

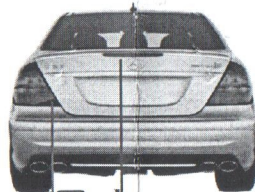
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# Lights Sender 2

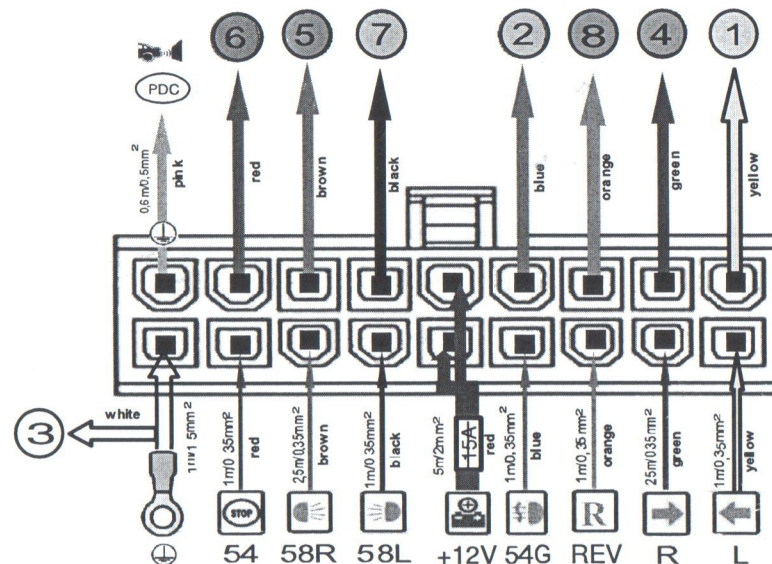
Universal towbar module for wiring 13pin

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CE   
 EEC-89/336 / 94/20/CE

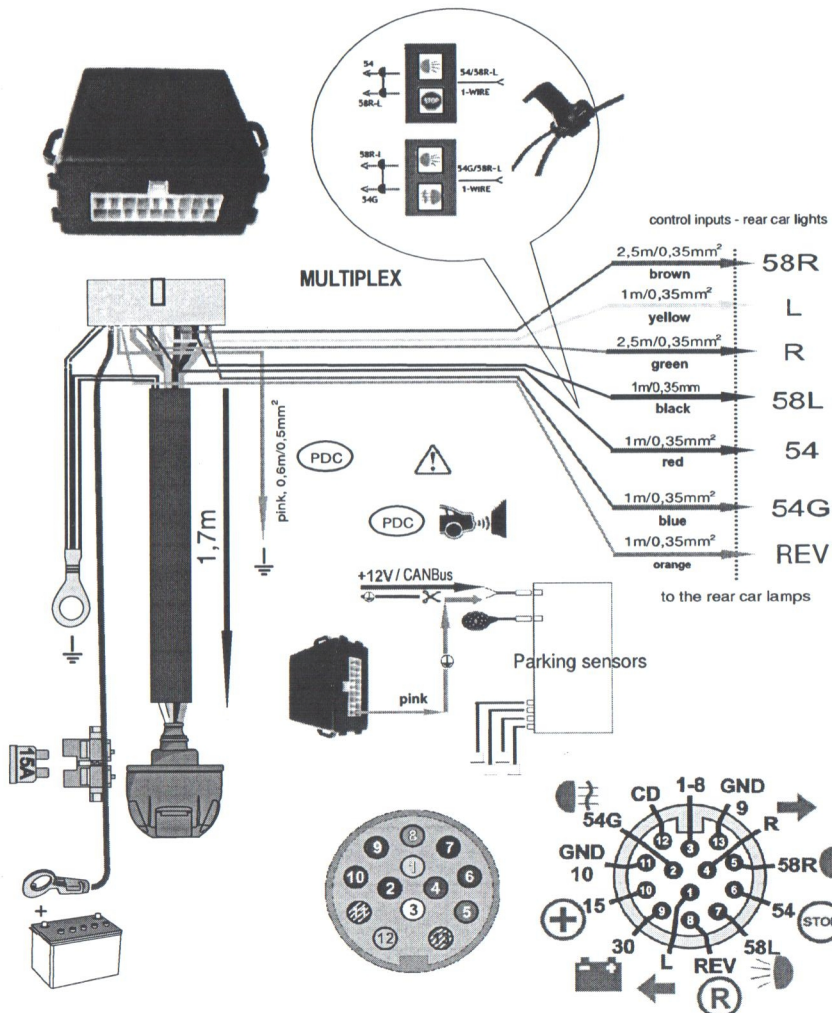


MULTIPLEX VW / MERCEDES



Output cables (to 13-pin trailer socket)

Functions	Power	DE	ES	FR	EN	IT	PL	SE
← 1 (L)	Min 5 W Max 21W	gelb	amarillo	jaune	yellow	giallo	żółty	gul
→ 2 (54g)	Min 5 W Max 42 W	blau	azul	bleu	blue	blu	niebieski	blå
⊖ 3 (31)	Ground	weiß	blanco	blanc	white	bianca	biały	vit
→ 4 (R)	Min 5 W Max 42 W	grün	verde	vert	green	verde	zielony	grön
☀ 5 (58-R)	Min 5 W Max 20 W	braun	marrón	marron	brown	marrone	brązowy	brun
STOP 6 (54)	Min 5 W Max 42 W	rot	rojo	rouge	red	rosso	czerwony	röd
☀ 7 (58-L)	Min 5 W Max 20 W	schwarz	negro	noir	black	nero	czarny	svart
→ 8 (REV)	Min 5 W Max 42 W	orange	naranja	orange	orange	arancia	pomarańczowy	apelsin
⊖ PDC	Park distance control	rosa	rosado	rose	pink	rosa	różowy	rosa



# Lights Sender 2-C2

## 13-Pin Universal Towbar Wiring Kit



micromel.pl

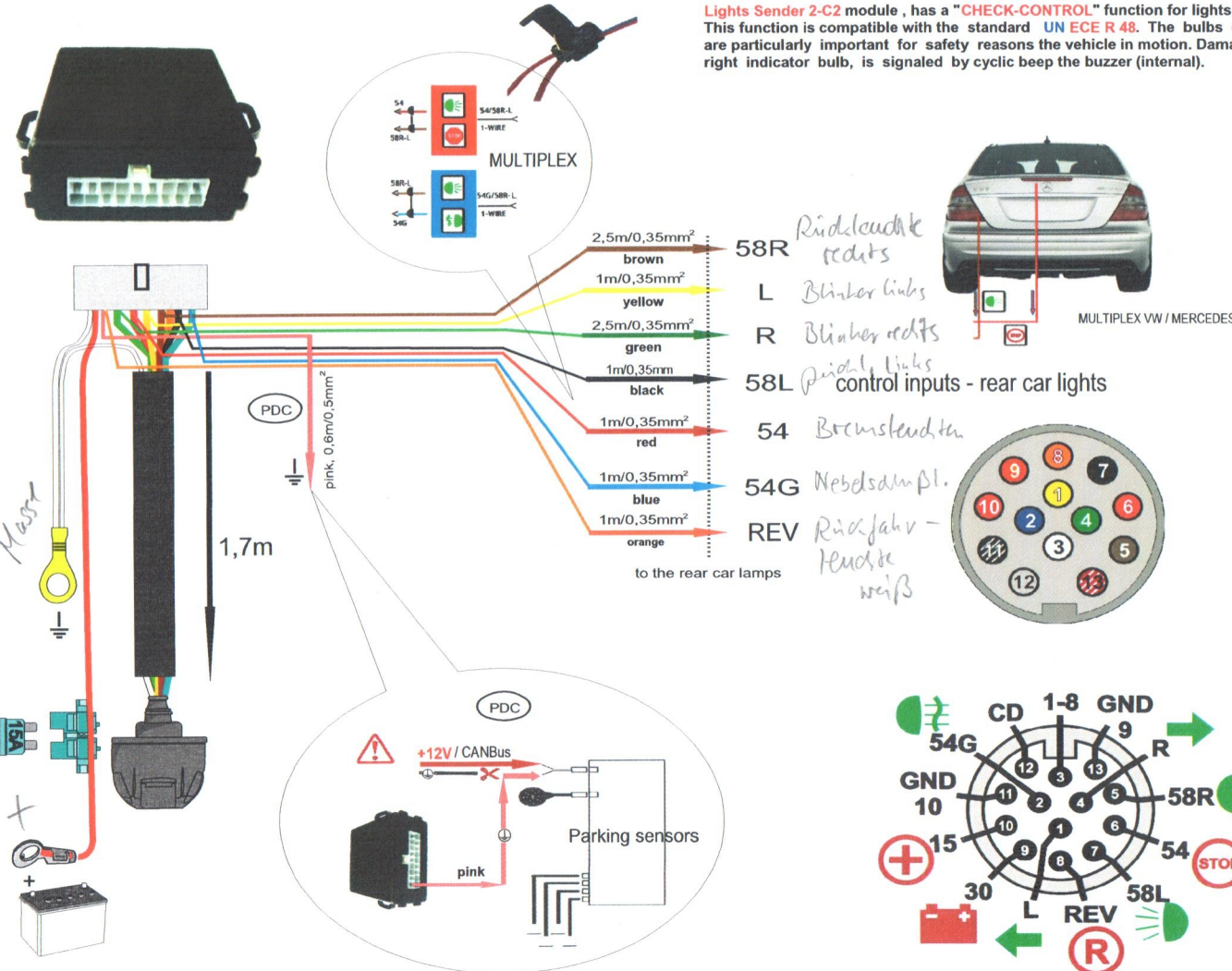
Electronic module „Lights Sender, type: 2”, is designed for electrical installation 12V, for connect to 13 pin socket installation, for hook installation in cars, which have, computers lighting control, designed to:

- power and diagnostics bulbs in lamps,
- for control LEDs lamps,
- PWM (monofilaments bulbs, the implementation of the function: STOP / POSITION, POSITION / FOG).

The module is characterized, low current for inputs (1mA), which is not detection by the computer vehicle. The module, off loads the lighting of the vehicle and protect the computer from damage (which can occur, as a result of direct connect circuit of trailer lighting).

The module performs the function of handling parking sensors. When the trailer is disconnected, the module gives ground (max 2A – pink wire), she must power the system parking sensors, and by connecting the trailer, this ground for sensors parking is disconnected.

Lights Sender 2-C2 module, has a "CHECK-CONTROL" function for lights on the trailer. This function is compatible with the standard UN ECE R 48. The bulbs of indicators, are particularly important for safety reasons the vehicle in motion. Damage of left or right indicator bulb, is signaled by cyclic beep the buzzer (internal).



Technical specification:	
power supply voltage:	12V/+ - 30%
input current	1mA
max output current	10A

### Output cables (to 13-pin trailer socket)

Functions	Pin	Power	(D)	(ES)	(F)	(GB)	(IT)	(PL)
←	1 (L)	Min. 5 W. Max 21W.	gelb	amarillo	jaune	yellow	giallo	zółty
↔	2 (54g)	Min. 5 W. Max. 42 W.	blau	azul	bleu	blue	blu	niebieski
⊥ (1-8)	3 (31)	Ground (circuit 1-7/8)	weiß	blanco	blanc	white	bianca	biały
→	4 (R)	Min. 5 W. Max 42 W.	grün	verde	vert	green	verde	zielony
☀	5 (58-R)	Min. 5 W. Max. 20 W.	braun	marrón	marron	brown	marrone	brązowy
STOP	6 (54)	Min. 5 W. Max. 42 W.	rot	rojo	rouge	red	rosso	czerwony
☀	7 (58-L)	Min. 5 W. Max. 20 W.	schwarz	negro	nolr	black	nero	czarny
↔	8 (REV)	Min. 5 W. Max. 42 W.	orange	naranja	orange	orange	arancia	pomarańczowy
⊕	9 Constant plus	Max 20A	rot/schwarz	negro/rojo	rouge/nolr	red/black	rosso/nero	czerwono/czarny
⊖	10 Charging line	Max 15A	-	-	-	-	-	-
⊥ (10)	11 Ground (circuit 10)	-	-	-	-	-	-	-
🚛	12 Trailer identification	-	-	-	-	-	-	-
⊥ (9)	13 Ground (circuit 9)	-	-	-	-	-	-	-
⊥ (PDC)	Park distance control	GROUND max 2A	rosa	rosado	rose	pink	rosa	różowy



## Übersicht über die dreizehn Pole (DIN 11446\*)

Pin	Funktion	Farbe	Leiterstärke (mm)
1 / L	Fahrtrichtungsanzeiger links	Gelb	1
2 / 54g	Nebelschlussleuchte	Blau	1
3 / 31	Masse	Weiß	1,5
4 / R	Fahrtrichtungsanzeiger rechts	Grün	1
5 / 58R	Rückleuchte rechts	Braun	1
6 / 54	Bremsleuchten	Rot	1
7 / 58L	Rückleuchte links	Schwarz	1
8	Rückfahrleuchte	Rosa	1
9	Allg. Stromversorgung	Orange	2,5
10	Ladeleitung	Dunkelgrau	2,5
11	Masse (Pin 10)	Weiß/Schwarz	2,5
12	Anhängenerkennung	Hellgrau	Kann variieren
13	Masse (für Pin 9)	Weiß/Rot	2,5

### Zusätzl. Pol (optional)

14 / 2a	Nebelschlussleuchtenabschaltung	Grau
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\*Spezifiziert einen dreizehnpoligen Kabelsatz für eine 12-Volt-Anlage.