



## UNIVERSAL WIRING KIT "SETGDWSP\_2" (12N SOCKET)

Available for use only with negative earth and 12V battery voltage.

### APPLICATIONS

Device complying with Directive 95/54/CE (e9 02-4348).

This wiring kit can be installed on most passenger cars or commercial vehicles, including vehicles that have:

- A digitally controlled light system with mixed voltages.
- Lamp failure detection system. (SFL)
- BSI multiplexed wiring system.
- Fog light activation system.
- CAN BUS Data system.
- Low voltage detection system.
- Check-Control
- Light switching system.

Available for use only in vehicles with negative earth and +12V battery voltage.

This device cannot be used on vehicles with reverse polarity (positive goes to the chassis or body) or in vehicles with battery voltages other than +12V.

This kit prevents any failure or overload , and is designed to connect power directly from the vehicle battery or alternator, avoiding possible failures in the vehicle control unit.

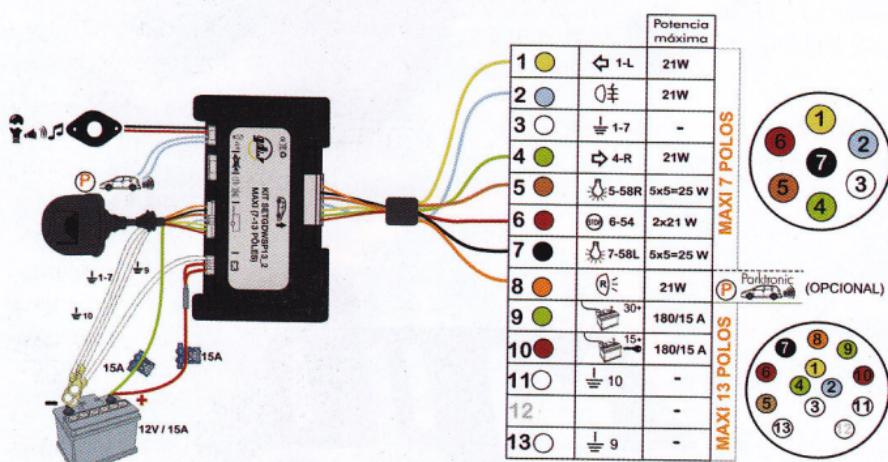
This product has a 2 year guarantee against possible manufacturing defects. The guarantee does not cover damage caused by misuse or incorrect installation, such as installation of the kit in vehicles with reverse polarity or subjecting this kit to other voltages than +12V. Any tampering with the product, such as opening the circuit box will also lead to cancellation of the guarantee.



- Quick connection in the electronic module.
- Possibility of disconnecting the PDC (parking sensors).
- C2 system: detects malfunctioning of flashing lights and position lights on the trailer by emitting a sound signal.
- Additional channel for vehicles with fog lights activated by earth.
- Replacement function of flashing light for position light in case of lamp failure of the flashing light on the trailer.
- Complete disconnection or reduction of intensity of one or two fog lights.
- Compatible with trailers or caravans with one or two fog lights.
- In switch (not as an amplifier) check loads in figures.

REF.	Description	Pin	Quick connection	Replacement light function	Fog light disconnection	PDC disconnection	C2
SETGDWSP_2	Universal wiring kit 7 PIN	7	YES	YES	YES	YES	YES
SETGDWSP13_2	Universal wiring kit 13 PIN	13	YES	YES	YES	YES	YES

## DIAGRAM 2 KIT SETGDWSP13\_2 MAXI (7-13 PIN)



GDW nv

Hoogmolenweg 23/B 8790 Waregem-Belgium  
Tel: +32(0)56/60 42 12 Fax: +32(0)56/60 01 93

Rev N° : 002  
Date aprob: 07-09-2011



## COMPONENTS SUPPLIED

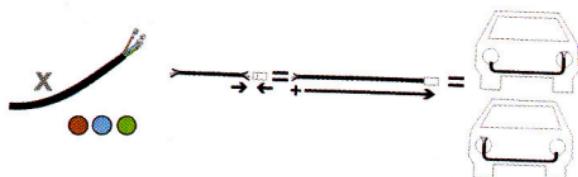
		SETGDWSP_2	SETGDWSP13_2
SETGDWSP_2	(7 PIN)	1	---
SETGDWSP13_2	(13 PIN)	---	1
7 pin 12N socket with 7-wire 1,5 m cable		1	---
13 pin 12N socket with 13-wire 1,5m cable		---	1
Screws M5x35		3	3
M5 Nuts		3	3
washers 5		3	3
Red electrical connector-shunt		12	15
Yellow electrical connector-shunt		1	1
Blue electrical connector-shunt		1	2
6 m red power cable + 1m white cable		1	1
5m red power cable			1
3-wire 3m cable (green, brown, blue)		1	1
6-wire 0,80m cable for signal input installation		1	1
Fuse holder with 15A fuse		1	2
Self-adhesive fastener		1	1
Installation instruction/manual		1	1
300x4 cable straps		2	2
100x2,5 mm cable straps		7	8
Terminal 8 mm		1	2
buzzer		1	1
4-wire cable for buzzer/parktronic		1	1
4-wire cable for fog light switch		1	1

## INSTALLATION INSTRUCTIONS

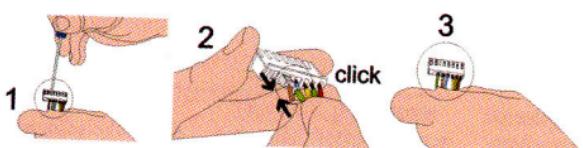
1. Before you begin, read the installation instructions carefully and check if all components are supplied.
2. Make sure that the circuits are disconnected, isolated and safe to start work, always following the instructions provided by the vehicle manufacturer.
3. The circuit has to be supplied from an independent power point on the car using sections that are suited to the maximum consumption of the trailer and always placing the fuse holder as close as possible to the battery or power source.
4. Place the socket holder (7 PIN) (13 PIN) on the socket holder of the tow bar and run the 7-wire cable to the inside of the vehicle in order to connect with the module. Fasten the cable to the tow bar with the cable straps.



5. Connect the white earth wire with the terminal to an earthing point in the vehicle, make sure the connection is clean and free of grease.
6. Connect the wires with the red electrical connector-shunts to the wiring of the vehicle's light units. Connect two side lights, the stop light, the fog light and both flashing lights or indicators. In case of the wiring kit 13 pin a connection of the rear light is also needed.
7. This wiring kit has an additional 3-wire cable (2,3m) (green, brown, blue) in case there has to be made a connection on the other side of the vehicle. Therefore remove the 3 pins (green, brown, blue) in the 7 pin socket and replace them by the long wire placing the colours on the same position.



IF THE CABLE IS TOO SHORT, THEN USE CABLE X



8. Connect the 6-wire cable in the 8 pin socket attached to the vehicle, following diagram 2.
9. Attach the module SETGDWSP\_2 with the self-adhesive part « Q » to the vehicle on a dry and ventilated place. Avoid tension on the wires between the module and the light units.
10. Bring the fuse (15A) in the fuse holder, attach this one to the red cable connected to the power source. Check if everything is connected.

**• Attention:** Before you place the socket of the trailer or caravan on the tow bar you have to make sure that all lights of the trailer or caravan are really working. If you use a voltage searching device or voltage meter in order to check the correct connection, please keep in mind that some devices might give false readings or a wrong measurement. Use a testing box which imitates the consumption of the trailer or caravan.

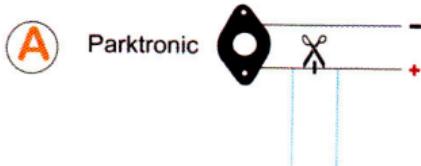


- For vehicles equipped with the replacement lighting system (e.g. if a sidelight bulb fuses, the brake light performs this function), it is necessary that all bulbs of the vehicle work properly, so the lights on the trailer will also work.
- Further it is necessary to also have the lights of the trailer or caravan in perfect condition, in order to prevent that the electronic module of the wiring kit activates a wrong lamp when the indicators are disconnected or in case of lamp failure.
- The installer has to place the electronic module so it is protected from water or moisture, since it has inside a little signal to detect if the trailer is connected or not. The signal might wrongly interpret contact with water as the trailer being connected, while this is not the case.
- Installer and customer both have to make sure that the consumption of trailer clearance and side lights is well distributed in the two channels and there is no overload in either of the channels that could cause damage to the module.

## SPECIAL CASES

---

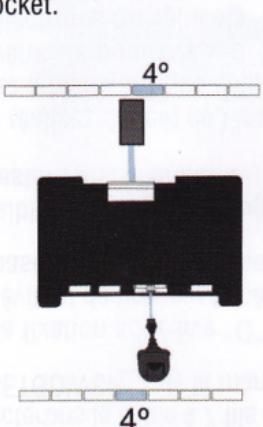
- **Multiplexed system:** when there are two functions on one lamp (e.g. sidelight and brake light or sidelight and fog light) both wires covering these functions (sidelight and brake light or sidelight and fog light) have to be connected on the same wire. The module will recognize the difference between both functions.
- **C2 (WARNING LAMP FAILURE):** The module SETGDWSP\_2 version MAXI detects a lamp failure of a flashing light or sidelight by emitting a warning beep, in case of the flashing light the sound signal is transmitted on the frequency of the flashing light, in case of the sidelights you each time hear the sound signal for some time when you turn on the lights. If a lamp on the flashing light of the trailer has a failure, the function is replaced by the lamp of the sidelight.
- **DISCONNECTION OF THE PDC OR PARKTRONIC :** Disconnection of the PDC or Parktronic will be performed by disconnecting the buzzer or removing the power supply from the vehicle module, for which the module provides two contacts opening when the trailer is attached and the vehicle is in the reverse gear. When the power supply is removed from the module, there has to be checked if there are no other functions connected to the module.
- **CONNECTION OF THE FOG LIGHT:** Thanks to the module SETGDWSP-2 MAXI the fog lights can be switched or activated either by positive or by earth:



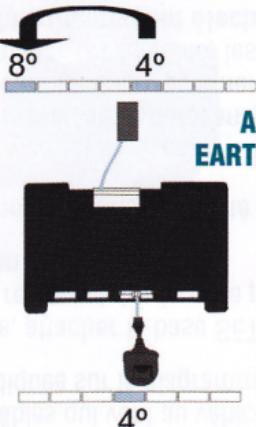


- OPTION 1<sup>a</sup> fog light activated by positive.
- OPTION 2<sup>a</sup>: fog light activated by earth. In that case we take the incoming signal (blue wire) from position 4 to position 8 by pushing on the contact with a fine point to make the wire coming out of the socket. To ensure that the signal also reaches this position you have to turn on the beam lights before you place back the socket.

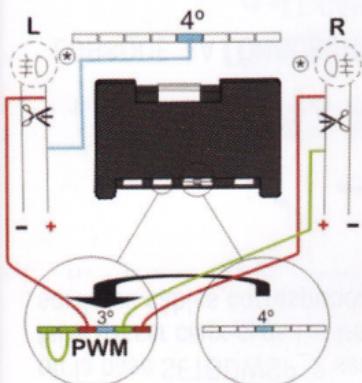
**ACTIVATED BY POSITIVE**



**ACTIVATED BY EARTH (NEGATIVE)**

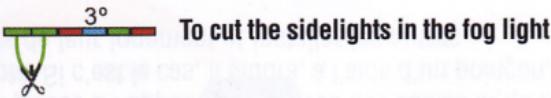


- DISCONNECTION OF THE FOG LIGHTS: At the connection of the fog lights has to be checked whether the connection point to the vehicle is compatible with the socket of the trailer. Since the module switches automatically between the voltages it is important to verify if no failures are generated when the fog lights are connected.



### **SWITCHING OF FOG LIGHT (OPTION)**

**PWM: SIDELIGHTS AND FOG LIGHT HAVE THE SAME CABLE PWM**



### **IMPORTANT**

- The maximum voltage of 15V cannot be surpassed.
- Maximum load on the exits is 6A.
- The total maximum voltage cannot exceed 15A.
- Supports short-circuit at the exit (temporarily, it is not continuous).
- Supports reversed polarity (temporarily, not continuously)
- Working temperature between 20° and 50°.