

INSTALLING A BCDC1212T TO A DUMP TRAILER

This installation guide applies to fitting a REDARC BCDC1212T battery charger (drawing up to 12 A) to a trailer equipped with an auxiliary battery. This requires a 12 V auxiliary feed through the tow-bar wiring, including socket and plug, with sufficient capacity to support the additional load.

BEFORE YOU BEGIN:

Read the BCDC1212T user manual. The manual lists various safety warnings and other information associated with product use, battery chemistry configuration, installation and battery charging.

Check that you have everything you need. Additional items are required to complete this installation, and are not included with the product. The installer must supply all parts, tools, and fasteners that are suitable for the individual installation configuration.

YOU WILL NEED:

- ▶ BCDC1212T
- ▶ 4 × ¼" (M6) bolts, washers and nuts (or equivalent)
- ▶ Fuse and fuse holder (FK30 fuse kit recommended)
- ▶ Heatshrink or electrical insulation tape (or equivalent)
- ▶ Short cable to connect fuse holder to auxiliary battery positive terminal (KIT19 recommended)
- ▶ Bolt to attach KIT19 cable to battery positive terminal

FITTING THE BCDC1212T

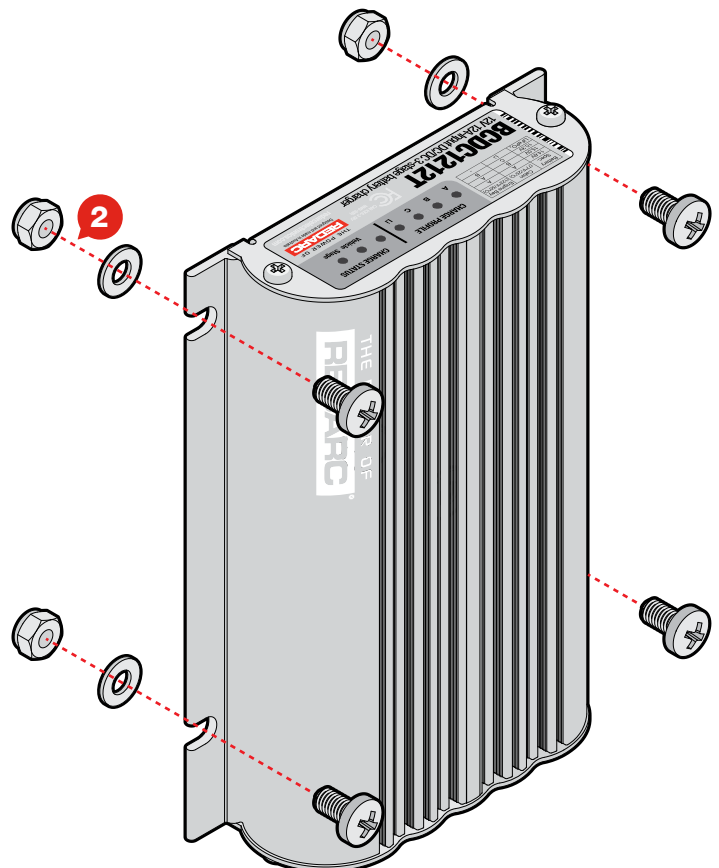
1. Identify a suitable mounting location for the BCDC1212T.

The BCDC should be located as close as possible to the auxiliary battery, within the length of the fitted **BROWN** wire. Note that a protective in-line fuse is required between the BROWN wire and the auxiliary battery positive terminal.

2. Mount the BCDC1212T to the trailer.

Fasten the BCDC1212T in a clear area using ¼" (M6) bolts, washers and nuts, drilling holes for the fasteners as needed.

Ensure that the display panel is visible for periodic operational checks (is not obscured by the trailer body or other auxiliary equipment).



WIRING THE BCDC1212T

3. Connect the BCDC BLACK (ground) wire to a suitable clean trailer ground point.

This must be a low impedance path to both the start battery (through the towing harnesses) and the auxiliary battery grounds. The auxiliary battery negative terminal is an ideal connection point.

4. Confirm the battery chemistry of the auxiliary battery.

Refer to the supplied BCDC1212T user manual to configure the **ORANGE** (profile) wire to suit your battery type:

- If it is a Lithium-based battery, connect **ORANGE** to **GREEN**.
- If it is a conventional Lead-acid battery, leave **ORANGE** and **GREEN** disconnected.

5. Connect the auxiliary battery.

- Connect the BCDC1212T **BROWN** (output) wire to a suitably rated fuse holder (REDARC part FK30 is recommended).
- Connect a short cable (KIT19 recommended) to the other side of the fuse holder and fit a suitable fuse (30 A recommended).
- Connect the other end of the short cable to the positive terminal of the auxiliary battery.

6. Configure the remaining BCDC wires.

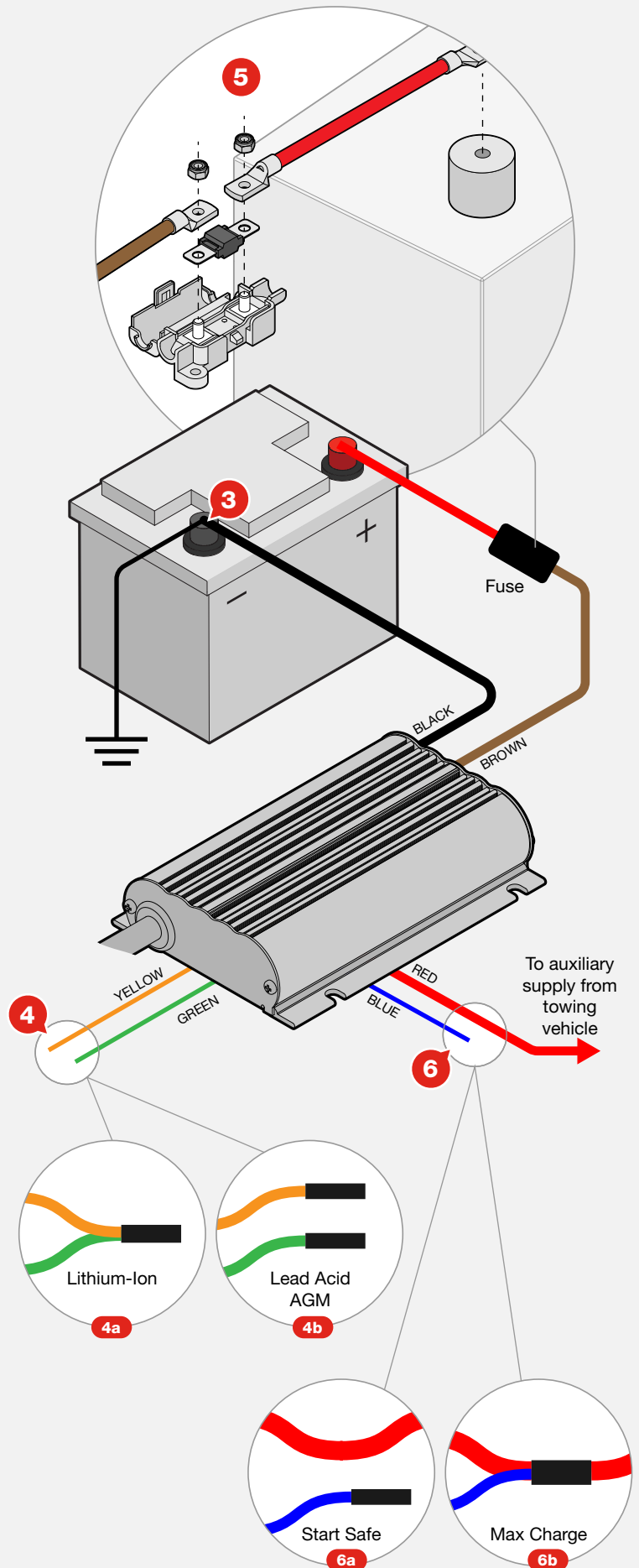
Connect the BCDC1212T **RED** (input) wire to the 12 V auxiliary power from the trailer connection.

Note: The trailer wiring harness fitted in the tow vehicle must be suitably rated for the current and fused to protect the wiring harness — refer to the BCDC1212T user manual for further information.

- If the 12 V auxiliary power in the towing connection is permanently fed (does not isolate when the towing vehicles ignition is switched off), leave the BCDC1212T **BLUE** (trigger) wire disconnected.
- If you want to maximize trailer auxiliary charging, connect the BCDC1212T **BLUE** (trigger) to the BCDC1212T **RED** (input) wire which will continue to draw down on the towing vehicle electrical supply to a lower threshold which may impact cranking (vehicle starting) ability.

7. Insulate all bare wires.

Ensure that all bare/unused wires are insulated with heatshrink or electrical insulation tape. Ensure that all wiring is secured so that it cannot be damaged.



This is a generic installation for illustration purposes. Read the BCDC1212T instruction manual for further installation information. For further assistance with your BCDC installation, contact REDARC at power@redarcelectronics.com