** more than **10 sec**, Pair LED blinks,
Shows the device in **Pairing Mode**

2. CCT Control



SW 4
CCT **LED blinks** and goes **OFF**.
States control mode is for **CCT control**

3. Intensity Control



SW 5
Intensity **LED blinks** and goes **OFF**.
States control mode is for **Intensity control**

CAUTION: RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

FCC Statement:

This equipment 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 by one or more of the following measures:

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

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



CONNECTING THINGS TO LIFE

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