

**LEGEND:**

- F1: 5A fuse connected to the vehicle battery to power the side marker lights (only with NE185 shunt)  
 F2: 20A fuse connected to the vehicle battery to power the fridge  
 F3: 15A fuse connected directly to the service battery to power the step  
 F4: 30A fuse connected directly to the service battery to power the Webasto / Auxiliary  
 F5: 15A fuse connected to lights master switch to power the group of lights\_1  
 F6: 15A fuse connected to lights master switch to power the group of lights\_2  
 F7: 10A fuse connected directly to the service battery to turn on the fridge and heater and to the pump switch to power the water pump  
 F8: 10A fuse connected directly to the service battery to the external light and courtesy light switch  
 F9: 15A fuse connected to the AUX switch

**OPERATION:****Power activated from control panel:**

The outputs for internal lights (lights\_1 and lights\_2), external light, pump, aux. and heater control are activated directly by the relevant keys on the control panel.

- The external light goes out automatically when the engine is running
- If the service battery voltage remains under 10V for over a minute, the NE148/NE185 shunt automatically turns off all the power for lights, pump, aux. and heater. To recharge press the relevant keys on the control panel. If the battery is still under 10V, it will be deactivated again after one minute.

**Services activated by D+: with NE148 shunt**

The coupler relay and fridge relay are enabled only if there is the +Key signal (or +alternator) and if the starter battery exceeds 13.0 V. They are automatically disabled by turning off the engine or when the starter battery voltage is below 12.0 V.

JP6 pin1	+vehicle battery
+12V	>13V

- The coupler relay recharges the service battery with the alternator when the engine is running.  
 The fridge relay powers the three-purpose fridge at 12V when the engine is running.  
 - If an external battery charger is used, remove the J5 bond.

**Services activated by D+: with NE185 shunt**

The coupler relay and fridge relay are enabled immediately in one of these two conditions:

 +Alternator JP6 pin1	or	 +key JP13 pin 3	 D+ JP13 pin 2
+12V		+12V	on

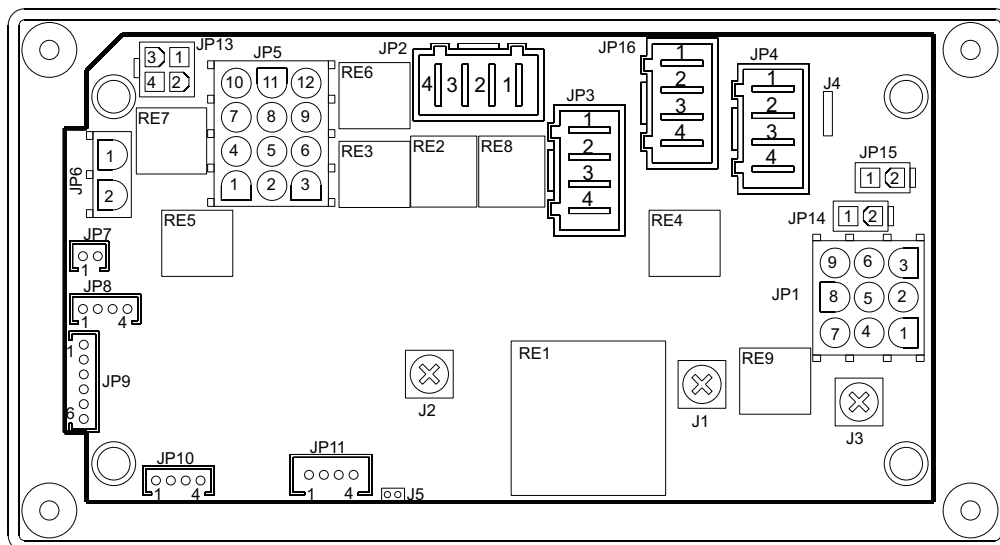
- The coupler relay recharges the service battery with the alternator when the engine is running.  
 The fridge relay powers the three-purpose fridge at 12V when the engine is running.  
 - If an external battery charger is used, remove the J5 bond.

**Side marker signal: with NE185 shunt**

The side-marker output can be activated with a negative control (negative) on the JP13 block, pin 4, or with a positive control (+12V) on the JP13 block, pin 1.

**DIMENSIONS:**

- Wall-fitted box only: (L x H) 183 x 98 mm  
 Full upright container: (L x H x P) 215 x 102 x 186 mm

**JP11: CONTROL PANEL**

4-pole connector to connect the control panel with the cable provided.

**JP9: TANKS (S1)**

1. NEGATIVE
2. 1/4 drinking water tank S1
3. 2/4 drinking water tank S1
4. 3/4 drinking water tank S1
5. 4/4 drinking water tank S1
6. N.c.

**JP7: RECYCLE TANKS (R1)**

1. NEGATIVE
2. FULL recycle tanks R1

**JP8: RECYCLE TANKS (R2-R3)**

1. NEGATIVE
2. FULL recycle tanks R2
3. NEGATIVE
4. FULL recycle tanks R3 (Not run from the NE172L control panel)

**JP10: AMPEROMETRIC SHUNT**

(Not run from the NE172L control panel)

**JP2: LIGHT OUTPUT (BLACK)**

1. NEGATIVE
2. NEGATIVE
3. LIGHTS\_1 (+) (F5 15A)
4. LIGHTS\_2 (+) (F6 15A)

**JP4: FRIDGE OUTPUT (WHITE)**

1. NEGATIVE
2. Gas ignition power supply (+) (F7 10A)
3. Fridge output (+) activated by relay (F2 20A)
4. Direct fridge output (+) (F2 20A)

**JP6: D+ INPUT, POWER MAINS ON**

1. D+ input from alternator
2. POWER MAINS ON input from battery charger

**JP5: POWER OUTPUTS**

9. Valve output (+) (F7 10A)
- 7,10. Heater control contact (Not run from the NE172L control panel)
- 1,4,5,8. AUX output (+) (F9 15A)
12. PUMP output (+) (F7 10A)
6. External light output (+) (F8 10A)
- 2,3. Courtesy light output (+) (F8 10A)
11. output step in (max 1A)

**JP3: STEP OUT, TRUMA (RED)**

1. NEGATIVE
2. NEGATIVE
3. STEP output (+) (F3 15A)
4. Webasto / Auxiliary output (+) (F4 30A)

**JP16: PREPARATION OF SOLAR PANEL (GREEN)**

1. NEGATIVE
2. Ignition (F7 10A)
3. Service BATTERY (F3 15A)
4. Auto BATTERY (F2 20A)

**JP1 : NEGATIVE**

- 1.2.3.4.5.6.7.8.9: NEGATIVE

**J1: AUTO BATTERY INPUT**

1. Input + AUTO battery (B1)

**J2: SERVICE BATTERY INPUT**

1. Input + SERVICE battery (B2)

**J3 : NEGATIVE**

1. NEGATIVE

**J4 : D+ OUTPUT**

Positive output (max. 0.5A) to activate all charges operating with engine running (e.g. fridge AES, aerial entry, discharge valves, etc.)

**J5 : COUPLER RELAY ENABLING**

When the bond is removed the shunt no longer couples the batteries with the engine running.

**Additional connections on shunt version NE185****JP13: D+ CONTROL INPUT, SIDE MARKER**

1. Side Marker positive control input
2. D+ negative control input (C036L1A -2)
3. +Key input (C036L1A -13)
4. Side Marker negative control input (C036L1A -11)

**JP15: Side Marker right output**

1. Side Marker dx output (+) (F1 5A)
2. NEGATIVE

**JP14: Side Marker left output**

1. Side Marker sx output (+) (F1 5A)
2. NEGATIVE

