Installation

Bending light modul

1. Introduction

Dear customer,

thank you for buying our bending light modul and congratulations!

Expensive premium cars already offer a bending light function by default. The car automatically recognizes if you turn into another road an turns on the fog light on the corresponding side of the car. The road you are turning into is illuminated and the accident hazard is minimized.

With our bending light modul you can add this function to any car.

What is "bending light"?

Bending light is a function where your car is turning on the fog light on one side of your car whenever you are turning into a new road.

What does the module offer?

- ◆ Fast installation in all cars with 12V power system and original or addon fog lights (or any other additional light).
- ◆ invisible installation in your car.
- ◆ Whole programming is done with the original switches your car already offers.
- ◆ Function can easily be activated and deactivated.
- ◆ Function is only active in case it is dark outside.
- ◆ Function is only active under a programable speed.
- ◆ „Pace-Car-Funktion": For Show Events you can use the module to let your fog lights flash one after the other.
- ◆ No energy consumption when not active.

2. Technical Data

Power Supply: 12 V (min. 10 V, max. 16 V)
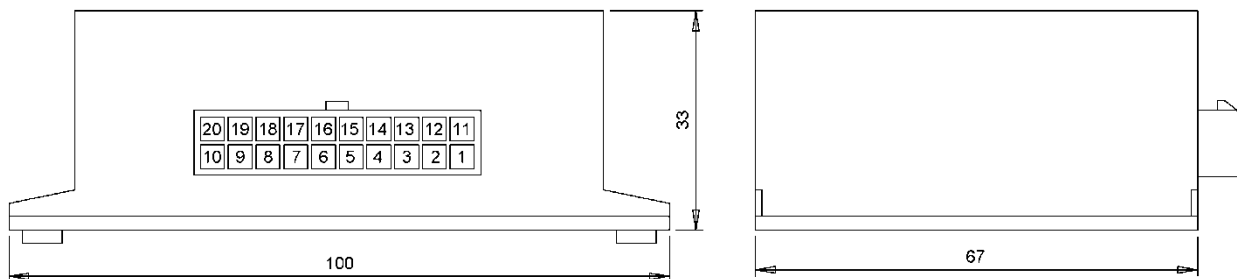Maximale current consumption: 15 A
Temperature Min / Max: -10 to +80° C

3. Delivery contents

1 x Bending light Module
1 x Cable-Set (20-pole with max. 9 cables)
1 x Installation Instruction in German

20	19	18	17	16	15	14	13	12	11
10	9	8	7	6	5	4	3	2	1

33

100

67

4. Safety Instructions

In order to get a good result please install the module carefully. You will need different tools (depending on your car) and knowledge in order to install the module on your own.

Please make sure to install the cables clean and tidy so that they can not get damaged or kinked. The best is to put the cables into the original cable duct wherever possible. If you have standalone cables please fix them with cable fixer. Not used cables should be fixed and isolated! You can use „Kabeldiebe" (little plastic thing which connects one cable to another).

All here named connections are only meant as a hint. Please make sure that you find a corresponding cable in your car and most important please always check the polarization before you connect the module to any part of your car.
Please also keep in mind that all metallic parts of your car offer -12V, so please ensure that no cables get connected to metallic parts of your car at any time.

5. Installation

Place to choose

You should install the module at a place where you can easily get the needed connections (best is behind the dashboard, behind the light switch or near the fuses). Please ensure that the module is placed at a dry place.

Parking light

Please search a cable which has +12V if you turn on the parking light. After you found the cable please connect the red cable to the previous found cable. The module uses this signal as +12V and in order to find out if the light is turned on. Alternative sources could be the dim light or any other signals which offers the same functionality.

Ground

Connect the black cable with ground (ground cable or a blanc metal ground point of your car body.

Turn signal left and right

Please search for the two cables that offer +12V in case you are switching on the turn signal left or right. You can connect the cables directly to the turn signal bulb. Please connect the blue/green cable with the turn signal „left" and the brown/white cable with the turn signal "right". The module uses this signals in order to recognize a turn process.

Fog light / additional light

Search for the cables that are connected to your foglight (+12V). Please cut this cabel on both sites of your car.

Left site: Connect the cut of cable which is connected to the light switch with the white cable, the other part of the cable (which is connected tot he light) should be connected with the green/black cable.

Right site: Please isolate the cable which is connected to the light switch, this is not needed anymore. Please connect the other part of the cable (connected to to light) with the blue/black cable.
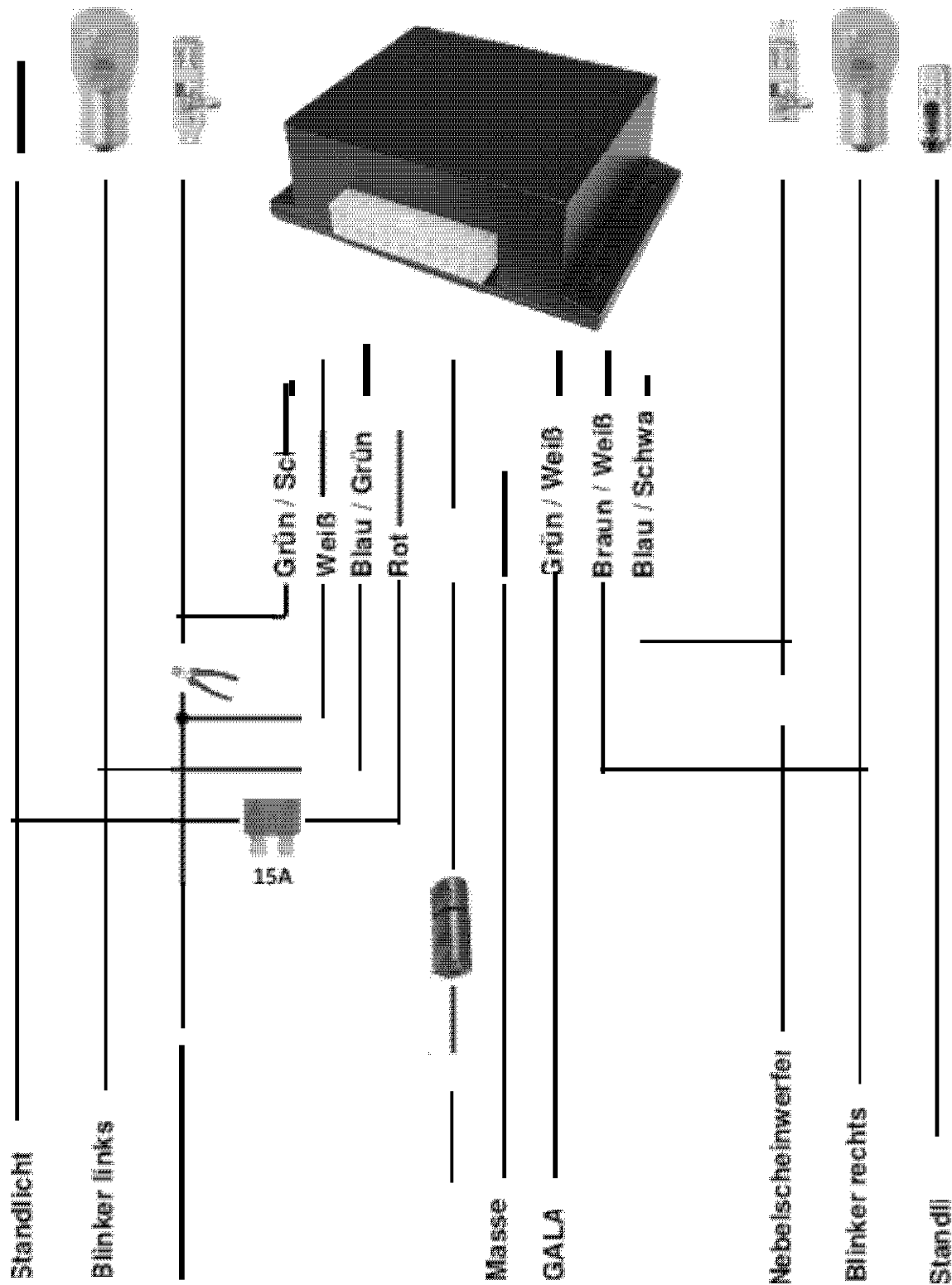
+12V ACC

Please find a cable which is offering +12V (only when ACC is on). Please connect the yellow cable to the found cable.

SpeedSignal

Search for a speed signal (this can often be found behind the radio where the signal is used to change the volume depending on the speed). Otherwise the signal could be found directly at the speedometer. Please connect the green/white cable with the found signal.

6. Connectiondiagram

Grün / Sc
Weiß
Blau / Grün
Rot

Grün / Weiß
Braun / Weiß
Blau / Schwa

15A

Standlicht

Blinker links

Masse

GALA

Nebelscheinwerfer

Blinker rechts

Standli

7. Programming

Enter programming mode

For all programming functions you first have to enter the programming mode.
Turn on ACC, turn the parking ligh on 3 times and let it switched on the third time.

Sequence: ACC on – LIGHT on – LIGHT off – LIGHT on – LIGHT off – Light on

The Fog lights will flash 3 times to show you that you entered the programming mode. When you turn of ACC you the programing mode will end and the configuration will not be saved.

Now you can choose the program. After choosing a program please wait for the confirmation before you continue with the programming.

If you turn of your parking light you will end the programing mode and save the configuration.

Activate the Pace-Car function

Start the programing mode.

Switch on the turn signal "left" (1x) After ~4 Seconds the Pace-Car function is switched on. The module will confirm this with a short flash with the fog lights.

This function will be disabled automatically if you start any other function or switch of the park-light.

Activate / Deactivate the module

Start the programming mode.

Switch on the turn signal "left" (2x): The module is activated. The fog lights will flash

2x to confirm.

Switch on the turn signal „left" (3x): The module is deactivated. The fog lights will

flash 3x to confirm.

Save the configuration by turning of the park light.

This Status is saved permanently – even if you turn oft he car totaly or disconnect the battery.

Activate / Deactivate the speed signal

If your car has no speed signal or if this is not compatible you can turn off this function.

Start the programming mode.

Switch on the turn signal "left" (4x): The speed-signal is used. The fog lights will flash 4x to confirm.

Switch on the turn signal "left" (5x): The speed-signal is not used. The fog light will flash 5x to confirm.

Save the configuration by turning of the park light.

Program the speed limit

You can choose below witch speed the module is active so that your fog light is not switched on when you are e.g. on the higway.

Start the programing mode but switch on the engine instead of only ACC.

Switch on the turn signal "left" (8x) and wait for the fog light confirmation (they will flash for about 5 Seconds). Now accelerate to the desired speed e.g. 30 km/h and turn off the park light after reaching the desired speed. The current speed is now saved a the maximum speed below which the module is active. The Fog lights will flash for 5 Seconds to cofirm.

Number of turn light signals

You can choose after how many turn light signals the Fog light should be switched on.

Start the programing mode.

Switch on the turn light „**right**" so often as the module should wait – e.g. 4x than the module will switch on the fog lights after the 4th flashing.
The fog light will flash once to confirm.

Save the configuration by turning off the park light.

Persistence time

You can choose the time the module will fade out the light after the turning. On the back of the module you find a little controller. You can select between 1 to approx.. 10 Seconds. Please be very carefull as the controller has a minimal end stop and will be destroyed if you spin the controller beyond this end stop.

Reset the module

Start the programing mode.

Turn on the turn lights "left" (12x) – The fog light will flash twice for ~5 Sec.

Save the configuration by turning off the park light.

All configuration points are reset to default:

Module is activated, Flashing to turn on 4x, Speed dependent: off, Speedlimit 60km/h

8. Function

After programing the module it will show the following function:

Turn on the light

Switch on the turn light left/right

After the programed number of flashes the fog light on the corresponding site will be turned on.

Switch of the turn light.

The module will fade out the fog light in the programed time or when you exceed the programmed speedlimit.

If you are above the speedlimit when switching on the turn lights the module will ignore this and the fog lights will not be turned on.

The default functionality of the fog lights is not influenced.

9. Problems

1.) The module is not working

Please have a look at the cables again and verify all signals with a voltmeter. If the problem is not solved try to reset the module and turn of the speed dependent function.

10. Legal

Return

We offer 14 days of return for all our modules. Please contact us before sending back the module. Please never just send back the module, otherwise you will have to pay the delivery charges on your own and have the risk that the module is lost. All other legal information can be found on our website.

Warranty

We offer two years of warranty for our moduls. If your modul shows a defect please contact us before you send us the module back. Otherwise you will have to pay the delivery chages and have the risk if the module is lost.
We will test the functionaly of your module. If the module is working fine you can decide if we should send it back to you on your own cost.
If the module is defect we will have a look at the interiour oft he module. If the defect is caused by the module itself we will decide if we send you a new module or repair the old one. If we can see that the module is destroyed by your fault (e.g. +12V / -12V conected wrong way) you can decide if we should keep the module or send it back to you at your own cost. Modules that are destroyed by the fault of the owner are not repaired or changed.

Please NEVER open a module yourself, otherwise the warranty will be lost.

Please keep in mind that the electronic of cars can/will be different. Therefore please double check all connections before you connect the module. Please also check that there can't be any damages or malfunctions to your car.
We don't offer any warranty for your car this is for damages to your car directly caused by the module as well als indirectly e.g. because of not working lights etc.

Legal situation

We don't check the legal situation in your country. Please make sure that the functionality of our module is allowed in your country.