Help informations for the eLight Software by Car-Solution

Help version 1.7

Please read at first the general information, the first steps and the instruction manual.
Also read the specialities for your car.

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General information for the eLight- module:

The module is able to switch on and off the lighting at the vehicle over data-bus-telegrams. Furthermore are two auxiliary outputs available and one input. The outputs transmit a ground signal with max. 500mA and are intended to control a relay or a LED.

Over a switch at the input you could activate the lightshow.

The module could be reprorammed more then 100.000 times.

The module will deactivate the production-line flashing indicators by locking or unlocking the car because else the light-show doesnt work correct.

All the modules are available for: BMW E46, E38, E39, E83 and E85.

Currently we offer the following module types:

eLight standard

You determine the order of lighting:

By closing the vehicle with your remote key, only the turnsignals light up for acknowledgement.

With eLight you configure the sequence and duration of the complete lighting system.

Delivered with software, data cable and instructions.

All eLight modules are additionally with daytime-running-lights over the front fog-lights.

eLight deluxe

Same as eLight standard additional with comfort turn signal:

However extended of the function comfort turn signal,

1 x tapping = 3 x flashing. A comfortable solution for many drivers.

The function comfort-flashing can alternatively be activated or deactivated.

eLight comfort

Function as eLight deluxe, however with sensor-steered home light:

Due to time-delayed switching off of your high-beams or fog-lights a safe way home is made possible.

eLight professional

Module as eLight comfort plus:

Automatic locking the vehicle by drive off and unlocking the vehicle by ignition off.

The functions comfort-flashing, way-finder, locking and unlocking can be individually switched on and off by the programming software.

eLight enterprise

Module as eLight professional plus:

Bending light over the front fog lights and trunk outside-lighting over backup lights by darkness.

eLight ultimate

Module as eLight enterprise plus:

Automatic side mirror turn down by locking the car.

General information for the eLight- software:

With our eLight Software you can set the sequence of the lights, the lighthing time, break time and the repeat time. The number of programmable light activations depends of the amount of selected lights and functions.

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First steps:

After the software installation you must select the serial device at your computer at first.

Connect the eLight-programming cable with a 9V battery then with your computer.

Please note: If your computer dont have a serial device then you could use a USB adapter cable.

Connect the eLight module with the programming cable.

Now click on the menu item Read module informations. The program will detect the module type. This can used as an connection test as well.

Then select your vehicle type under the menu item Configuration.

The module is ready to get programmed.

If you dont get a connection with the module, please check the following:
- Check if you have the correct serial device
- Check the right connection of the cable.
- Check the condition of the battery.

Please note:
After programming please cut the battery from the programming cable because the battery will be slowly discharged by the computer.

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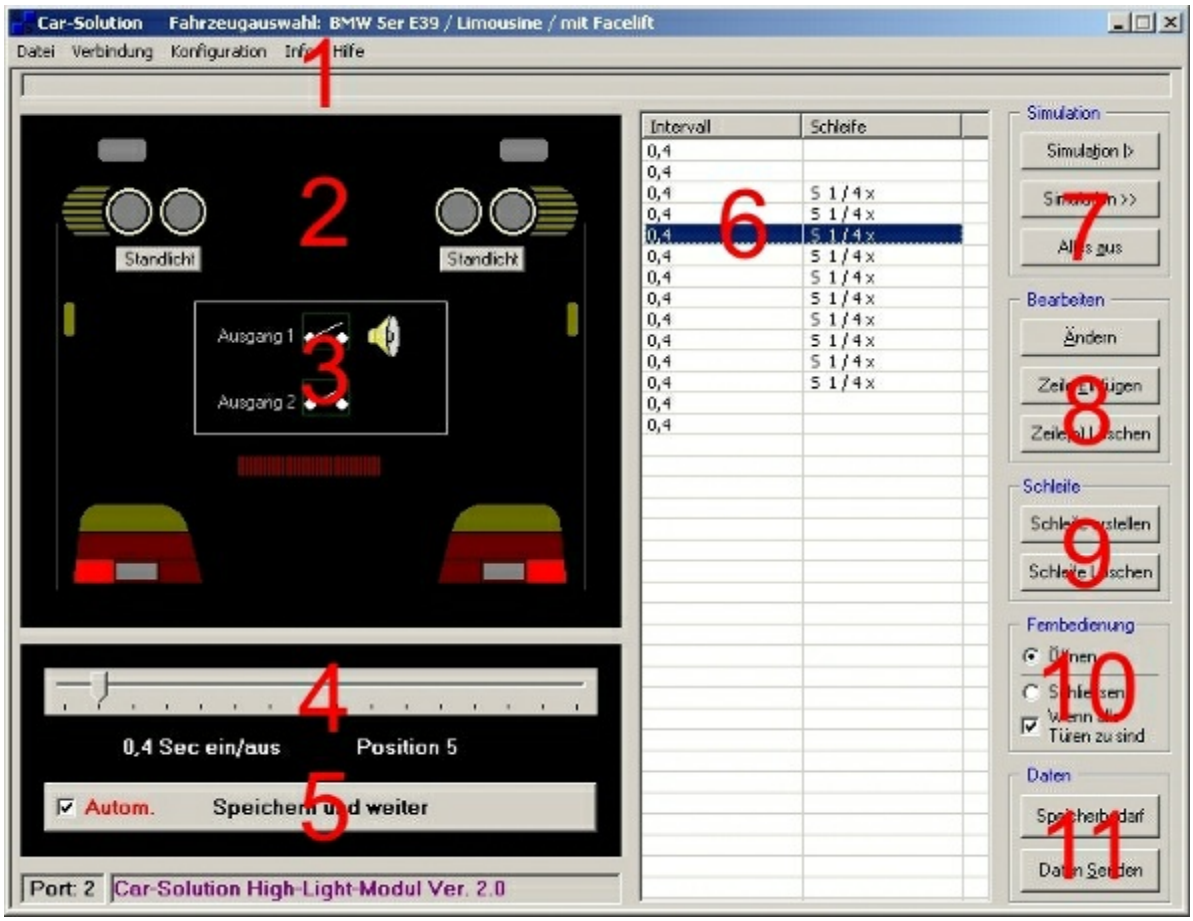
Operation instructions for the eLight software:



1. Menu selecting: Here you can open and save files, open the properties windows, exiting the program, selecting the serial device, selecting the vehicle type and get information about the connected module.

Please note:

If your computer dont have a serial device then you could use a USB adapter cable.

2. Programming the lighting and the outputs:

This field is for turning on and off the lighting at the car and for checking the programmed lights by simulation.

3. In and Outputs:

4. Time selection:

The slider is for the switch-on time for the lights. You can select the time from 0,1 up to 3,0 sec. If the light should flash longer than 3,0 sec., you can select the light twice in succession.

For example: 3,0 sec. + 3,0 sec. = 6 sec. overall time.

5. Save the lighting and periods in the table:

After switching on one or more lights in the field 2 you could save this if you click on the button item Save and continue. If you select Autom. then each light will be one line in the table.

In the automatic-mode you could also save multiple lights if you press the right mouse-button and select some lights. To save and to go to the next line press the left mouse-button.

6. Table:

Here you can see the switch-on and -off periods and the created loops.

On the left side you see the switch-on-period and on the right side you see the loops.

7. Simulation:

Here you can see the programming as a simulation.

8. Edit:

With the button Edit you can overwrite lines in the table.
With the button Insert line a new line is added in the selected line. If the line is inserted into a loop, the loop is also extended. With the button Delete line you can delete the selected lines.

9. Loop:

With the button Create loop you can create a loop by marking the field in the table that should be repeated and then click on Create loop. You can create loops with the maximum

size of 32 lines on the table which you can repeat up to 9 times.

With the button Delete Loop you can either delete a loop partly or completely.

Deleting a loop completely:

Mark a line within the loop and click on Delete loop.

Deleting a loop partly:
Mark one or more lines at the beginning or at the end of the loop and click on Delete loop.

10. Remote key:

Here you can select how the lighting should flash if you unlock or lock your car.
The selection If all doors are closed means the lighting flashes only when all doors - except the trunk - are closed.

11. Data:

With the button Memory requirements you can always check the memory requirements in the module needed from the program.
With the button Send data the program-values of the module are sent and saved.

12. Vehicle selection and settings:

Auxiliary in and outputs:

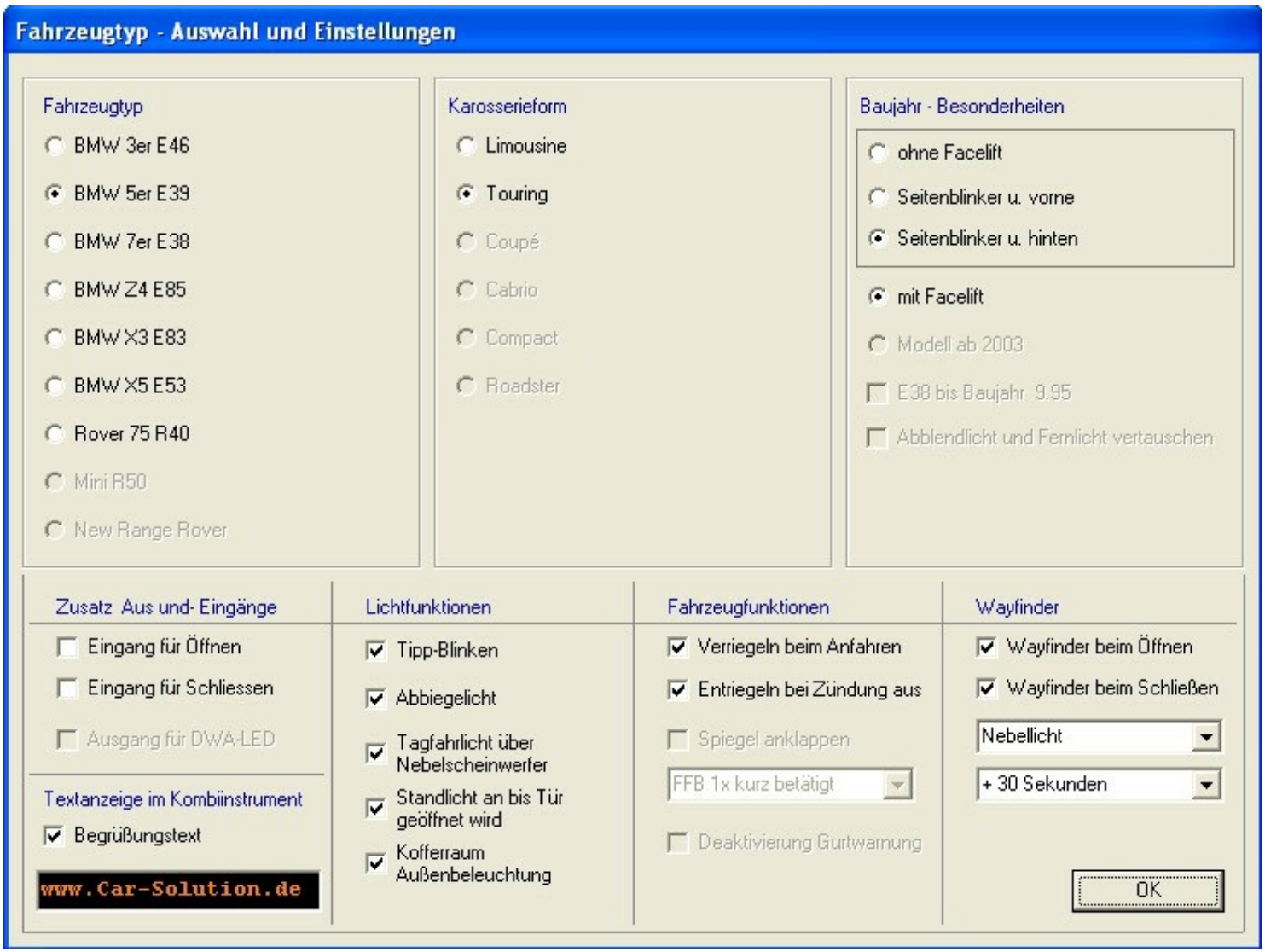
The auxiliary input is for activating the module without using the remote key. The auxiliary input is only active if you also have selected it in the program.
The auxiliary input can be used either for activating the program Lock or Unlock.

Additional functions:

Here you can switch on or off the different additional functions depending on module type:

Welcome message: At ignition position 1 you see a free selectable welcome message in your instrument-cluster. (Only BMW E38, E39 and E53 with High-instrument-cluster)
Tip-blinking: If you tip the turn signal lever once, the turn signal flashes 3 times.
Bending light: With activating the turn signal the fog light located on the same side goes on.
Daytime-running-lights: At ignition position 2 the fog lights are activated as daytime-running-lights.
Parking lights on until the door is opened: At vehicles with automatic driving-light-control the parking lights stay on until the driver door is opened.
Trunk outside-lighting: The backup-lights go on if you open the trunk in the darkness. (not for E46, E83, E85)
Locking at driving off: At driving off the central door locking locks.

Unlock at ignition off: The central door locking unlocks at turning off the ignition.
Turn up side-mirrors: The side-mirrors turn up automatically by locking your car with your remote key and turn down again by unlocking the car.
Wayfinder: Wayfinder-function at locking or unlocking the car alternatively over the high-beam lights, the low-beam lights or the fog lights.



Instructions to set the brightness-sensor for the wayfinder

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General installation instructions:

Theoretical you could install the module everywhere in the vehicle where you find permanence plus and the vehicle-data-bus. The module could installed at the K-bus or I-bus. At vehicles with I and K-bus the module must installed at the I-bus.

Cable color of K-bus: white-red-yellow
Cable color of I-bus: white-grey-yellow

Pin configuartion at the eLight-module:

Cable color	function	description
red	permanent plus	Permanent power (+)
brown	ground	Vehicle ground (-)
white	data-bus	Data-bus for bus commands.
black	output 2	Output 2 for free usage.
blue	output 1	Output 1 for free usage.
yellow	input	Connection for a switch to activate the module without the remote key.

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Please select your module-type to show the relevant fitting instructions

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You determine the order of lighting:
You could configure the sequence and duration of the complete lighting system by
locking or unlocking your car

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Same as eLight standard additional with comfort turn signal.

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Due to time-delayed switching off of your high-beams or fog-lights a safe way home is made possible.

eLight professional

Module as eLight comfort plus:
Automatic locking the vehicle by drive off and unlocking the vehicle by ignition off.

eLight ultimate

Module as eLight professional plus:
Automatic side mirror turn up by locking the car.

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Specialities at the E85 Z4:

The turn signals at the front could several controlled for each side.

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Instructions to set the brightness-sensor for the wayfinder:

Turn on the ignition and check that the interior lights are off.

If the LED on the module is on means that the wayfinder is activated at the current brightness.

The best way is if you set the wayfinder in the darkness. Wait for the favored brightness and turn the potentiometer to the right or left if the LED is flashing, then the brightness is adjusted.

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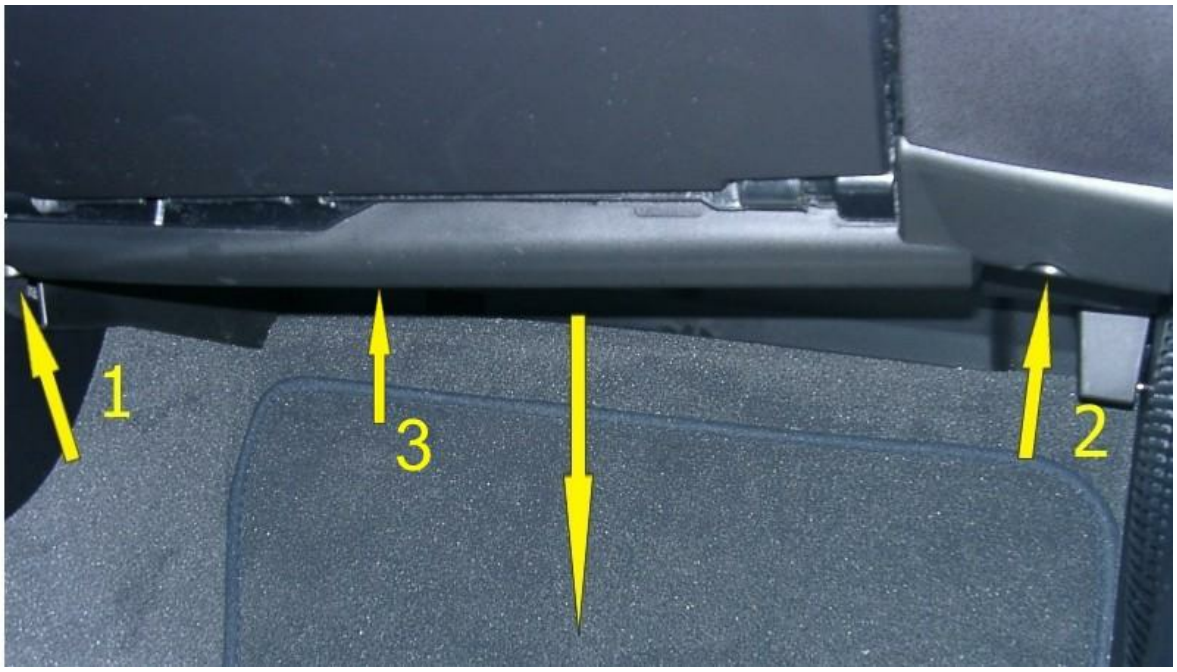
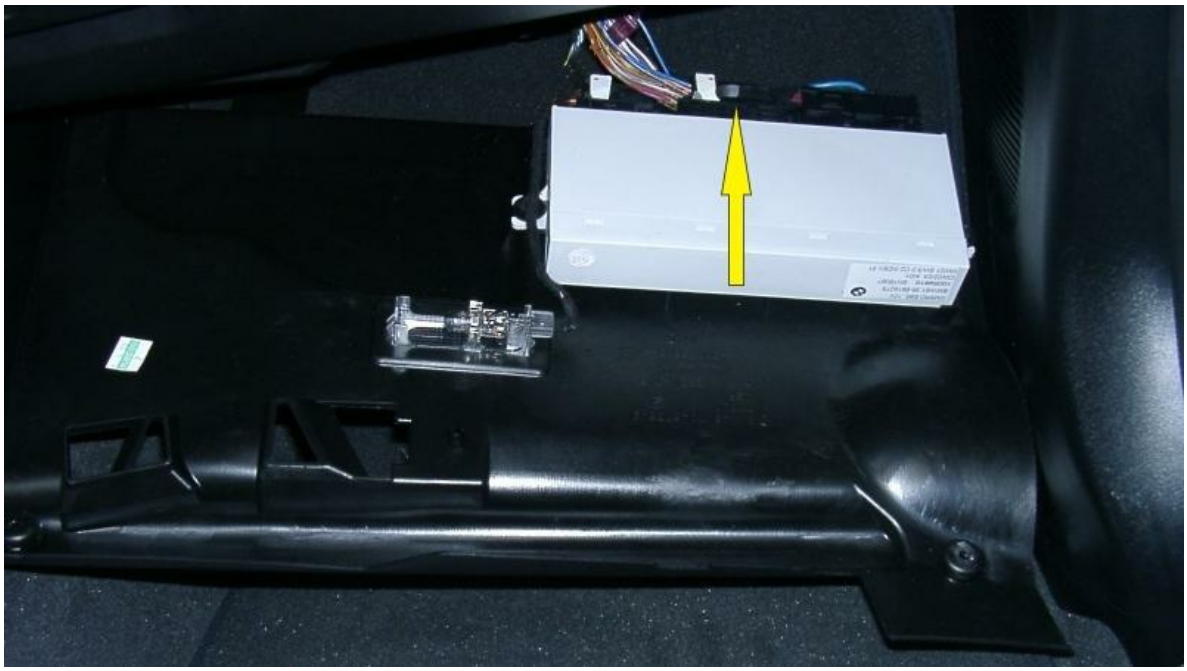
Fitting instruction for the eLight module for BMW Z4 E85:

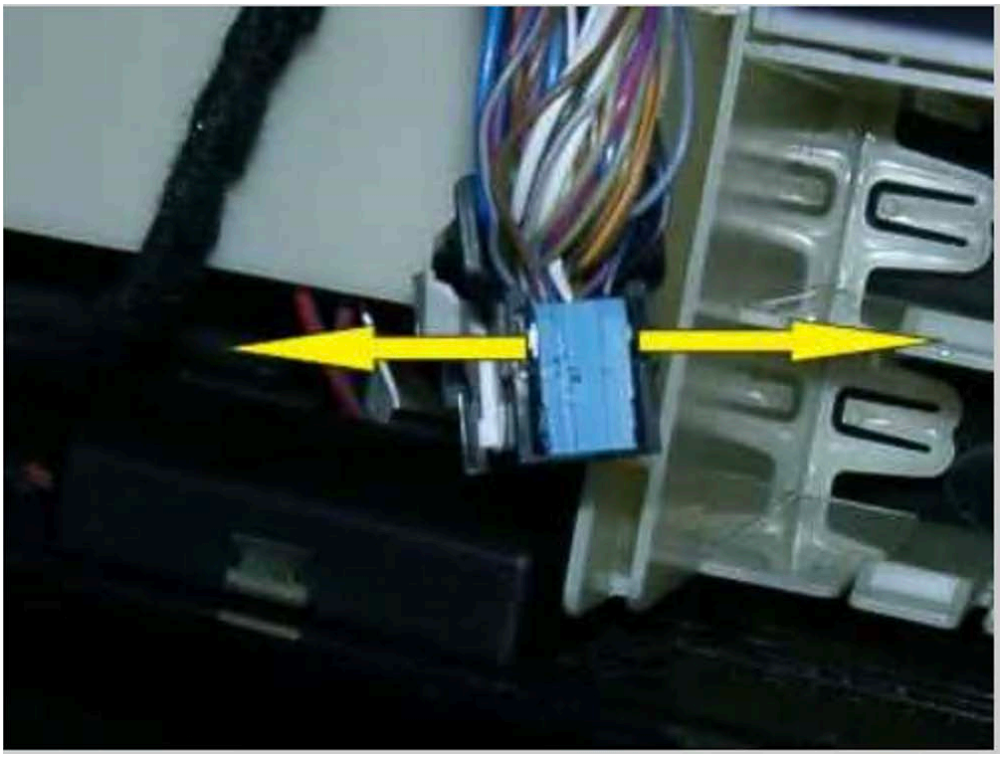
1. Demount the cover below the glove compartment: Unscrew the screws 1 & 2 as shown. After this demount the expanding rivet. (3)



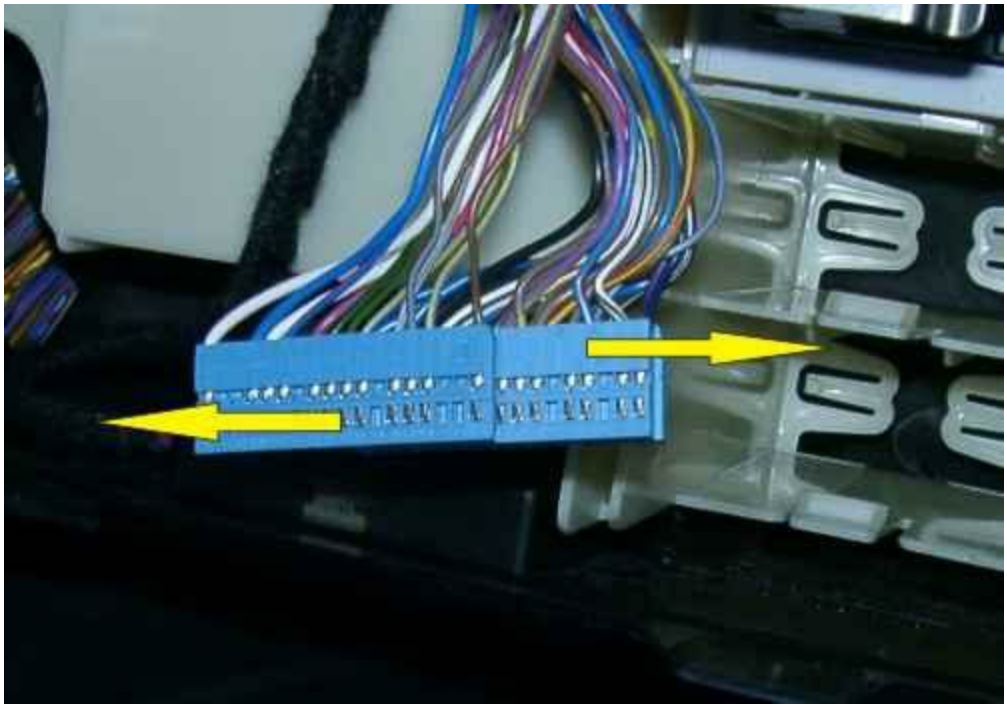
2. Demount the black 54-pin plug in the middle of the basic module.



3. Remove the housing of the 54-pin plug.



4. Move the interior of the plug and add the red terminal connectors as follow:
   - cable color brown-black pin 10
   - cable color red-violet pin 47
   - cable color white-red-yellow pin 9



5. Connect the cable harness of the module as follow:
   -- connect the brown cable of the module with the brown-black cable of the basic module.
   - connect the red cable of the module with the red-violet cable of the basic module.
   - connect the white cable of the module with the white-red-yellow cable of the basic module.

6. Lay the cable harness to any desired point in the car.
We advise to lay the cable harness in to the glove compartment.

7. Re-assemble everything in reverse succession and connect the module with the eLight-cable harness.

8. Before testing the module, please lock and unlock the car to synchronise the module.

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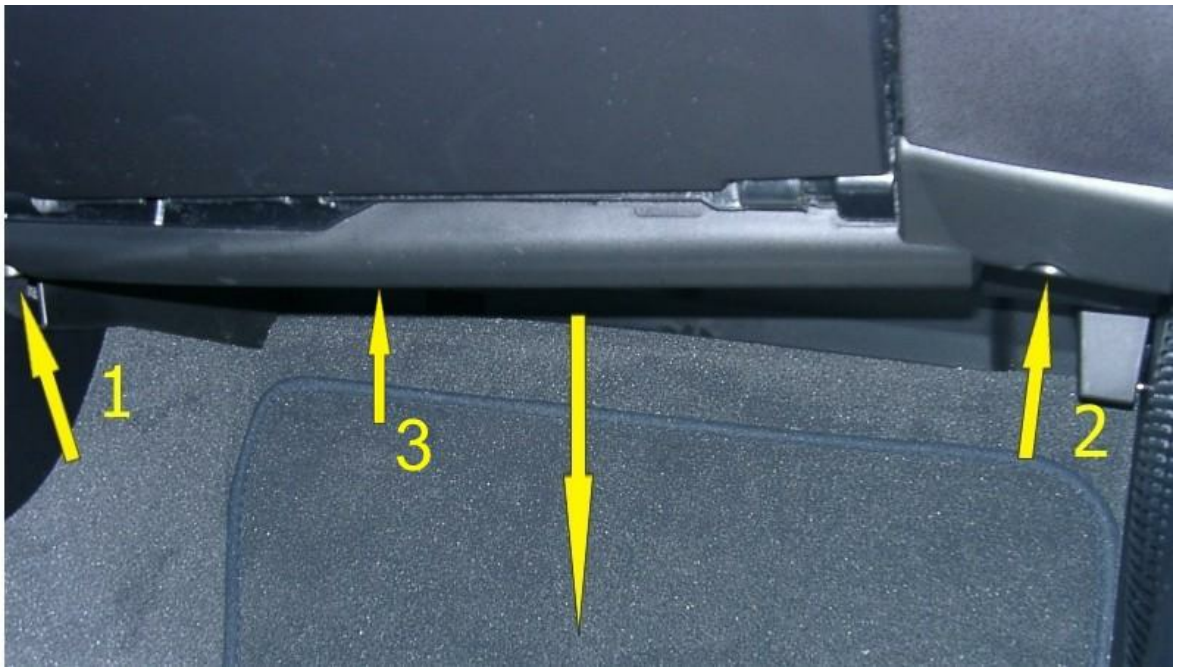

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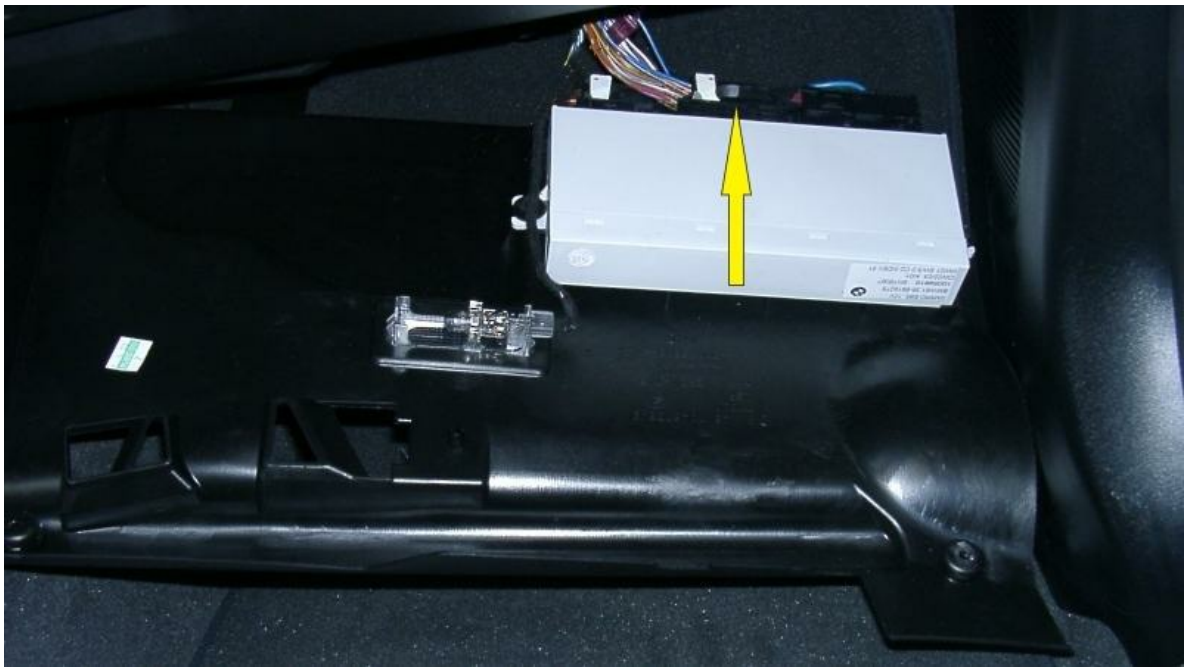

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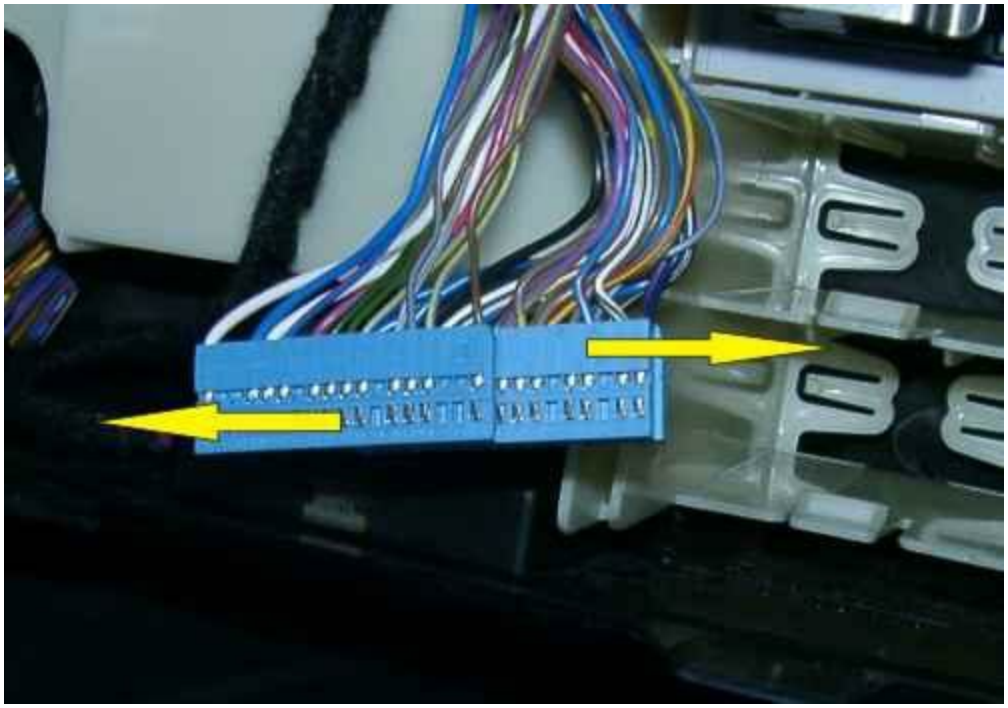

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   - connect the red cable of the module with the red-violet cable of the basic module.
   - connect the white cable of the module with the white-red-yellow cable of the basic module.

6. Lay the cable harness to any desired point in the car.
We advise to lay the cable harness in to the glove compartment.

7. Installation of the brightness sensor:
You can install the sensor on any place of your choice.

7. Re-assemble everything in reverse succession and connect the module with the eLight-cable harness and the sensor cable with the eLight module.

8. Before testing the module, please lock and unlock the car to synchronise the module.

Adjust the sensor for the wayfinder

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