Instruction manual m-stop

Exclusion of liability

DEVICE HOUSINGS AND ALL OTHER DELIVERED PARTS MUST NOT BE OPENED OR DISMANTLED. IN CASE OF NON-COMPLIANCE ALL GUARANTEE CLAIMS BECOME INVALID. MOTOGADGET ACCEPTS NO LIABILITY FOR DIRECT OR INDIRECT DAMAGE OR SUBSEQUENT DAMAGE OF ANY KIND RESULTING FROM THE USE, INSTALLATION OR CONNECTION OF THE M-STOP OR OTHER DELIVERED EQUIPMENT. THIS EXCLUSION OF LIABILITY PARTICULARLY INCLUDES DAMAGE TO PERSONS, MATERIAL LOSSES AND FINANCIAL DAMAGES. THE USE OF THE DEVICE IN AREAS OF PUBLIC TRAFFIC IS UNDERTAKEN AT THE USER'S OWN RISK.

Application area

The m-Stop is a electronic switch. The device can only switch resistive loads like light bulbs or LED lamps up to a maximal current of 7A. This maximum current is equivalent to 4 light bulbs with 21W (hazard warning lights). The device is not suitable to switch capacitance loads (horn) or inductive loads (coils, relay). The ambient temperature must not below -20° (-4°F) and not exceed +85° (185°F). If a LED lamp is used with modus 1 or modus 4; during the continuous illuminating phase might very short dark phases (approx. 4 Milliseconds) be visible. These dark sections occur every second and are technical determined. At setting modus 4 or 6 the device need after power down a break of 4 seconds to start the switching cycle again. If the break is to short, the connected lamp will illuminate with the same switching pattern as it was switched off.
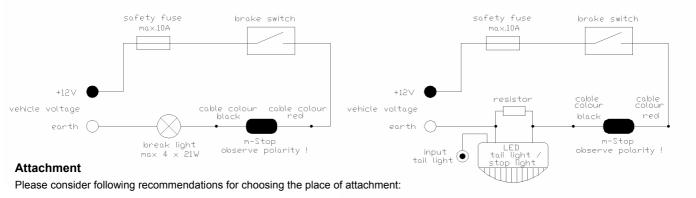
Power supply

The m-Stop can operate in a voltage range from 5,5V to 18V DC and is suitable for 6V and 12V vehicle power systems. Operating the device without a battery, for example, using a direct connection to the vehicle's generator is not envisaged or recommended. The device will not switch if used with a voltage below 5,5V. A voltage higher as 18V will destroy the device. Also a short circuit (operate without a load) will destroy the device. Do not use the device if it is not working properly (lamps are permanently switched on). Every type of LED taillight has internally a different routing. If your LED tail light is not working with this connecting instruction, you will find help at support at www.motogadget.com.

Connection

Make sure you connect the m-Stop in the right polarity. Connect the red cable in direction +12V and the black cable in direction earth. A short operation in reverse polarity (<5s) will not damage the m-Stop. In this case the connected lamp will permanently illuminate. An operation longer than 5 seconds in reverse polarity will destroy the device. Please check the polarity of the connection cables with a voltmeter before connection and operation.

If the device is used at a **LED** tail-light / brake-light unit the enclosed resistor has to be connected between brake-light input and vehicle earth as shown below.

Attention! The minimal supply cable width is 0,75mm². You must fuse the +12V power supply cable with a max. 10A safety fuse. If the device will be use without fuse, damage at the connecting cable or the m-Stop itself can cause a shortcut and a cable fire. There may be risk of your life! Make sure you are capable to connect the device properly. If you are not sure, let the professional shop do the job!

Attachment

Please consider following recommendations for choosing the place of attachment:

- water protected place
- sufficient distance to hot engine or exhaust parts (max. ambient temperature in operation is 85°C)
- a minimum distance of 30 cm to sources of electromagnetic interferences (ignition coils, high tension cables).

Important is a sufficient strain relief and bend protection of the connection cables. At mechanical stressed areas an additional insulating is necessary to prevent damage at the cable insulation. It must no mechanical stresses and strains act on the device (pull, push or shock forces). The device has to be attached direct at the cable loom with plastic cable ties.

Remove the vehicle battery or interrupt its connection to the vehicle electrical system before starting the electrical connection of the m-stop. Use the original vehicle wiring diagram. Make sure you accomplish your work in a proper way.

Operation

The m-Stop provides eight different settings. To change a setting, please use the DIP switch as follows:

Function	Switch setting	Pattern	Bulb	LED
Modus 1	ON/ON/ON	continuous light	yes	yes, with load resitor
Modus 2	ON/ON/OFF	fade in – fade out with 3 Hz	yes	yes, with load resitor
Modus 3	ON/OFF/ON	flashing with 5 Hz	yes	yes, with load resitor
Modus 4	ON/OFF/OFF	8 times flashing with 5 Hz then continuous light	yes	yes, with load resitor
Modus 5	OFF/ON/ON	2 times flashing with 5 Hz than 1 second continuous light and starting again	yes	yes, with load resitor
Modus 6	OFF/ON/OFF	3 seconds continuous light and then flashing with 5 Hz	yes	no
Modus 7	OFF/OFF/ON	flashing relay, automatically switching of after 20 seconds of operation	yes	yes, with load resitor
Modus 8	OFF/OFF/OFF	standard flashing relay	yes	yes, with load resitor