



INSTALLATION

DBE180-SX/DBE180-SX+

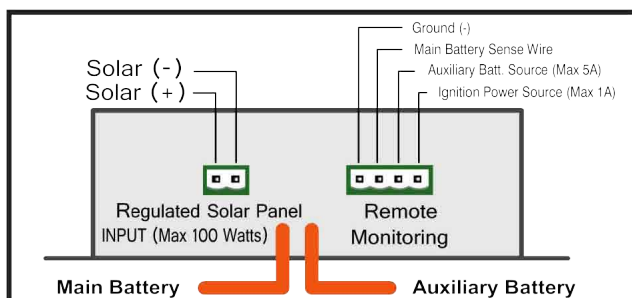
MOUNTING AND WIRING

1. Mount the isolator high up in the engine bay away from moisture and any source of external heat (eg. Exhaust system).
2. Make sure that the cable entry holes on the isolator are pointing downwards.
3. **For IGNITION SENSE Function** - Connect WHITE wire to a 12 Volt ignition switched power source. (12V side of ignition switch or wiper motor circuit.)
4. **For BATTERY VOLTAGE SENSE Function** - Connect BLACK & WHITE wire to a good engine or chassis EARTH.
5. Connect the marked main battery cable to the positive terminal of the MAIN battery. For the isolator to function properly, the MAIN battery voltage must achieve at least 13.4V when the engine is running in its normal state.
6. Connect the AUXILIARY battery cable to the positive terminal of the AUXILIARY battery.
7. Ensure AUXILIARY battery is correctly earthed.

TESTING PROCEDURE

After mounting and wiring, to test if the unit is operating:

1. Remove the AUXILIARY cable (check writing on cable) from the AUXILIARY battery.
2. Install test light between AUXILIARY cable and EARTH.
3. Start the vehicle.
4. The test light should come on as soon as the main battery voltage exceeds 13.4 Volts. This could be within 1 sec. to 6 min. and the LED on the isolator should be GREEN. If not, check that the voltage of the MAIN battery is at least 13.4V.



SEE OVER FOR DETAILED WIRING DIAGRAMS

LED LIGHT OPERATION DBE180-SX/DBE180-SX+

- Auxiliary not charging
- Auxiliary is in charging mode
- Auxiliary charging from main & solar
- Auxiliary charging from solar
- Auxiliary not charging. Will reboot when safe to do so. If condition persists then the **VPF mode is activated**

Vehicle Protection Feature (VPF)

The "VPF" function is there to protect your vehicle electrics and may indicate

- Auxiliary battery has developed a fault
- Either the auxiliary battery earth or the DBE180-SX earth has been compromised, check and redo earths.

After rectifying problem, reboot the DBE180-SX by disconnecting power in and out and disconnect small earth and ignition wire. Wait 10 minutes and reconnect. Unit will reboot and go to green.

SPECIFICATIONS DBE180-SX/DBE180-SX+

PART NO.	DBE180SX
TYPE	VOLTAGE SENSING ISOLATOR
CUT IN VOLTAGE	13.4V
CUT OUT VOLTAGE	12.8V
CHARGING SYSTEM	SUITABLE FOR UP TO 180 AMP
DIMENSIONS	140mm 112mm 42mm 68mm
WEIGHT	600 GRAMS (WITH CABLES)
CURRENT LIMITING	ELECTRONIC
SPIKE/SURGE PROTECTION	BUILT IN
STARTING	MAIN BATTERY ONLY
LED INDICATOR	See Flyout
CASE	NYLON
CABLES (BATTERY)	HEAVY DUTY WITH STRAIN RELIEF
MOUNTING KIT SUPPLIED	3M + 3M BATTERY CABLE, EARTH STRAP, M11 BRASS BATTERY TERMINALS & MOUNTING HARDWARE
INPUT	SOLAR CHARGING (AUX. BATTERY) 100W MAX
OUTPUT	DIRECT TO MONITOR
MANUFACTURE	AUSTRALIAN STANDARD ISO9002
CALIBRATION	FACTORY CALIBRATED FOR LIFE
CURRENT DRAW	CHARGING 500mA / STANDBY 30mA



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AUSTRALIAN DESIGNED, MADE & OWNED

Piranha use & recommend:

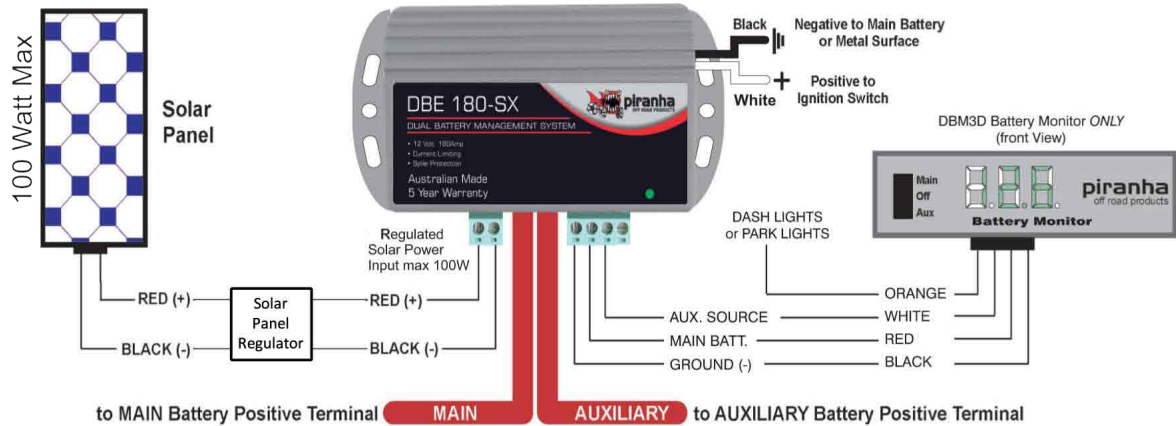


WIRING DIAGRAMS

DBE180-SX & DBE180-SX+

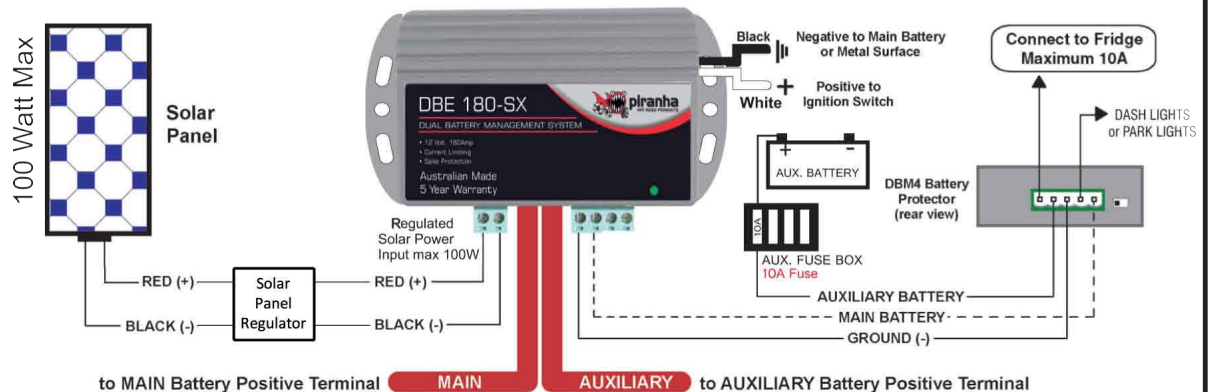
DBE180-SX(+) & DBM3D

WIRING DIAGRAM DBM3D Battery Monitor



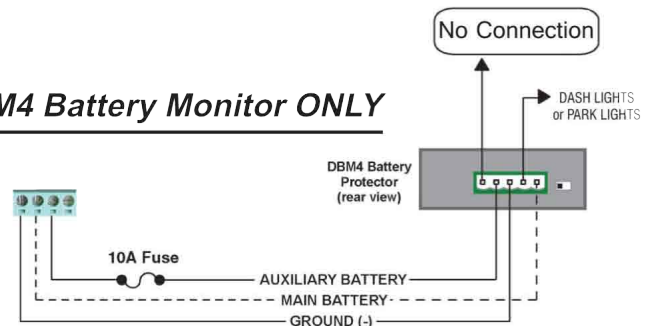
DBE180-SX(+) & DBM4

WIRING DIAGRAM DBM4 Battery Protector (Monitor)



WIRING DIAGRAM (Alternative) DBM4 Battery Monitor ONLY

If you prefer, or do not have an auxiliary battery fuse box, the DBM4 can be mounted directly to the DBE180-SX+ and used as a monitor only.



WARNING:

- DO NOT exceed the 5A Limit when connecting a device to the 'Auxiliary Battery' position of the DBE180-SX 4-terminal connector. Exceeding the 5A Limit will cause damage to the DBE180-SX.
- Winching may overload your vehicle's alternator and charging system. DO NOT winch from the Auxiliary Battery! Consult the owner's manual of the winch. A dual battery kit does not necessarily protect you from overloading the vehicle's charging system. Consult your Piranha dealer for specific information on this issue.
- If using DBM4 Battery Protector with the low voltage cut out - it is necessary to follow the DBM4 protector wiring diagram precisely.