

ARB FITTING INSTRUCTIONS

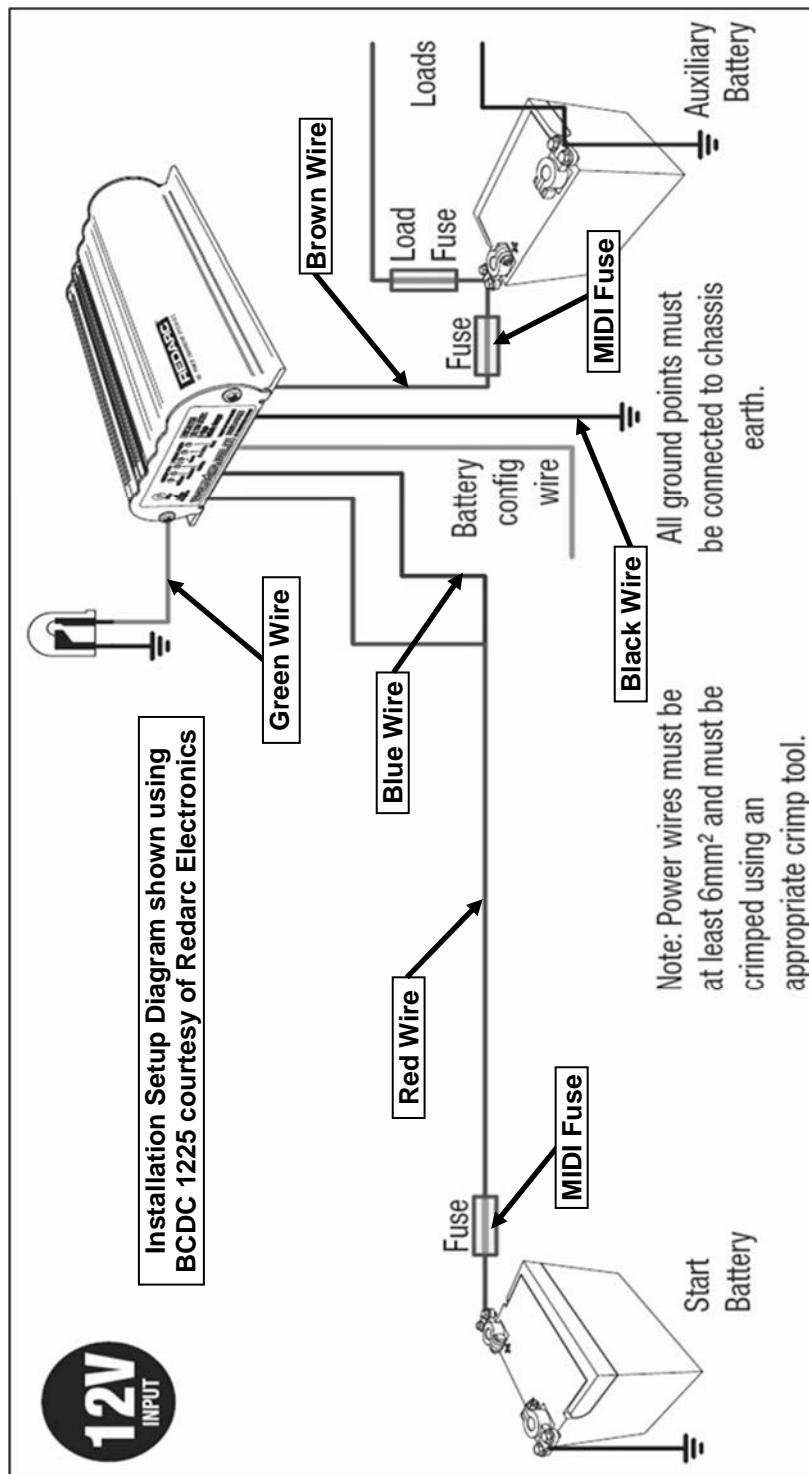
Part Number: **4300020**
 Product Description: **WIRING KIT with MIDI Fuses to suit BCDC in ARB BATTERY TRAYS**

- Before commencing work, please take note of the following points:
- This product must be installed exactly as per these instructions using only the hardware supplied
 - It is recommended that this product is only installed by trained personnel
 - These instructions are correct as at the publication date. ARB Corporation Ltd. cannot be held responsible for the impact of any changes subsequently made by the vehicle manufacturer
 - During installation, it is the duty of the installer to check correct operation/clearances of all components
 - Work safely at all times
 - To avoid a potentially hazardous situation when fitting this product, it is suggested that protective safety gear including eye protection be worn and safe work practices be employed
 - **CAUTION: Securely fasten all wires away from any hot, sharp or moving surfaces. DO NOT fasten wires to brake or fuel lines**

REQUIRED TOOLS FOR FITMENT OF PRODUCT:

BASIC METRIC SPANNER AND SOCKET SETS	PVC INSULATION TAPE
SIDE CUTTERS & PLIERS	SOLDERING IRON, SOLDER & HEAT GUN

ITEM	DESCRIPTION	CONTENTS
1	BCDC Input	6 metres of Red Wire with $\phi 5\text{mm}$ ring terminal on one end
2	BCDC Source Select	6 metres of Blue Wire with $\phi 8\text{mm}$ ring terminal on one end
3	Fuse to Input Fuse to Output	(2X) 0.3metres of Red Wire with $\phi 8\text{mm}$ and $\phi 5\text{mm}$ ring terminals on either ends
4	Battery Earth to Chassis	0.75 metres of Black Wire with $\phi 8\text{mm}$ ring terminal on both ends
5	BCDC Earth	0.75 metres of Black Wire with $\phi 8\text{mm}$ ring terminal on one end
6	BCDC Output	0.3metres of Red Wire with $\phi 5\text{mm}$ ring terminal on one end
7	MIDI Fuse	(2X) 50A MIDI Fuses
8	Fuse Holder	(2X) MIDI Fuse Holders with included M5 lock nuts
9	Positive Battery Terminal	Positive Terminal Clamp to suit $\phi 8\text{mm}$ ring terminals
10	Negative Battery Terminal	Negative Terminal Clamp to suit $\phi 8\text{mm}$ ring terminals
11	Cable Tie	(15X) Cable Ties Black 200mm
12	4mm Heatshrink	0.07metres of $\phi 4\text{mm}$ black heatshrink tubing
13	8mm Heatshrink	0.2metres of $\phi 8\text{mm}$ black heatshrink tubing
14-16	Fasteners	(4X) Screw M4, Washers and lock nuts



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INSTALLATION PROCEDURE

1. Disconnect Negative Terminal of Vehicle Start Battery.
2. Connect ϕ 5mm ring terminal end of BCDC Input wire(1) to MIDI Fuse(7) in Fuse Holder(8) via M5 lock nuts.
3. Place Fuse Holder(8) near the Vehicle Start Battery and route the non-terminated end of BCDC input wire(1) towards the BCDC charger.

4. For BCDC 1220/1225/1240

Route the non-terminated end of BCDC Source Select wire(2) towards the BCDC charger. Leave enough length to attach the ϕ 8mm ring terminal to the Positive Terminal of the Vehicle Start Battery.

For BCDC 1220-IGN/1225-LV/1240-LV

Route the non-terminated end of BCDC Source Select(2) wire towards the BCDC charger. Leave enough length to attach the terminated end to a suitable +12V ignition feed.

CAUTION: Do not connect BCDC Source Select(2) wire to the battery or a +12V ignition feed at this stage.

5. Once the BCDC Input(1) and Source Select wires(2) are near the BCDC charger, cut away any excess wire from the non-terminated ends of these wires.

HINT: For best performance, BCDC Input(1) and Source Select(2) wires should be as short as practical.

6. Solder the non-terminated end of BCDC Input(1) to the Red Wire on the BCDC. Protect and cover the solder joint with 8mm Heatshrink(13).
7. Solder the non-terminated end of BCDC Source Select(2) to the Blue Wire on the BCDC. Protect and cover the solder joint with 4mm Heatshrink(12).
8. Connect the Positive Battery Terminal(9) and Negative Battery Terminal(10) onto the Auxiliary Battery.
9. Solder the non-terminated end of BCDC Output(6) wire to the Brown Wire on to the BCDC. Protect and cover the solder joint with 8mm Heatshrink(13).
10. Solder the non-terminated end of BCDC Earth(5) wire to the Black Wire on the BCDC. Protect and cover the solder joint with 8mm Heatshrink(13).

Connect the ϕ 5mm terminated end of BCDC Output(6) wire to MIDI Fuse(7) in Fuse Holder(8) via M5 lock nuts.

Connect the ϕ 8mm terminated end of BCDC Earth(5) wire to Negative Battery Terminal(10) of Auxiliary Battery or to a good earth point on the chassis.

NOTE: Do not use the vehicle tub as an earthing point.

11. The connection of the orange wire on the BCDC will vary depending on the battery type and installation location. Refer to Redarc BCDC user manual for correct connection of the orange wire.

12. If customer requires a visual indicator to show when the BCDC is charging the auxiliary battery, connect green wire to positive terminal of a LED. Connect LED negative terminal to ground. The LED can be placed inside the vehicle on the dash.

NOTE: Some BCDC models may not have this green wire.

This wire can be left disconnected if visual indicator is not required.

13. Connect ϕ 8mm terminated end of Battery Earth to Chassis wire(4) to Negative Battery Terminal(10) on Auxiliary Battery.

Connect other ϕ 8mm terminated end of Battery Earth to Chassis wire(4) to a suitable chassis ground/earth.

NOTE: Do not use the vehicle tub as an earthing point.

14. Secure Fuse Holders(8) in desired locations using supplied fasteners(14/15/16).

Near Auxiliary Battery

Connect ϕ 5mm end of Fuse to Output wire(3) to MIDI Fuse(7) in Fuse Holder(8) near Auxiliary Battery via M5 lock nuts.

Connect other ϕ 8mm end of Fuse to Output(3) wire to Positive Battery Terminal(9) on Auxiliary Battery

Near Vehicle Start Battery

Connect ϕ 5mm end of Fuse to Input(3) wire to MIDI Fuse(7) in Fuse Holder(8) near Vehicle Start Battery via M5 lock nuts.

Connect other ϕ 8mm end of Fuse to Input wire(3) to Positive Terminal on Vehicle Start Battery.

15. For BCDC 1220/1225/1240

Connect ϕ 8mm terminated end of BCDC Source Select(2) wire to Positive Terminal of Vehicle Start Battery.

For BCDC 1220-IGN/1225-LV/1240-LV

Connect terminated end of BCDC Source Select(2) to a suitable vehicle ignition feed (+12V accessories).

NOTE: You may need to cut off the ϕ 8mm ring terminal and use a suitable terminal to connect to vehicle ignition feed.

16. Reconnect Negative Terminal of Vehicle Start Battery.
17. Confirm correct operation of the BCDC by referring to the information in the Redarc BCDC user manual.