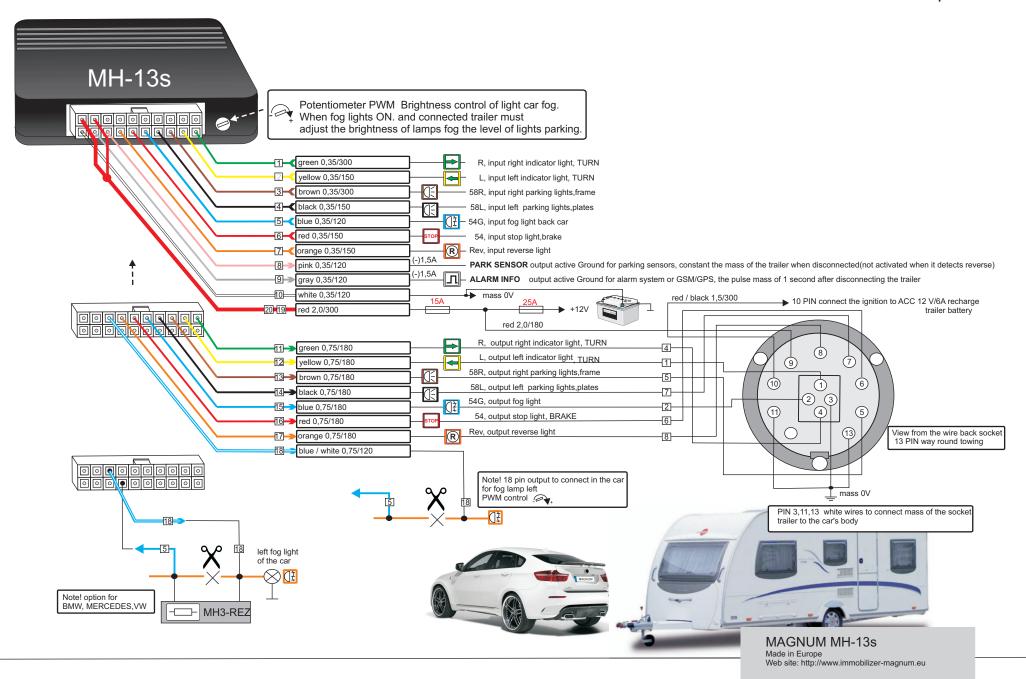
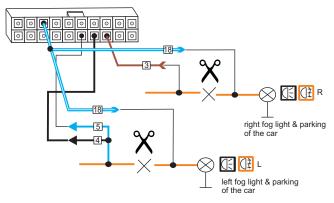


## UNIWERSALNY ZESTAW ELEKTRYCZNY HAKA / UNIWERSAL TOWBAR WIRING KIT / УНИВЕРСАЛЬНЫЙ КИТ СВЕТОТЕХНИКИ ПРИЦЕПА

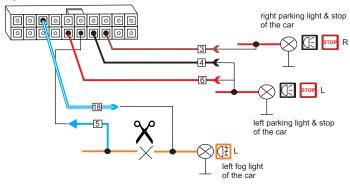




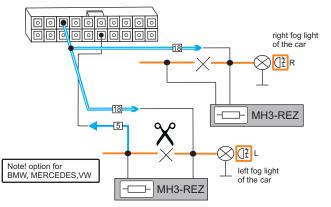
 Wiring diagram for realized the functions on a single filament light bulbs parking 6 Volt and fog 12 Volt



2. Wiring diagram for realized the functions on a single filament light bulbs parking 6 Volt and stop 12 Volt



Wiring diagram for realized the functions on a single filament light bulbs fog 12 Volt with add a resistive load MH3-REZ in BMW, MERCEDES, VW



# Description of the series trailer lighting modules MH-7, MH-7s, MH-13, MH-13s on market EU,UK,RU

The module realizes all the functions and the lighting control trailer. Has a version of S additional functions ALARM INFO protect the trailer for alarm systems and functions PARK SENSOR control parking sensors.

The module is designed to work with any type of installation of modern cars working with both for realized the functions on a single or double filament light bulbs, and LED lamps.

The module is connected to the rear car lights without fear of detection error for the load module test vehicle lighting condition (test circuit overload).

#### **Function -TEST CONNECTION TRAILERS.**

The device detects the trailer and after that connect all the test conducted lighting light bulbs every single bulb in a trailer.

#### Function - for car alarm ALARM INFO

MAGNUM MH-13s

In this function we have provided security the trailer if you try to steal it. Module MH-7S,MH-13S has an output to control the car's alarm system or monitoring the GPS / GSM.

ALARM INFO output should be connected, for example, to switch doors or trunk light.

After disconnecting the trailer is issued a second impulse that simulates a mass activation of the switch which causes activation of the alarm system.

### **Function - PARK SENSOR**

This function gives us the cooperation of the ultrasonic sensor Parking is installed without the learning function of solid obstacles (after connecting the trailer becomes a permanent obstacle). We have the ability to block its work on the attached trailer.

The module has an output rated at max. 1.5 A which is switched to the "mass" when there is no trailer attached. When you turn on the Reversing Input disables the output we park sensor "mass". Should be connected to the output of the ground of the power unit parking sensor.

#### **Function - CONTROL LEFT PARKING LIGHT**

This function is intended for single filament light bulbs at the same time realizing functions of parking and fog lights or parking and stop (see Figure 1 and 2).

#### Function - CONTROL LEFT FOG LIGHT

This function prevents the dazzling, car fog light reflected from the front surface of the trailer. This shall be carried module output PWM to enable adjustment the brightness of fog from the circuit when the turn up the lights fog of the car and while controlling the light in the trailer. Adjust the intensity of illumination light in the car carried out by a potentiometer PWM, selecting the setting so that the car lights module does not display the error associated with the rear fog illumination of the car. For the proper installation, cut the electrical circuit car fog lamps and connect the cable from the car to install the module input and the cable from the bulb to the output module (see Figure 3).

**Note:** For proper operation of the module lights the car manufacturers: **BMW**, **VW** ,**MERCEDES** is required for installation of an additional module load **MH3-REZ**.

This solution does not cause errors on damaged fog light bulb car lighting car in the controller because the controller is still loaded the trailer light module.