

## SMIDSY FGHM-1 HEADLAMP MODULATOR

### FGHM-1 SPECIFICATIONS:

<b>VOLTAGE:</b>	<b>10-15 VOLTS DC (NEGATIVE GROUND)</b>
<b>MAXIMUM LOAD:</b>	<b>130 WATTS</b>
<b>UNIT SIZE:</b>	<b>54mm x 38mm x 25mm</b>
<b>CABLE LENGTH:</b>	<b>750mm (30") approx</b>
<b>WORKING TEMP:</b>	<b>-20C to +70C</b>

**WARNING: DO NOT USE THIS MODULATOR ON HID (High Intensity Discharge) HEADLIGHT SYSTEMS. SERIOUS DAMAGE MAY RESULT TO BOTH MODULATOR AND HID SYSTEM.**

### HIGH OR LOW BEAM?

The unit has been designed with LOW Beam in mind as the motorcycle Pass Switch can be utilised to turn modulation on/off. However, it's up to you! We would suggest that if you normally ride with Low Beam in daylight hours, then that is your answer and vice versa for High Beam.

### NIGHT RIDING

The unit has a daylight sensor and will stop modulation when daylight reduces to preset level in accordance with US DOT Regulations.

### FGHM-1 OPERATION SEQUENCE:

#### WIRED TO LOW BEAM:

ON POWER UP HEADLIGHT IS IMMEDIATELY ON. LED WILL FLASH FOUR TIMES UNLESS IT IS TOO DARK.

**DAYLIGHT:** LOW BEAM BEGINS MODULATION AND LED PULSES AT 4Hz. (240 per minute)

**NIGHT:** HEADLAMP CEASES MODULATION, LED IS OFF.

#### MODULATION ON/OFF

PRESS AND HOLD THE PASS SWITCH FOR 2 SECONDS, LED GOES OUT, RELEASE PASS SWITCH, LED IS ON, MODULATION TURNS OFF. REPEAT PROCEDURE TO SWITCH MODULATION ON AGAIN. THE 2 SECOND DELAY ALLOWS USE OF PASS LIGHT WITHOUT AFFECTING MODULATION STATE.

#### WIRED TO HIGH BEAM

ON POWER UP HEADLIGHT IS IMMEDIATELY ON. LED WILL FLASH FOUR TIMES UNLESS IT IS DARK.

**DAYLIGHT:** HIGH BEAM BEGINS MODULATION AND LED PULSES AT 4Hz. (240 per minute)

**NIGHT:** HEADLAMP CEASES MODULATION, LED IS OFF.

**Note:** If required, a separate push button may be wired between the Red and Yellow wire to turn modulation On/Off.

The procedure is the same as using the Pass Switch when wired to Low Beam. (See connection diagram overleaf).

### INSTALLATION INSTRUCTIONS

**1.** Correctly identify the HIGH and LOW BEAM wires feeding the Headlamp Bulb(s). You may have more than 1 lamp or a combination of lamps. This is not a problem, just do not exceed 130 Watts total. Standard bulbs are 55W low beam, 65W high beam and many are twin filament 65/55W high/low bulbs.

**Note:** Ensure you have identified the correct wires by using a test lamp/meter or by disconnecting one wire and trying the lights by elimination process. Most modern motorcycles will also have a ground wire leading to the bulb holder. Connect the FGHM-1 Ground (Black) to this wire. Older motorcycles may rely on the motorcycle frame as Ground, if this is the case, you will need to find a suitable point on the frame to connect the FGHM-1 Ground wire. If in doubt, consult an auto electrician.

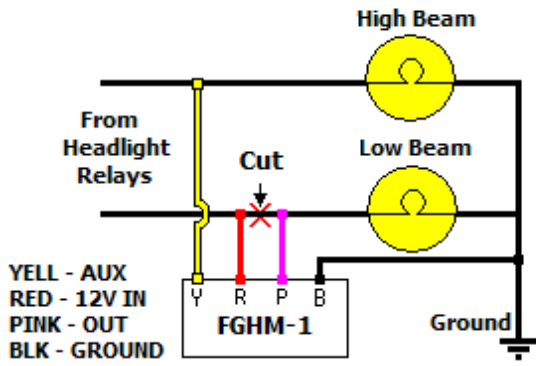
**2. Disconnect the battery leads before proceeding further.**

**3.** You may fit the unit anywhere convenient in the cockpit area. The front face of the unit must point roughly towards sky,  $\pm 30^\circ$  is okay. The unit is supplied with two cable ties protruding from the rear of the unit which are ideal if attaching to tubular handlebars, but can be removed if not required by removing the 4 screws on the rear of the unit, or simply cut them off. The unit may also be attached on a flat surface using the supplied 'Sticky Pads'. The unit is fully waterproofed. It is best to spend a few extra moments deciding on the best location before cutting any wires. Cut and connect the wires identified earlier as shown in the connection diagrams below, depending on whether you have decided on the HIGH or LOW BEAM option.

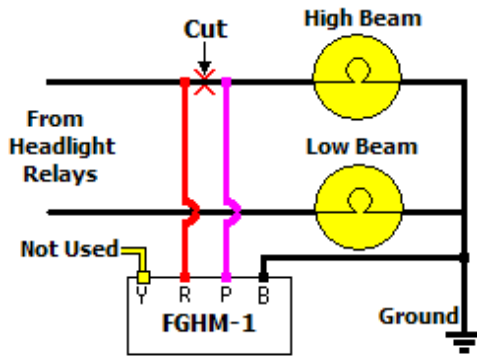
Do not be tempted to use 'Splice In' connectors as these are generally unreliable. Bare the insulation on all wires and twist together firmly using pliers, slide the supplied heat shrink sleeving over the connection and shrink down. Alternatively, use crimp connectors.

The FGHM-1 is supplied with approx 750mm (30") length cables. You may cut them to length as required along with the protective sleeving, or coil the excess up using cable ties and secure to the motorcycle. Do not allow the cables or unit to just 'flop around', they must be secured. Use the supplied Cable Ties to secure. **ENSURE CABLE IS NOT STRETCHED AT HANDLEBAR TURN LIMITS.**

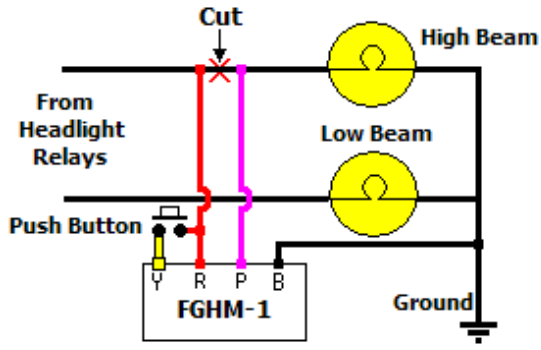
**Low Beam Connection Diagram**



**High Beam Connection Diagram**



**High Beam Connection Diagram with optional on/off button**



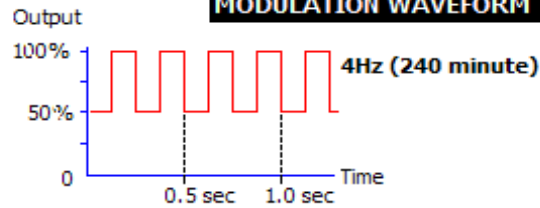
**WARRANTY**

We hope you will be pleased with your purchase. All SMIDSY products are fully tested after assembly. This product is guaranteed against malfunction or manufacturing defects for a period of 12 months from the date of purchase, provided the unit is installed in accordance with these instructions. Your statutory rights are not affected.

**BULB LIFE**

The use of this Headlight Modulator will not adversely affect the life of your headlamp bulb(s). Theoretically, bulb life could be extended, as when modulating, the duty cycle is 75%.

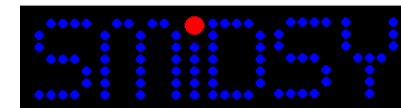
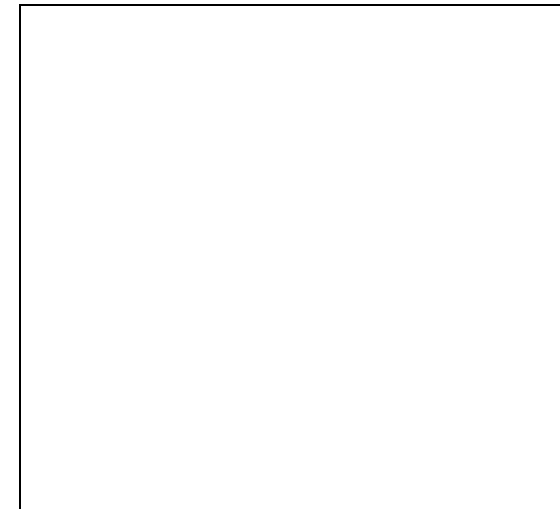
**MODULATION WAVEFORM**



**DISCLAIMER:** THIS PRODUCT IS LEGAL FOR USE ON PUBLIC ROADS IN THE USA AND CANADA, THIS PRODUCT MAY OR MAY NOT BE LEGAL FOR ROAD USE IN OTHER COUNTRIES. INSTALLATION AND USE IS ENTIRELY AT THE CUSTOMER'S DISCRETION.

**THE MANUFACTURERS WILL NOT ACCEPT ANY LIABILITY WHATSOEVER FOR USE OF ITS PRODUCTS WHERE LOCAL LAWS PROHIBIT SUCH USE.**

SMIDSY – Sorry Mate, I Didn't See You!



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