



## 2. Installation Instructions

1. DO NOT remove any connections from your old board until you have fully read these instructions. This is because there are no standard wiring colours, or numbering of the connectors, on the original boards.
2. We suggest placing the new board next to the old board in the vehicle, then label and move one wire at a time.
3. Locate a wire and label it (permanent marker) with the 'P' number written on the old circuit board.
4. Look up the 'P' number in the table (on reverse) in the column for the board to be replaced.
5. Look along the row to find the letter for the AE-184 PCB.
6. Remove the wire and plug it onto the corresponding letter on the AE-184 board.
7. We have included a guide for the typical wire colour this connection might be. NOTE: this should be used as a guide only because there are no standard wire colours inside vehicles.

## 3. Optional PCB configuration changes

Some versions of the original PCBs were modified during the original vehicle installation. The AE184 has been designed to accommodate these modifications without the need of a soldering iron or drilling out tracks on the PCB:

- If the charger has a 2-pin output connector, normally with red and black wires (e.g. PS276/AE276+); connect the positive of the charger output to pin A via the loom in the PDU.
- If the charger has two 2-pin output connectors – one red/black the other yellow/black (e.g. PS301/PS306/AE301+); connect the yellow positive wire from the charger to Pin X, and the red positive wire from the charger to Pin A via the loom in the PDU. Now cut LK 2 on the circuit board.
- If there is a wire through a hole in the old circuit board then connect that wire to the Z pin and cut the link called 'D+ Link' near terminal Y.

## 4. Test Button/Fault finding

To aid in testing and fault-finding for the most common issues with the vehicle wiring, your new circuit board incorporates a test switch. When pressed, the test switch on the board will mimic the on/off function from the control panel. Pressing and holding this button will power up the board and provide power to the outputs without the control panel connected. If you only get power to the outputs when the test button is pressed, then there is a fault with the control panel or wiring. The power to the panel is on pin E and the on/off return switched 12V from the panel goes to pin F.

## 5. Wiring Tables

PCB-134-MD to AE184		
Old Pin number	New Board Letter	Circuit Function (written on circuit board)
P3	B	Fridge negative
P1	E	On/Off Master Switch
-	D	Lights ctrl
P2	F	On/Off Master Switch
P4	C	Relays negative
P5	G	Pump Pressure Switch
P6	H	Pump Switch
P7	I	Power To Pump
-	W	Perm (Alarm)
-	V	Perm (Fridge Ign+Radio)
P8	U	Leisure Battery
P11	Y	Fridge Power Out
P10	T	Fridge Power In
See	A	Charger (van)
P9	X	Charger (bat)
P12	S	Car Battery
P13	R	Lights 1
P14	Q	Lights 2
P15	P	Igniters (Hob)
P16	O	Pump/Toilet
P17	N	Auxiliaries
P18	M	Radio Feed
P19	L	Extractor Fan
P20	K	Space Heater
P21	J	Water Heater
-	Z	Alternate D+

PCB-164-MD to AE184			
Old Pin number	New Board Letter	Circuit Function (written on circuit board)	Typical Wire Colour for 164
P1	B	Fridge negative	Brown
P2	E	On/Off Master Switch	Green/Red
P3	D	Lights ctrl	Orange
P4	F	On/Off Master Switch	Red
P5	C	Relays negative	White
P6	G	Pump Pressure Switch	No Connect
P7	H	Pump Switch	No Connect
P8	I	Power To Pump	No Connect
P9	W	Perm (Alarm)	Blue
P10	V	Perm (Fridge Ign+Radio)	Grey
P11	U	Leisure Battery	Red
P14	Y	Fridge Power Out	Red
P13	T	Fridge Power In	Red
See Notes	A	Charger (van)	
P12	X	Charger (bat)	Red
P15	S	Car Battery	Green
P16	R	Lights 1	Red
P17	Q	Lights 2	Orange
P18	P	Igniters (Hob)	Black
P19	O	Pump/Toilet	Green
P20	N	Auxiliaries	Yellow
P21	M	Radio Feed	Yellow
P22	L	Extractor Fan	Blue/Brown
P23	K	Space Heater	Grey
P24	J	Water Heater	Blue
-	Z	Alternate D+	

PCB-147-MD to AE184		
Old Pin number	New Board Letter	Circuit Function (written on circuit board)
P3	B	Fridge negative
P1	E	On/Off Master Switch
-	D	Lights ctrl
P2	F	On/Off Master Switch
P4	C	Relays negative
P5	G	Pump Pressure Switch
P6	H	Pump Switch
P7	I	Power To Pump
P8	W	Perm (Alarm)
P9	V	Perm (Fridge Ign+Radio)
P10	U	Leisure Battery
P13	Y	Fridge Power Out
P12	T	Fridge Power In
See	A	Charger (van)
P11	X	Charger (bat)
P14	S	Car Battery
P15	R	Lights 1
P16	Q	Lights 2
P17	P	Igniters (Hob)
P18	O	Pump/Toilet
P19	N	Auxiliaries
P20	M	Radio Feed
P21	L	Extractor Fan
P22	K	Space Heater
P23	J	Water Heater
-	Z	Alternate D+

PCB-184-MD to AE184			
Old Pin number	New Board Letter	Circuit Function (written on circuit board)	Typical Wire Colour for 184
P1	B	Fridge negative	black
P2	E	On/Off Master Switch	red/green halves
P3	D	Lights ctrl	yellow
P4	F	On/Off Master Switch	red
P5	C	Relays negative	white
P6	G	Pump Pressure Switch	blue
P7	H	Pump Switch	yellow
P8	I	Power To Pump	dark blue/white stripe
P10	W	Perm (Alarm)	yellow/black stripe
P11	V	Perm (Fridge Ign+Radio)	green
P12	U	Leisure Battery	red
P13	Y	Fridge Power Out	red/orange stripe
P14	T	Fridge Power In	red/orange stripe
See Notes	A	Charger (van)	
P15/P9	X	Charger (bat)	red/yellow
P16	S	Car Battery	light green
P17	R	Lights 1	blue/brown stripe
P18	Q	Lights 2	black/green halves
P19	P	Igniters (Hob)	orange
P20	O	Pump/Toilet	purple
P21	N	Auxiliaries	yellow
P22	M	Radio Feed	dark blue
P23	L	Extractor Fan	light blue/red stripe
P24	K	Space Heater	orange/green halves
P25	J	Water Heater	dark blue
P100	Z	Alternate D+	