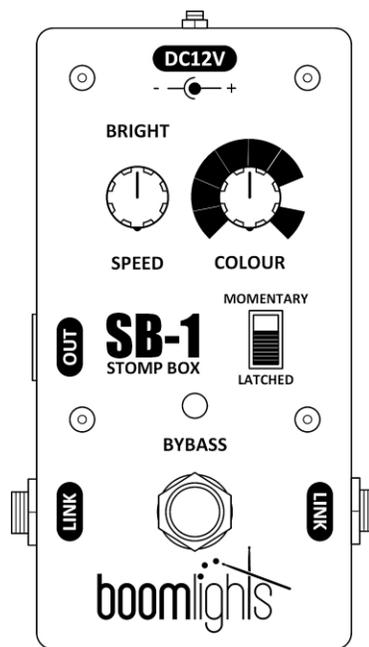




# SB-1

## STOMP BOX



## USER MANUAL

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## WARNING



**For your own safety, please read this manual to learn how to safely use, store and maintain the SB-1 prior to use.**

## WHAT'S INCLUDED

- SB-1
- DC12V 2A 90~240VAC Power Supply
- User Manual
- 40" RGB LED Strip
- 25' USB Type A to Type B Cable

## SAFETY INSTRUCTIONS



**CAUTION! Please keep this pedal stored in an area with no moisture.**

- Do not operate this pedal at temperatures above 113°F
- Only use the supplied power supply
- Make sure the power supply's cord is not pinched or damaged in any way
- Make sure the power supply is plugged into an appropriate voltage source
- If any defects with the pedal are discovered, please contact an authorized service technician for assistance

## 1.0 INTRODUCTION

### 1.1 Overview

The SB-1 is a single channel RGB LED lighting controller that has been specially designed for musicians by musicians. Housed within a traditional guitar stomp box that can be discreetly added to any pedal board, the SB-1 offers manual lighting control directly from the stage. With a kick of the switch, you become your own lighting designer.

With a robust yet efficient design, the SB-1 is a complete lighting controller that allows users to manually control a variety of lighting parameters on the fly with unparalleled ease. The pedal has a total of 8 colour settings: 7 fixed and 1 variable (which randomly cycles through all available colours). While the brightness/intensity is adjustable for all 8 settings, the variable colour setting has an additional parameter, which controls the rate at which the colours randomly cycle. The pedal's footswitch can be operated in 2 different modes: "Momentary" and "Latched". All of these parameters can be adjusted while the pedal's footswitch is engaged or bypassed. "Link" jacks, located on either side, allow multiple SB-1 pedals to be chained together and simultaneously controlled from a single pedal. In other words, multiple musicians can take turns controlling lighting cues directly from their position on stage.

## 1.2 Features

**1 - DC12V Input:** Main power connection for the unit used to connect the DC12V power supply.

**2 - Bright / Speed Control Knob:** When one of the 7 fixed colour settings is selected, this knob adjusts the brightness/intensity of the LEDs. When the variable colour setting is selected, the last brightness/intensity level will be retained and this knob changes function in order to control the rate at which the colours randomly cycle.

**3 - Colour Control Knob:** This knob is used to select which colour the LEDs will illuminate. There are 7 fixed colour settings (red, green, blue, cyan, yellow, magenta, white) and 1 variable colour setting, which randomly cycles through all available colours.

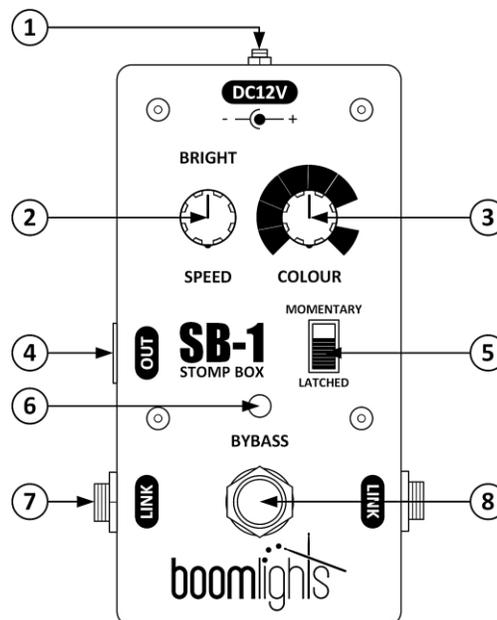
**4 - RGB Channel Output Connector:** This 4-pin USB type B connector is used for driving any 12V common anode RGB LED strip. **DO NOT CONNECT TO A USB PORT ON A COMPUTER!**

**5 - Momentary / Latched Switch:** This switch allows users to select between 2 modes, which control the pedal's RGB channel output in different ways. When the "Momentary" mode is selected, the RGB channel output will only be engaged while the footswitch is pressed. When the "Latched" mode is selected, each press of the footswitch will alternate between engaging and bypassing the RGB channel output.

**6 - Bypass Indicator Light:** This indicator light will illuminate red when the RGB channel output is engaged and will remain unlit when the RGB channel output is bypassed.

**7 - Link Jack:** These 1/4" phono type jacks allow multiple SB-1 pedals to be chained together. When connected, any linked SB-1 pedal can be used to simultaneously control all LEDs being driven by all linked SB-1 pedals.

**8 - Pedal Footswitch:** Pressing this footswitch will engage the RGB channel output. The footswitch will react in correspondence with the control mode selected on the "Momentary / Latched" switch.



## **2.0 OPERATION**

### **2.1 Getting Started**

Setting up and using the SB-1 is very simple and straightforward. Plug the supplied power supply into an appropriate power source and connect it to the “DC12V” input located on the end of the pedal. From here, simply connect the supplied 40” RGB LED strip to the pedal using the supplied 25’ USB cable. You are now ready to begin operating the SB-1.

### **2.2 Colour Control Knob**

This knob is used to select which colour the pedal will output. There are 7 fixed colour settings (red, green, blue, cyan, yellow, magenta, white) and 1 variable colour setting, which randomly cycles through all available colours. Simply move the knob so that the line indicator is pointing toward the desired colour setting. When an LED strip is connected to the pedal’s “Out” and engaged by the footswitch, it will illuminate according to whichever colour setting is selected.

### **2.3 Bright / Speed Control Knob**

This multifunction knob is used to control various parameters dependent upon which type of colour setting is selected via the “Colour” control knob. When one of the 7 fixed colour settings is selected, this knob will adjust the brightness/intensity of a connected LED strip.

When the variable colour setting is selected, this knob changes function in order to control the rate at which the colours randomly cycle. It is important to note that, when the variable colour setting is selected, the brightness/intensity is determined by the “Bright / Speed” control knob’s previous position prior to changing from a fixed colour setting to the variable colour setting. Therefore, make sure the desired brightness/intensity is set accordingly via the “Bright / Speed” control knob prior to changing to the variable colour setting. When the knob is turned fully to the left, the corresponding parameter will be at its minimum (i.e. dimmest or slowest). Conversely, when the knob is turned fully to the right, the corresponding parameter will be at its maximum (i.e. brightest or fastest).

The pedal has a single-step function, which triggers a random colour each time the pedal is engaged via the footswitch. This function can be accessed while the variable colour setting is selected by turning the “Bright / Speed” control knob fully to the left. At this point, if an LED strip is connected, it will cease illumination momentarily. When the LED strip illuminates again, the pedal’s single-step function will be activated. Turning either control knob will end the single-step function and the pedal will revert back to the corresponding settings selected.

### **2.4 Momentary Mode vs Latched Mode**

The “Momentary / Latched” switch is used to select between the pedal’s 2 modes. Ultimately, this selection will dictate the way in which the pedal’s footswitch functions. When the “Momentary” mode is selected, the pedal’s output will only be engaged while the footswitch is pressed. Alternatively, when the “Latched” mode is selected, each press of the footswitch will alternate between engaging and bypassing the pedal’s output. In both modes, the bypass indicator light will illuminate red when the pedal’s output is engaged.

## 2.5 Linking Multiple Pedals Together

Multiple pedals can be linked together using the 1/4" "Link" jacks located on either side of the pedal. Using a standard 1/4" patch cable, you can connect either of the pedal's "Link" jacks, which are wired in parallel, from an SB-1 pedal to either "Link" jack of another SB-1 pedal. This same process can be applied to link additional SB-1 pedals.

When multiple SB-1 pedals are linked together, each pedal's footswitch has the ability to simultaneously engage or bypass all of the linked pedals. However, each linked pedal retains its specific settings, including colour, brightness/intensity, speed and mode. For example, if the first linked SB-1 pedal is set to the colour red and the second linked SB-1 pedal is set to the colour green, the first pedal will output red while the second pedal will output green regardless of which pedal's footswitch is pressed. In this scenario, the brightness/intensity of each colour is determined by the position of the "Bright / Speed" control knob of the associated pedal. The same is true for the speed parameter when the variable colour setting is selected on any linked pedals.

It is important to note that each linked SB-1 pedal will react accordingly to whichever mode, either "Momentary" or "Latched", is selected. For example, if the first linked SB-1 pedal is set to "Momentary" and the second linked SB-1 pedal is set to "Latched", the first pedal will only output the selected colour (and its corresponding parameters) as long as the footswitch is pressed while the second pedal will alternate between either engaging or bypassing the selected colour (and its corresponding parameters). With that said, unless a specific effect is desired, it is recommended to have all linked SB-1 pedals set to the same mode.

## 3.0 CURRENT LIMIT

The pedal can handle a total current draw of 2A before the internal fuse blows. If the fuse blows, the pedal will stop working and you will need to contact an authorized service technician for assistance. To avoid this issue, it is important to know that the longer the LED strip is, the more current it draws from the pedal. On average, our LED strips consume 1A for approximately every 40". Therefore, as long as the LED strip's length is 80" or less, the total current draw will be within the 2A limit.

## 4.0 TROUBLESHOOTING

**Issue:** LED strip is connected to the "Out" and the pedal's footswitch and bypass indicator light are both working, but the LED strip is not illuminating.

**Solution:** If the pedal's footswitch and bypass indicator light are working, the fault is most likely the USB cable or the LED strip. Make sure that the USB cable and the LED strip are both connected correctly and not damaged in any way. If no issues are apparent, replace the USB cable and test to see if the LED strip illuminates. If the LED strip is still not illuminating, the LED strip is most likely damaged and will need to be replaced. In the event that the LED strip is still not illuminating after these solutions have been tried, you should contact an authorized service technician for assistance.

**Issue:** Everything appears to be connected correctly, but the pedal is not working.

**Solution:** Make sure the power supply's cord is not pinched or damaged in any way and that it is plugged into an appropriate power source. If no issues are apparent, the pedal's internal fuse is most likely blown due to the pedal's total current draw exceeding the maximum 2A limit. In this case, you should contact an authorized service technician for assistance.

**Issue:** The pedal appears to be working, but the LED strip is not illuminating while the variable colour setting is selected.

**Solution:** When the variable colour setting is selected, the LED strip's brightness/intensity is determined by the "Bright / Speed" control knob's previous position prior to changing from a fixed colour setting to the variable colour setting. With that said, it is possible that the "Bright / Speed" control knob was turned fully to the left, resulting in the minimum brightness/intensity, when the colour setting change was made. You will need to revert back to a fixed colour setting, set the "Bright / Speed" control knob for the desired brightness/intensity and then change to the variable colour setting. When the variable colour setting is selected, the "Bright / Speed" control knob will adjust the rate at which the colours randomly cycle instead of the brightness/intensity.

## **5.0 SPECIFICATIONS**

### **SB-1: STOMP BOX**

**Controls:** Bright / Speed Knob, Colour Knob, Momentary / Latched Switch, Pedal Footswitch

**Indicators:** Bypass Indicator Light

**Connectors:** RGB Channel Output, 2x Link Jacks, DC12V Input

**Power Supply:** DC12V 2A 90~240VAC

**Maximum Current Draw:** 2A

**Dimensions:** 4.625" x 2.5" x 1.625" (118 mm x 64 mm x 41 mm)

**Weight:** 0.57 lbs (0.26 kg)