

# LightMate II user manual

## TRAILER TESTER TRAILER SIMULATOR

User manual  
Gebruikershandleiding  
Gebrauchsanleitung  
Mode d'emploi



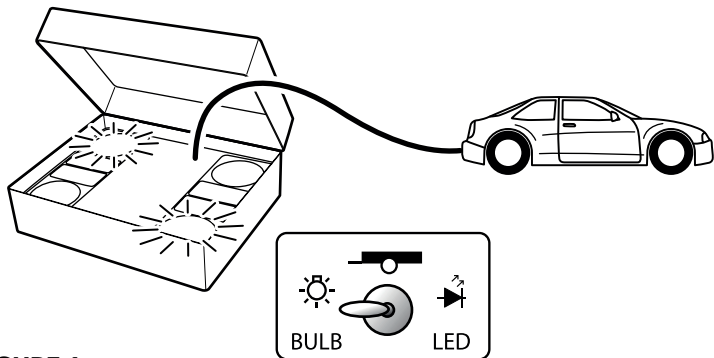
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For vehicles with 7 / 13 pole socket and  
Trailers / caravans with 7 / 13 pole plug  
According to ISO 1724 and DIN 11446



Warning: Multicon and WeSt  
connections systems are not supported

## TRAILER TEST / TRAILER SIMULATOR / SELF TEST



### TRAILER SIMULATOR

- Bulb lighting on trailer
- LED lighting on trailer

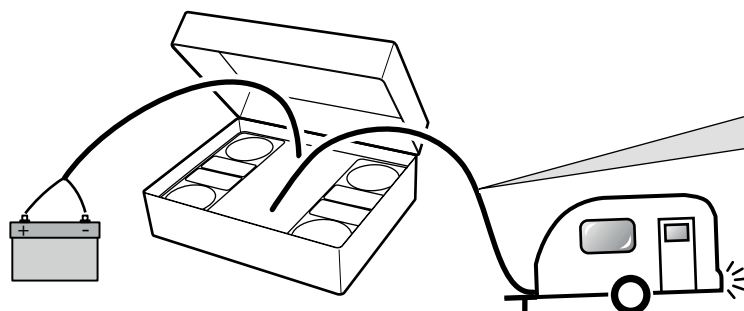


FIGURE 2

### TRAILER TEST

#### Optional

Extension cable 10 meter (Not supplied)  
Part No.: SP-128-ZZ

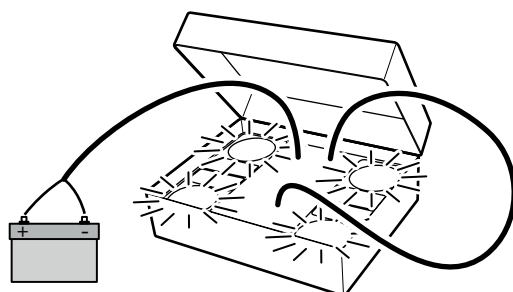


FIGURE 3

### SELF TEST

# CONTROL PANEL

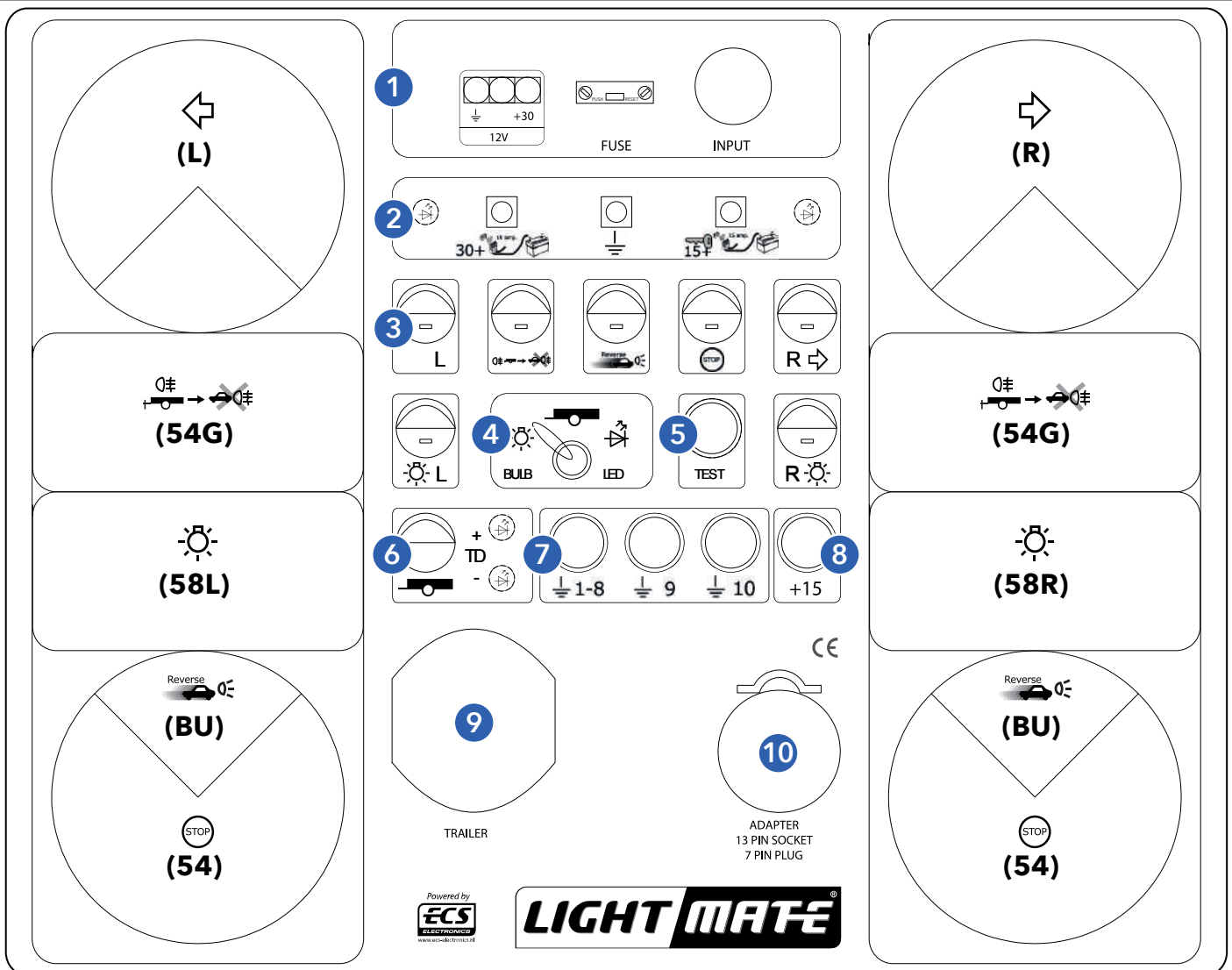
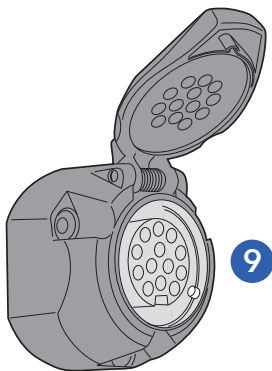
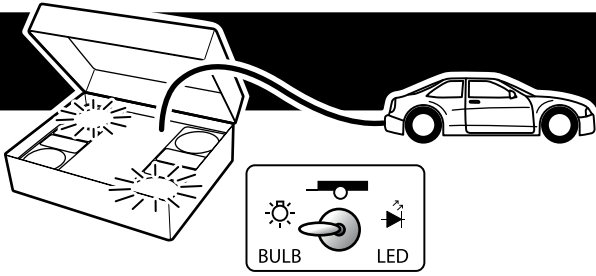


FIGURE 4

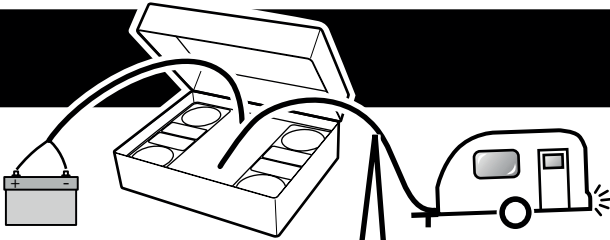


## Functie overzicht

- 1 Automatic fuse, external power and Input Cable with 13-pole plug
- 2 Test points and power indicators
- 3 Light switches
- 4 BULB-LED select switch
- 5 Button for self test
- 6 Trailer detection
- 7 Ground test buttons
- 8 Switched power button
- 9 13-pole output socket acc. DIN 11446
- 10 13>7 pole adapter



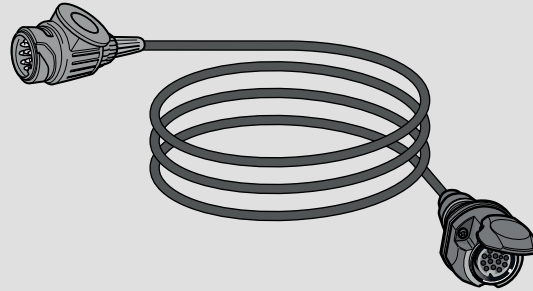
- Connect 13-pole plug to 13-pole socket of vehicle. Make use of 13>7-pole adaptor if necessary.
- LED +30 (2) will light up when power supply on 13-pole vehicle socket is connected. Not applicable by 7-pole vehicle socket.
- Put all light switches (3) in on position. BULB /LED Switch (4) in desired position. To check if vehicle is capable to control LED lighting on a trailer, use LED position (4).
- Start the engine. LED +15 (2) will light up when ignition power supply on 13-pole vehicle socket is connected. Not applicable by 7-pole vehicle socket.
- Switch vehicle parking lights on. Push earth buttons (7) two by two to check the three earth connections. The earth button not pressed is checked. Only applicable by 13-pole vehicle socket with the 3 earth wires connected. Stop the engine.
- By 7 pole vehicle socket just push earth button 1-8 (7) to disable earth. Parking lights on the tester will switch off.
- Check all taillight functions by switching on the vehicle taillight functions one by one.
- To simulate trailer recognition, switch TD switch to on (6).
- To test C2 function (indicator control) switch on the left hand indicator of the vehicle. To simulate a broken trailer lamp, switch off the L (3). If the vehicle and the towbar wiring kit have a C2 function, this function will now be activated. The 'broken' trailer lamp will be detected by the vehicle (buzzer, indication on the dashboard etc.). Repeat the above procedure for the right hand indicator.
- To check the rear fog light cut off, switch on the rear fog light of the vehicle. Now disable the trailer rear fog light (by using the switch (3) on the LightMate). The rear fog light on the LightMate will switch off, on the vehicle the rear fog light will be switched on.



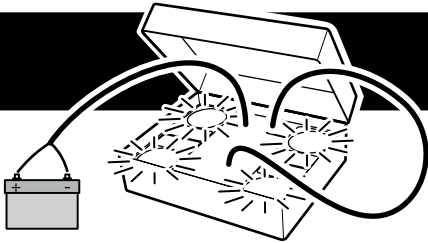
## Optional

Extension cable 10 meter  
(Not supplied)

Part No.: SP-128-ZZ

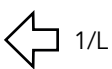

















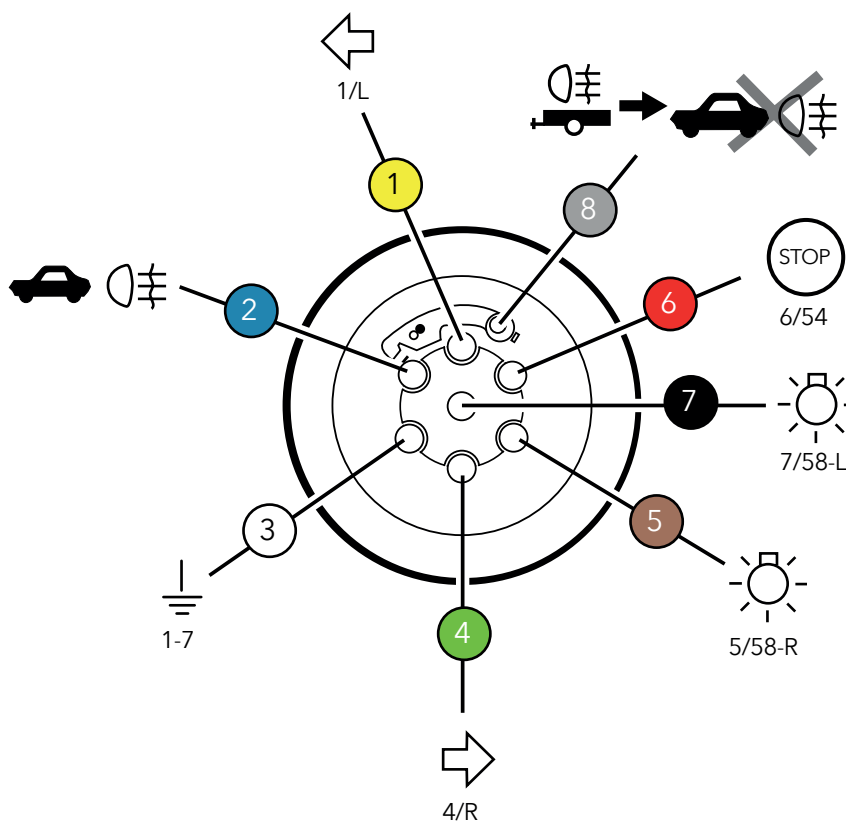
- Put all light switches (3) in the off position. Set the BULB /LED Switch (4) to the BULB position.
- Connect external power cable to a 12 V battery or Power pack 12V/15A (1).
- In case of a trailer with appliances or interior lighting, switch off all the loads.
- LED +30 (1) will light up. If not check the automatic fuse by pushing the button.
- Connect trailer plug to the socket (9). Make use of 7>13-pole adaptor if necessary. (Not supplied)
- Switch 58L (Pin 7) and 58R (Pin 5) lights on. Push earth button 1-8 (7) to disable earth for trailer lights. The lights 58L and 58R on the trailer will switch off.
- Push earth button 9 (7), to disable earth for 12 V power supply (+30) in Caravan. Only applicable by 13-pole.
- Push +15 button (8) for 12 V ignition controlled power supply (+15) in caravan. LED +15 (2) will light up. Only applicable by 13-pole.
- Push earth button 10 (7) together with button +15 (8), to disable earth for 12 V ignition controlled power supply (+15) in caravan. Only applicable by 13-pole.
- Check all taillight functions by switching trailer taillight functions one by one (3).
- Trailer recognition indication (+TD or -TD (6)). The LED's will indicate if a trailer recognition is connected. Only applicable for vehicles / trailers with this function used. Trailer recognition to earth (-TD) is normally used.
- In case of a short circuit in the trailer harness the automatic fuse will switch off. Fix this problem first before continuing testing. (The fuse can be switched on after a cooling period.)



- Connect external power cable to a 12 V battery or power pack 12V/15A (1).
- LED +30 (2) will light up. If not please check the automatic fuse
- BULB /LED Switch (4) in BULB position.
- Put all light switches (3) in the on position.
- Push the test button for a maximum of 30 seconds (5)!
- If OK, All lamps will light up.
- If Not OK, replace the broken lamp(s).
- Put all light switches (3) in the off position and put the TD switch (6) in on position.
- Connect the 13-pole plug of the tester into socket (9).
- If the tester has no failures all LED's in the switches (3) will light up including the TD-LED (9).
- Disconnect external power cable.
- Disconnect the 13-pole plug.

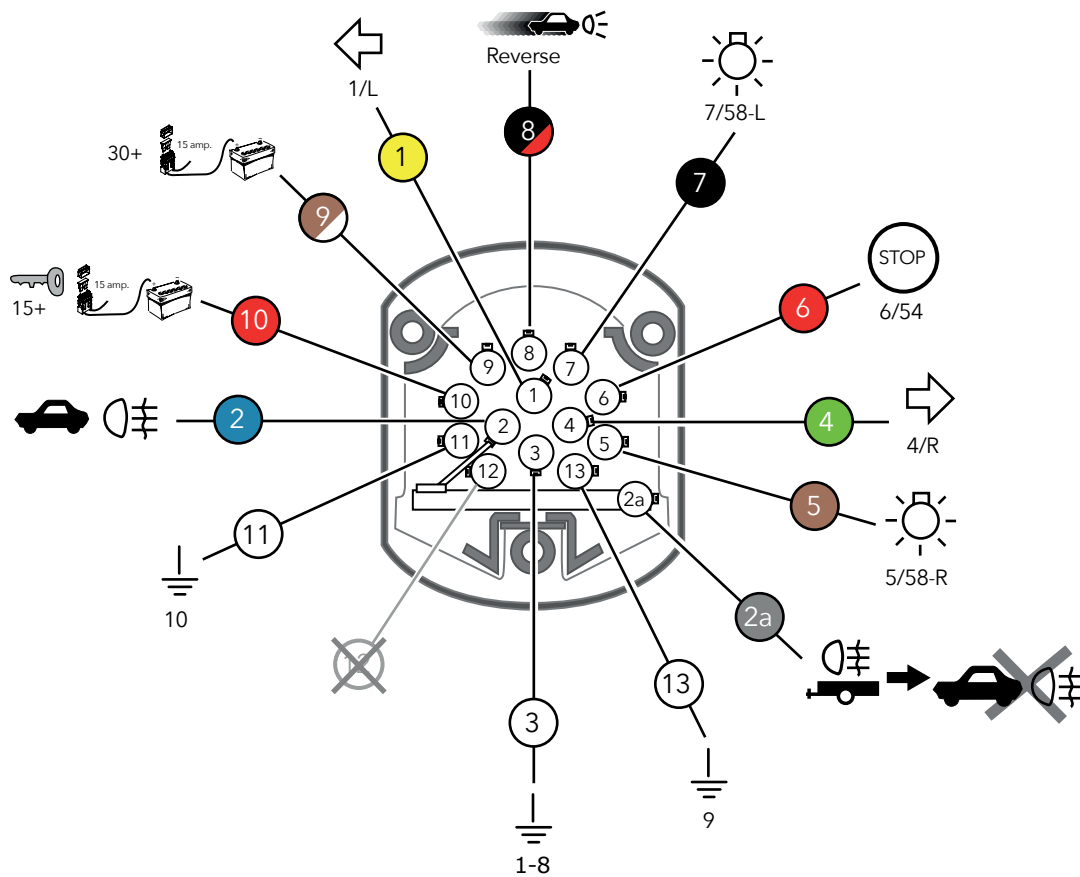
# SOCKET CONNECTION DIN/ISO 1724

1	 1/L	 Yellow
2		 Blue
3	 1-7	 White
4	 4/R	 Green
5	 5/58-R	 Brown
6	 6/54	 Red
7	 7/58-L	 Black
8		 Grey



# SOCKET CONNECTION DIN/ISO 11446

1	1/L	Yellow	8	Reverse	Black/Red
2	Car Horn	Blue	9	30+ 15 amp.	Brown/White
2a	Car Horn	Grey	10	15+ 15 amp.	Red 2,5mm <sup>2</sup>
3	1-8	White	11	10	White
4	4/R	Green	12		
5	5/58-R	Brown	13	9	White
6	6/54	Red 1mm <sup>2</sup>			
7	7/58-L	Black			





## GENERAL DESCRIPTION

Applications	for vehicles with 7 / 13 pole socket and trailer/caravan with 7 / 13 pole plug according ISO 1724 and DIN 11446
Supply voltage	9 .. 15 V
Maximum supply current	10A, fused (automatic)
Maximum load	L and R (Flasher) : 21W, each 58L and 58R (Tail) : 21W, each 54 (Brake) : 2 x 21W 54G (Fog) : 1 x 21W BU (Back Up) : 1 x 21W
Case dimensions	450 × 510 × 165 mm
Weight	6,5 kg
External power cable	1,50 Meter with cable clamps
Adapter	13>7-pole acc. DIN 11446 > ISO 1724
Extra features	fused in case off wrong connection Bulb or LED simulation test Self test
Disclaimer:	The LightMate is made for functional testing only. Don't use the tester for duration tests.

# TRAILER SOCKET CHECK LIST

(make copy before use)

Vehicle model: .....

License plate: .....

Date: .....

Checked by: .....



LightMate connected to vehicle



LED 30+ lights up (not applicable by 7-pole)



LED 15+ lights up (not applicable by 7-pole)



Earth check circuit 9 (not applicable by 7-pole)



Earth check circuit 10 (not applicable by 7-pole)



Earth check circuit 1-8



Left hand indicator



Right hand indicator



Stop lamp



Left hand tail lamp



Right hand tail lamp



Trailer recognition (if applicable)



C2 function (indicator control) left hand



C2 function (indicator control) right hand



Rear fog light cutoff