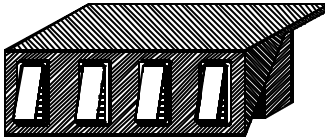
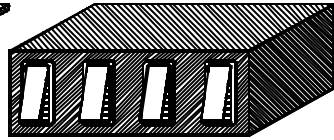


# SWITCH PANELS & SWITCH BOXES

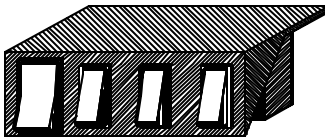
## INSTALLATION GUIDE



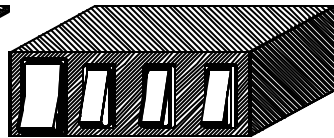
SP1515



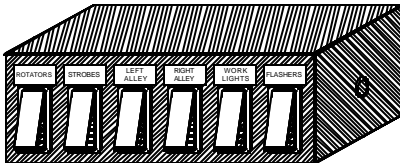
SB1515



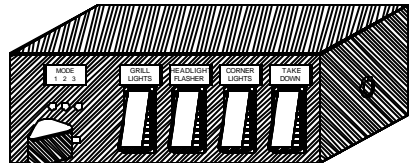
SP3015



SB3015



SB4020



SB4040



**IMPORTANT:** Please read all of the following instructions before installing your new switchbox.

Installers should keep in mind the importance of safe installation to protect the lives of those who may depend upon this equipment. Please especially note the following important safety instructions:

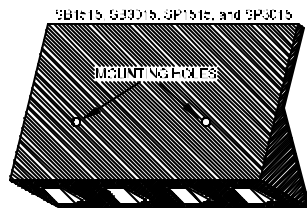
- To properly install this equipment you must have a good understanding of automotive electrical procedures and systems, along with proficiency in the installation and use of safety warning equipment.
- Position the switch module so the vehicle controls can be operated safely under all driving conditions. Route your wires such that they do not interfere with the vision of the driver or the operation of the steering wheel, gear shifter, and/or airbag.
- When drilling into a vehicle, be sure both sides of the hole are clear of anything which may be accidentally damaged.
- Keep these instructions in a safe place for future reference when performing maintenance.

**WARNING :** Failure to follow all safety precautions may result in serious injury or property damage.

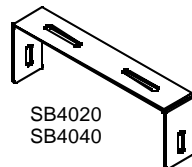
# Installation

1. Select a location to mount your switches. Position the switch module so the vehicle controls can be operated safely under all driving conditions.
2. The **SB1515**, **SB3015**, **SP1515**, and **SP3015** can all be mounted using the two holes in the top. For the "SB" models you will need to remove the bottom cover to gain access to the holes.

- Using your own screws (or other fasteners) mount the switches through the two holes in the housing.
- Take extreme caution so that you do not damage any of the wires attached to the switches.
- You may have to gently bend the wires in order to gain clear access to each mounting hole.



3. The **SB4020** and **SB4040** can all be mounted using the enclosed "U" bracket, or in any appropriate console, using the enclosed bolts.

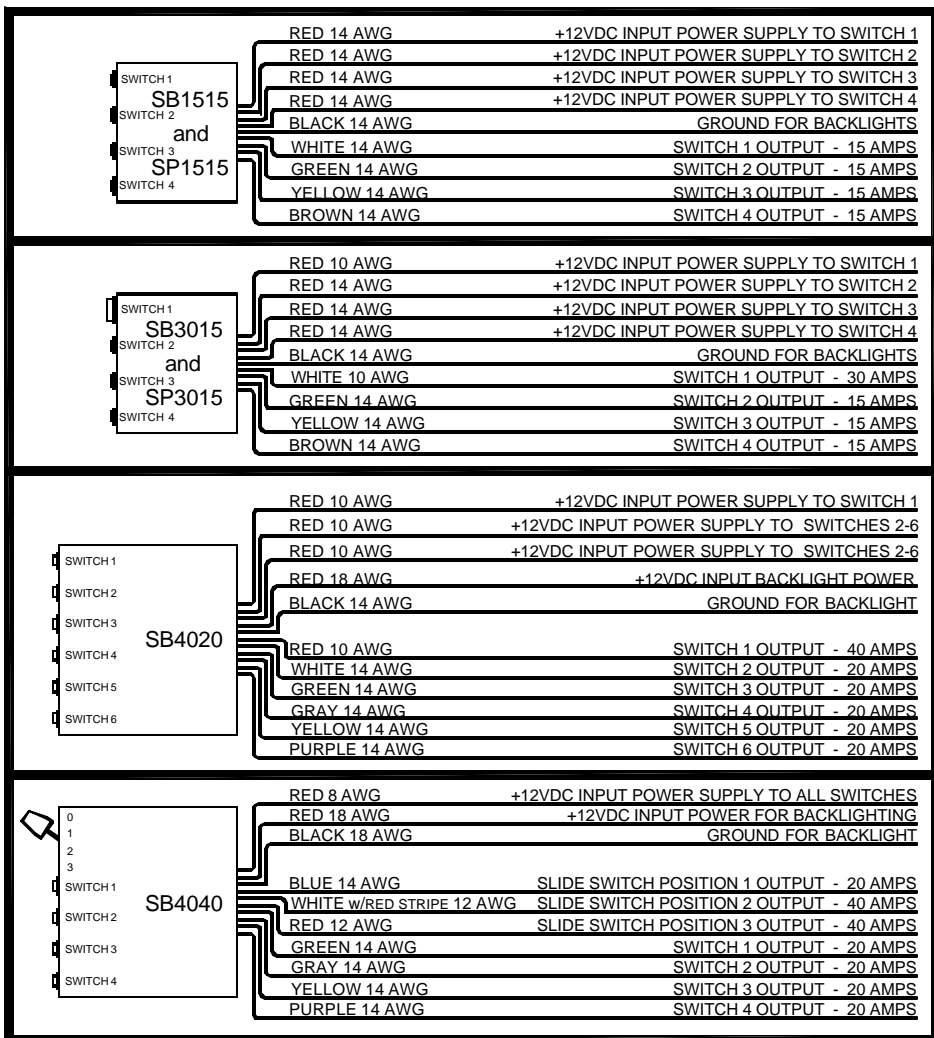
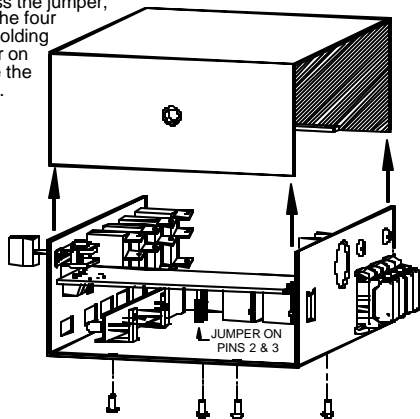


4. **For the SB1515, SP1515, and SP1515-MOM:** All four switched circuits are protected by 15 amp automotive blade type fuses.
5. **For the SB3015 and SP3015:** Switch 1 is protected by a 30 amp automotive blade type fuse, and switches 2-4 are protected by 15 amp automotive blade type fuses.
6. **For the SB4020:** A thermal lockout type circuit breaker, rated at 40 amps, protects circuit #1. Circuits #2-#6 are protected by 20 amp automotive blade type fuses.
7. **For the SB4040:** The circuit on Position 1 of the slide switch is protected by a 20 amp automotive blade type fuse. A thermal lockout type circuit breaker, rated at 40 amps, protects Position 2 and Position 3. The four circuits connected to the rocker switches are protected by 20 amp automotive blade type fuses.
8. Use wire with a gauge equivalent to the wire extending from your switch module to connect each lead to its corresponding accessory. Use the diagram on the following page and the table on the back of this booklet to properly identify which lead goes to which switch. For the **SB4020**, **SB3015**, and **SP3015**, switch 1 should be used to control any high current loads (i.e. – lightbar). For the **SB4040**, Positions 2 and 3 of the slide switch should be used for high current loads.
9. You may use 18 AWG wire to connect the black ground lead to a good chassis ground. Each device connected to the switch must be grounded with its own separate ground wire. Refer to your installation instructions included with each device to determine proper wire gauge and grounding methodology .
10. **For the SB4020 and SB4040:** Use 18 AWG wire to connect the 18 AWG red lead to the accessory terminal of the ignition switch or the vehicle instrument light circuit. This will control the backlighting on your switch panel.
11. Power for the switch module (or for each switch) may be obtained from a vehicle power distribution center or by a 60, 80, or 100 amp master circuit breaker. We recommend that all circuits be protected with fuses or circuit breakers. We suggest the good electrical practice of fusing all circuits connected to the battery at the battery. Connect each red wire from your switch module to your power source. Be sure to use wire that is AT LEAST the equivalent gauge of each red wire you are connecting to the master circuit breaker or a power distribution center. Proper wire gauges can be found in the diagram on the next page. If power is obtained in the engine compartment, and a hole is drilled in the firewall, be sure to use a grommet in the hole as to prevent the edges from damaging the wire and causing a short.  
**CAUTION:** Take care to insure that both sides of the drilling surface are free and clear of any parts which may be damaged, such as brake lines, fuel lines, electrical wires, or any other vital parts of the vehicle.
12. **For the SP1515-MOM:** Switch 4 is a momentary switch. Pressing (and holding) the top of the switch will activate the device attached to it. Pressing the bottom of the switch will have no effect.
13. **For the SB4040:** The slide switch on this model is set for progressive mode by default. The OFF position is found by moving the switch all the way to the left (Position 0). When moved to Position 1, the components connected to the blue wire are activated. When the switch is slid to Position 2, the components connected to the white wire with the red stripe are activated in addition to those already activated in Position 1. When the switch is moved over to Position 3 (all the way to the right), power is applied to the 12AWG red wire. Components activated by Positions 1 and 2 will remain on. Positions 2 and 3 will continue to operate, even if the fuse for Position 1 blows.

14. **For the SB4040:** The SB4040 has a new feature that can isolate slide positions one and two from one another. There is an internal jumper on the circuit board that can be moved to enable this feature. If the jumper is moved from the factory default position (jumpers 2 & 3) to pins 1 & 2, the slide switch will function as follows:

- Position 1: Only the components connected to the blue wire are activated.
- Position 2: Only the components connected to the white wire with the red stripe are activated.
- Position 3: The components connected to the 12AWG red wire are activated with both the components connected to the blue wire and the components connected to the white wire with the red stripe.

To access the jumper, remove the four screws holding the cover on and slide the cover off.



<u>Input Wire Color</u>	<u>1515 Function</u>	<u>3015 Function</u>	<u>SB4020 Function</u>	<u>SB4040 Function</u>
Black	Ground for Backlight	Ground for Backlight	Ground for Backlight	Ground for Backlight
Red (18AWG)	N/A	N/A	Backlight Power	Backlight Power
Red (8AWG)	N/A	N/A	N/A	Power to All Switches
Red (10AWG) (POWER IN SW1)	N/A	Power to Switch 1	Power to Switch 1	N/A
Red (10AWG) (no label – 2 wires)	N/A	N/A	Power to Switches 2-6	N/A
Red (14AWG)	Power to Switches 1-4	Power to Switches 2-4	N/A	N/A
<b>Switched Output Power Leads</b>				
Red (10AWG) (POWER OUT SW1)	N/A	N/A	Switch 1	N/A
White (10AWG)	N/A	Switch 1	N/A	N/A
White (14AWG)	Switch 1	N/A	Switch 2	N/A
Green	Switch 2	Switch 2	Switch 3	Switch 1
Gray	N/A	N/A	Switch 4	Switch 2
Yellow	Switch 3	Switch 3	Switch 5	Switch 3
Brown	Switch 4	Switch 4	N/A	N/A
Purple	N/A	N/A	Switch 6	Switch 4
Blue	N/A	N/A	N/A	Slide Switch Pos. 1
White w/Red Stripe	N/A	N/A	N/A	Slide Switch Pos. 2
Red (12AWG)	N/A	N/A	N/A	Slide Switch Pos. 3

## ONE YEAR LIMITED WARRANTY

The manufacturer warrants each new product against factory defects in material and workmanship for one year after the date of purchase. The owner will be responsible for returning to the Service Center any defective item(s) with the transportation costs prepaid. The manufacturer will, without charge, **repair or replace at its option**, products, or part(s), which its inspection determines to be defective. Repaired or replacement item(s) will be returned to the purchaser with transportation costs prepaid from the service point. A copy of the purchaser's receipt must be returned with the defective item(s) in order to qualify for the warranty coverage. Exclusions from this warranty include, but are not limited to, bulbs, strobe tubes, domes, and/or the finish. This warranty shall not apply to any light, which has been altered, such that in the manufacturer's judgment, the performance or reliability has been affected, or if any damage has resulted from abnormal use or service.

There are no warranties expressed or implied (including any warranty of merchantability or fitness), which extend this warranty period. **The loss of use of the product, loss of time, inconvenience, commercial loss or consequential damages, including costs of any labor, are not covered.** The manufacturer reserves the right to change the design of the product without assuming any obligation to modify any product previously manufactured.

This warranty gives you specific legal rights. You might also have additional rights which may vary from state to state. Some states do not allow limitations on how long an implied warranty lasts. Some states do not allow the exclusion or limitation of incidental or consequential damages. Therefore, the above limitation(s) or exclusion(s) may not apply to you.

*If you have any questions  
please contact our **Customer***



*this or any other product,  
partment at (585) 226-9787.*

*If a product must be returned for any reason, please contact our **Customer Service Department** to obtain*

a

# Star Headlight & Lantern Co., Inc.

455 Rochester Street Avon, NY 14414

Phone: 585-226-9787 FAX: 888-478-2797



www.starheadlight.com