Momentary Switching Module Installation Instructions

The function of the momentary switch module is to switch power between Relay 1 and Relay 2 by activation of a ground trigger on the module gray wire. Each individual ground trigger switches the relay ground on the relays and subsequently switches the power output from one relay to the other. Special features of the module are as follows:

1. The module uses a separate power relay for each of the two output circuits.

2. Where the module is used for high and low beam headlight control, the module takes the place of a traditional floor or column mounted dimmer switch and can be mounted high up under the dash to clear up the floor area. The module senses whether the headlights are on or off by use of the power output wire from the head light switch. When the headlights are on, each push of the momentary button switches between the high and low beam circuit by use of a separate power relay. When the headlight switch is turned off, the module automatically resets to the low beam position.

3. Where the module is used for high and low beam headlight control and the power output wire is without a power signal (i.e. the headlight switch is off), a “flash to pass” function exists by pushing and holding the momentary button. In this case the high beam relay is activated and the high beam lights will stay on for as long as the momentary button stays depressed. When released, the high beams will go off. This “flash to pass” function only exists when the headlight switch is off.

Important circuit description options:
The following diagrams show several options for installation of the module. It is important that you study each scenario and select the one that fits your individual installation requirement.

**Diagram 1A.** Installation of the switching module on a typical dual headlight system using the 12 volt power input to the headlight switch. This is the most common connection as there is already a main 12 volt power input to the headlight switch. Typically the main power input to the headlight switch comes directly from the fuse box. All lighting is connected to the headlight switch output which, in the case of a GM type headlight switch, was protected by the internal 28 amp breaker. The “flash to pass” module option requires a 12 volt input when the headlight switch is off. Therefore a direct 12 volt battery connection to the high beam relay is necessary. This can be accomplished by connecting to the headlight switch power input. However, this circuit is not protected by the headlight switch internal circuit breaker. Therefore, a separate circuit breaker is required to protect the high beam relay power input circuit.

![Diagram 1A](image)

**Diagram 1B.** Installation of the switching module on a typical dual headlight system using a separate 12 volt power source for the high beam relay. This is the same situation as described in Diagram 1A. If you have an available 12 volt power circuit, this connection can be used. A separate circuit breaker is still required to protect the high beam relay power input circuit.

![Diagram 1B](image)
2. **Diagram 2.** Installation of the switching module on a dual headlight system where all load is removed from the headlight switch and direct battery power is supplied to both the high and low relays. A typical GM style headlight switch, such as that used in all American Autowire kits, includes an internal 28 amp circuit breaker. This kit modifies the typical stock configuration by operating the high and low beam relays with direct battery power. This bypasses the internal circuit breaker in the headlight switch. Therefore, a separate circuit breaker is required to protect the relay power input. The power input can be a separate lead from a battery circuit on the fuse panel or tied into the original battery power input to the headlight switch. It is important to know the amperage draw requirements of your headlight system as a low capacity headlight switch may be a weak link in this chain. This configuration eliminates a headlight switch capacity problem.

![Diagram 2](image)

3. **Diagram 3.** Installation of the switching module on a typical quad headlight system. This is the same situation as explained in Diagrams 1A and 1B except that there are four headlights as opposed to two. The explanation is the same as in Diagram 2 concerning the power input to the relays.

![Diagram 3](image)

4. **Diagram 4.** Installation of the switching module on a quad headlight system where all load is removed from the headlight switch and direct battery power is supplied to both the high and low relays. The explanation is the same as in Diagram 2 concerning the power handling capability of the headlight switch being used. Keep in mind that you are still limited to the maximum 30 amp draw of all the headlight high beams and the maximum 30 amp draw of the low beams as dictated by the relays. While it is unlikely that the headlight circuits will require this much amperage, bear in mind that this module could not be used in such a situation where the relay capacity was exceeded.

![Diagram 4](image)