WARNINGS & SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS — This manual contains important safety instructions. Do not operate the system unless you have read and understood this manual. REDARC recommends that the products referenced in this manual be installed by a suitably qualified person.

Disclaimer: REDARC accepts no liability for any injury, loss or property damage which may occur from the improper or unsafe installation or use of its products.

⚠ WARNING

RISK OF EXPLOSIVE GASES: Working in vicinity of a Lead-Acid battery is dangerous. Batteries generate explosive gases during normal operation. For this reason, it is of utmost importance that you follow the instructions when installing and using the Main Unit and Battery Monitor.

⚠ CAUTION

1. This appliance is not intended for use by persons (including children under 8 years old) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance in a safe way by a person responsible for their safety and they understand the hazards involved. Children should be supervised to ensure that they do not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
2. DO NOT alter or disassemble the Main Unit or Battery Monitor under any circumstances. All faulty units must be returned to REDARC for repair. Incorrect handling or reassembly may result in a risk of electric shock or fire and may void the unit warranty.
3. Only use the Main Unit and Battery Monitor with standard automotive lead acid, calcium content, gel, AGM, SLI, deep cycle, heated or standard lithium iron phosphate ($LiFePO_4$) type 12 V batteries.
4. When using the Main Unit to charge a lithium iron phosphate ($LiFePO_4$) battery, only batteries that have an inbuilt battery management system featuring under and over voltage protection and cell balancing are suitable.
5. The heated lithium (H) charging profile should only be used with lithium batteries that have a functioning heating element. If unsure, the standard lithium (Li) charging profile must be used. Using the wrong charging profile may damage your heated lithium battery.
6. Check the manufacturer's data for your battery and ensure that the maximum voltage of the profile you select does not exceed the manufacturer's recommended maximum charging voltage. If the maximum voltage is too high for your battery type, select another charging profile.
7. Check the manufacturer's data for your battery and ensure that the continuous current rating of the Main Unit does not exceed the manufacturer's recommended maximum charging current. The battery charge current can be configured to match the manufacturer's recommendations if required.
8. Wiring must be installed in protected areas away from heat sources and sharp objects. Cables must not be routed over or through moving parts of the vehicle. Additional protection such as conduit may be required, especially if routing cables through the engine bay.
9. Cable and fuse sizes are specified by various codes and standards which depend on the type of vehicle the Main Unit and Battery Monitor is installed into. Selecting the wrong cable or fuse size could result in harm to the installer or user and/or damage to the Main Unit or Battery Monitor or other equipment installed in the system. The installer is responsible for ensuring that the correct cable and fuse sizes are used when installing this product.
10. The BCDC Alpha 100R is not intended to supply power to a low voltage electrical system other than to charge a battery.
11. DO NOT attempt to charge non-rechargeable batteries with the BCDC Alpha 100R.
12. NEVER smoke or allow a spark or flame in the vicinity of the battery or engine. This may cause the battery to explode.
13. The auxiliary battery must be placed in a well-ventilated area when charging vented batteries.
14. The Auxiliary Battery output terminal of this Charger should not be connected to the vehicle start battery.
15. The BCDC Alpha 100R must be installed in the following order: auxiliary battery positive (+), auxiliary battery negative (–) (battery monitor), common ground, start battery positive (+), vehicle ignition (if required), solar then the R-Bus cable.
16. The BCDC Alpha 100R must be disconnected in the following order: R-Bus cable, vehicle ignition (if installed), solar, start battery positive (+), common ground, auxiliary battery negative (–) (battery monitor) then auxiliary battery positive (+).

PERSONAL SAFETY PRECAUTIONS

To assist with the safe operation and use of the Main Unit and Battery Monitor when connected to the battery:

a. **HOT SURFACE:** High amperage loads connected to the Battery Monitor can cause the terminals and metal components to become extremely hot. To avoid burns, do not touch the hot parts without suitable personal protective equipment.
b. Wear complete eye protection and clothing protection. Avoid touching eyes while working near a battery.

c. If battery acid contacts your skin or clothing, remove the affected clothing and wash the affected area of your skin immediately with soap and water. If battery acid enters your eye, immediately flood the eye with running cold water for at least 10 minutes and seek medical assistance immediately.

NOTICE

1. Keep the Main Unit and Battery Monitor away from major heat sources, high voltages, and avoid extended exposure to sunlight.
2. DO NOT install the Main Unit and Battery Monitor in the engine bay, they are not designed to operate in engine bay environments.
3. The installer is responsible for applying the correct torque to the Terminal Bolts on the Battery Monitor. Over-torquing bolts may damage the Terminals.
4. DO NOT bottom-out the bolt threads when fastening Terminal Bolts to the Battery Monitor Terminals, this may cause a poor electrical connection.

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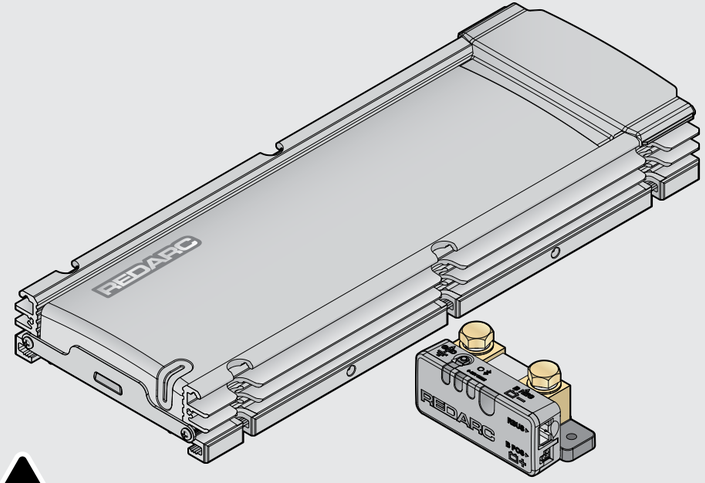
INSTALL GUIDE

BCDC ALPHA® 100R

BCDC12100R

12 V 100 A DC-DC Battery Charger with Smart Battery Monitoring and Bluetooth®



AUSTRALIAN MADE

BCDC ALPHA 100R OVERVIEW

The BCDC Alpha 100R charges all common 12V automotive battery types including standard and heated lithium and is equipped with screw terminals for easy installation.

The BCDC Alpha 100R prioritises charging from solar before supplementing from the vehicle start battery to lighten the load on your alternator and maximise the collection of free solar energy, with an option for excess solar energy to then top-up the vehicle start battery.

The Battery Monitor provides critical system information including battery voltage, current, State of Charge (SoC) and temperature information of the connected battery via the RedVision® App.

The BCDC Alpha 100R can be combined with REDARC R-Bus compatible products, including the RedVision® Display and TVMS Rogue.

The BCDC Alpha 100R also features the capability to seamlessly revive and charge a fully flattened lithium battery.

FULL-LENGTH MANUAL

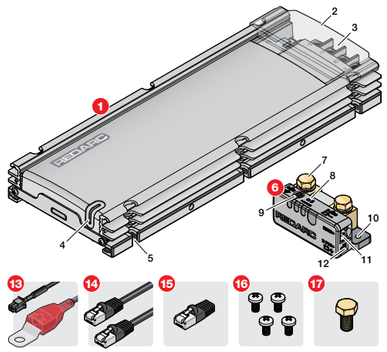
This document contains everything you need to know to complete a basic install of your BCDC Alpha 100R.

Note that there is a full-length manual available that contains expanded installation information for more complex systems.

BCDC Alpha 100R full-length manual

For the latest version of this document and any available translations, visit the REDARC website: www.redarcelectronics.com

KIT CONTENTS



1 MAIN UNIT

2. Terminal Cover
3. Terminals
4. Status LED
5. Mounting Points (×6)

9 BATTERY MONITOR

7. Terminal Bolts M10 × 16 mm (×2)
8. Status LED
9. Control Button
10. Mounting Points (×2)
11. R-Bus Socket
12. Battery Sense Lead Socket

13 BATTERY SENSE LEAD — 1 m (3'3")

14 R-BUS (RJ45) CABLE — 2 m (6'7")

15 TERMINATING RESISTOR

Located in the R-Bus Interface input on the Main Unit.

16 M6 × 12 mm PAN HEAD FASTENERS (×4)

Located in the M6 Terminals on Main Unit.

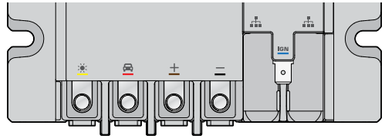
17 M10 × 20 mm ALTERNATIVE TERMINAL BOLT

MAIN UNIT PARTS

STATUS LED

On start-up, the Status LED will light up red for a short period. If there are faults, the Status LED will flash or turn solid red.

TERMINALS



Solar (M6)
Connects to the solar panel positive (+) wire.

Start Battery (M6)
Connects to the start battery positive (+) terminal.

Auxiliary Battery (M6)
Connects to the auxiliary battery positive (+) terminal.

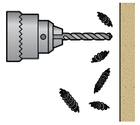
Ground (M6)
Connects to common ground.

R-Bus Interface Inputs
Connects to the Battery Monitor and terminating resistor or to another R-Bus device to expand the RedVision® system.

Vehicle Ignition FASTON Input
Connects to an ignition signal for vehicles with smart alternators.

SWARF BARRIERS

On the Main Unit there are swarf barriers to prevent swarf, cable trimmings and other materials from entering the Main Unit during installation.



DURING INSTALLATION

DO NOT remove any of the barriers when mounting and wiring your system.

Metallic objects entering the Main Unit can cause permanent damage and may void the warranty.

AFTER INSTALLATION

Once the Main Unit and all other components in your system are fully installed, the barriers should be removed.

INSTALLATION — MOUNTING

DON'T:

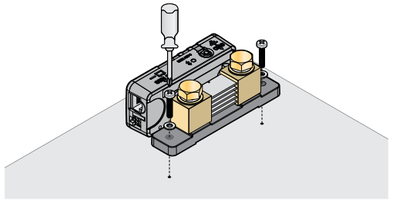
- × **DO NOT install the Main Unit and Battery Monitor in the engine bay.**
- × **DO NOT mount the Main Unit with the Terminals facing upwards.**
- × **DO NOT mount the Battery Monitor with the R-Bus and B POS sockets facing upwards.**
- × **DO NOT mount using adhesives or adhesive tape.**

DO:

- ✓ Use all mounting points on the Main Unit and Battery Monitor.
- ✓ Mount in a location where the Battery Monitor's Control Button and Status LED, and the Main Unit's Status LED are accessible and visible.
- ✓ Mount in a dry and protected location e.g. inside the vehicle's cabin, ute canopy, caravan or battery box.
- ✓ If installing the Main Unit or Battery Monitor in an enclosed space, make sure there is adequate venting at the top and bottom of the enclosure for cross-flow of air.
- ✓ Mount the Main Unit and Battery Monitor to fixed surfaces.
- ✓ Mount on flat a surface. Check the reverse side before drilling.
- ✓ Leave 100 mm (4") clearance around the Main Unit.
- ✓ Leave 30 mm (1.2") clearance around the Battery Monitor.

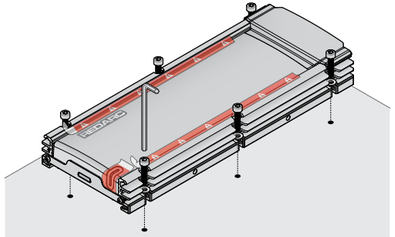
MOUNT THE BATTERY MONITOR

Mount using two **M6 (1/4")** to **M4 (5/32")** fasteners with washers.



MOUNT THE MAIN UNIT

Mount using six **M6 (1/4")** fasteners with washers.



SPECIFICATIONS

MAIN UNIT SPECIFICATIONS	
Nominal Current Rating	100 A
Operating temperature*1	−20°C to 60°C (−4°F to 140°F)
Start Battery Input	
Voltage Range	9–32 VDC ⎓
Maximum Input Current	110 A
Solar Input	
Voltage Range*2	9–48 VDC ⎓
Maximum Input Current	110 A
Maximum Array Size	2000 W
Output	
Nominal Output Voltage	12 V
Voltage Range	9–16 VDC ⎓
Maximum Output Current	100 A
Recommended Battery Capacity	100–1250 Ah
Maximum Output Power	1600 W

*1 As the temperature of the Main Unit rises above a certain level the current capacity of the output is decreased gradually to protect the battery and the Main Unit.

*2 The maximum voltage of the solar array should be calculated for the minimum temperature that it would be exposed to. The value should be less than 48 V or else damage to the Main Unit may occur. The Main Unit will not charge if the voltage is too high.

BATTERY MONITOR SPECIFICATIONS	
Operating Voltage Range	9–32 VDC ⎓
Operating Temperature	−20°C to 60°C (−4°F to 140°F)
Current Measurement Range	± 500 A
Current Measurement Accuracy	±0.3%, 1 to 500 A @ 50°C (122°F)
Voltage Measurement Accuracy	±0.7%
Battery Temperature Measurement Range	−40°C to 100°C (−40°F to 212°F)
Temperature Measurement Accuracy	±3°C (±5.4°F)
Regulatory Compliance	**FCC ID:** 2BAH6-SU601 **IC:** 30290-SU601

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

This device complies with Industry Canada (IC) license-exempt RSS standard(s). Operation is subject to the following two conditions.

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes.

(1) L'appareil ne doit pas produire de brouillage.

(2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillardest susceptible d'en compromettre le fonctionnement.

COMPLIANCE

CAN ICES-003 (B) / NMB-003 (B)

FCC — CLASS B

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules and with Innovation, Science and Economic Development Canada's licence-exempt RSS (s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

IMPORTER CONTACT INFORMATION

UK: Ozparts UK Ltd, 1 Prospect Place, Pride Park, DE24 8HG, Derby, UK

Europe: OZPARTS PL sp. z o.o. ul. Słowackiego 32/5 87-100, Torun, Poland

For written request please email power@redarcelectronics.eu

WARRANTY

For full warranty terms and conditions, visit the Warranty page of the REDARC website at www.redarcelectronics.com/warranty

Australia, New Zealand & Europe:
REDARC Electronics Pty Ltd,
23 Brodie Road (North), Lonsdale SA 5160, Australia

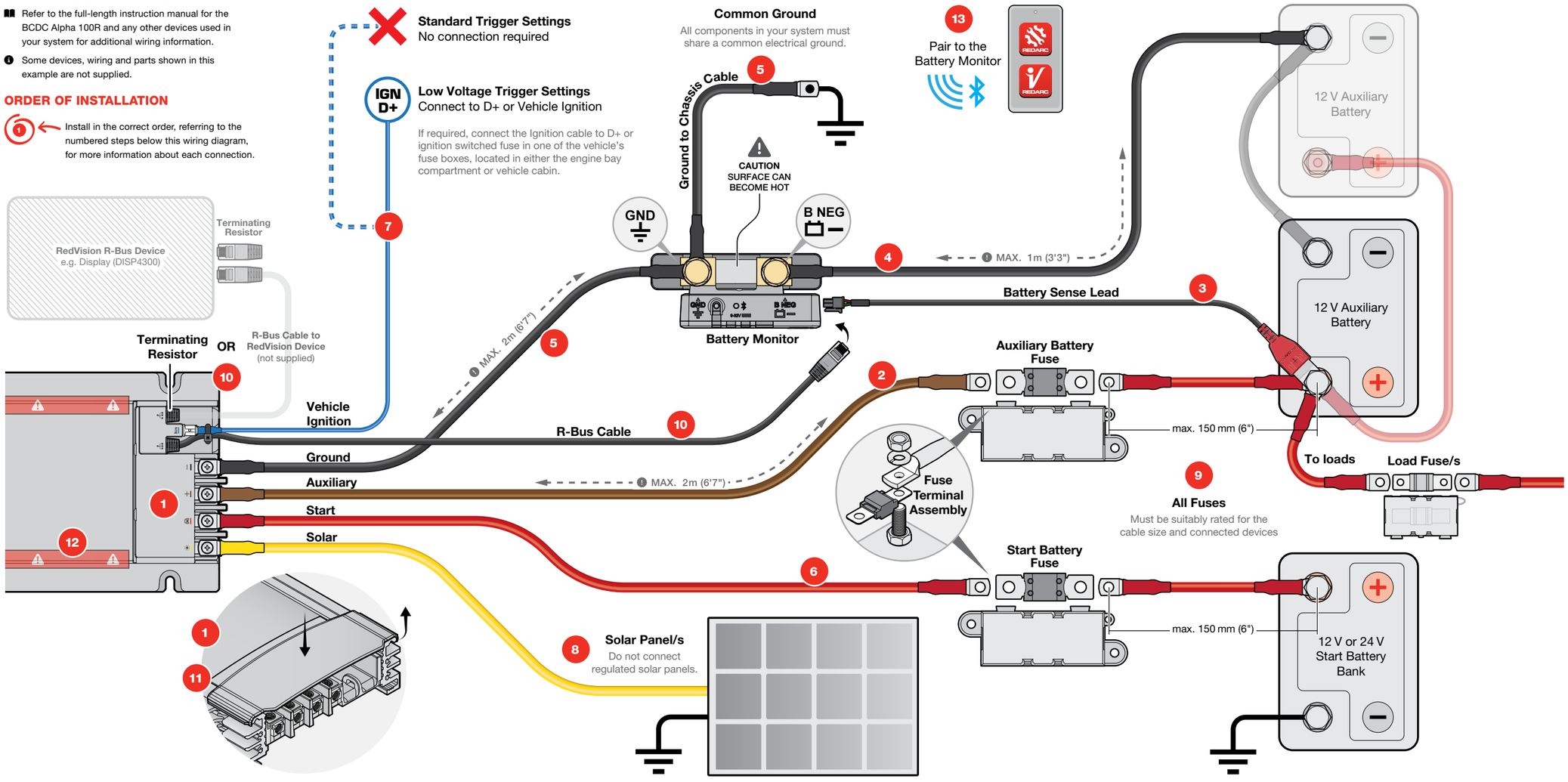
North America:
REDARC Corporation, c/o Shallco, Inc.
308 Component Dr., Smithfield, NC 27577, USA

EXAMPLE INSTALLATION

- Refer to the full-length instruction manual for the BCDC Alpha 100R and any other devices used in your system for additional wiring information.
- Some devices, wiring and parts shown in this example are not supplied.

ORDER OF INSTALLATION

Install in the correct order, referring to the numbered steps below this wiring diagram, for more information about each connection.



INSTALLATION — WIRING

MAIN UNIT CABLE AND FUSE SIZING

Refer to this table to identify the cable sizes needed for the **Ground, Auxiliary, Start Battery** and **Solar** connections on the Main Unit. Source lugs with an M6 stud hole and barrel size to suit the required cable gauge. Ensure that the width of the lug tongues does not exceed 15 mm (19/32").

IMPORTANT: The **Auxiliary** and **Start Battery** cables must be sized to conduct the configured **Maximum Current**/**Vehicle Input Current Limit** of the Auxiliary and Start Battery Terminals (configured via the Configurator App) and must be fused to protect wiring.

The **Solar** cable must be sized to conduct the short circuit current of your solar panel/s, regardless if it is below or greater than the maximum solar input current (110 A).

REDARC strongly recommends using good quality PVC V90 or XLPE insulated cables.

Expected Current	Fuse Rating (REDARC Fuse Kit)		One way length		Cable Gauge		Refer to NOTES
	Auxiliary Battery Fuse	Start Battery Fuse			mm²	AWG/B&S	
50 A – 55 A	60 A (FK60)	70 A (FK70)	0 – 5 m	0 – 16'5"	13.5	6	1
					20.2	4	
			5 – 9 m	16'5" – 29'6"	20.2	4	
			9 – 12 m	29'6" – 39'4"	20.2	4	1
					26.6	3	
75 A – 82 A	100 A (FK100)	125 A (FK125)	0 – 5 m	0 – 16'5"	33.6	2	1, 3
					16	-	2
					53.4	0	3
			5 – 12 m	16'5" – 39'4"	33.6	2	1, 3
					25	-	2
					53.4	-	3
100 A – 110 A	125 A (FK125)	175 A (FK175)	0 – 9 m	0 – 29'6"	42.4	1	1, 3
					25	-	2
					85	3/0	3
			9 – 12 m	29'6" – 39'4"	42.4	1	1, 3
					35	-	2, 3
					85	3/0	3

NOTES:

1. DO NOT use this cable size for connections to components located in the engine bay (i.e. **Start Battery** cable).
2. Only use XLPE insulated cables (must be high temperature rated).
3. For the BCDC Alpha 100R to carry the expected current, a step down assembly is required — refer to full-length manual.

BATTERY MONITOR CABLE SIZING

Refer to this table to identify the cable gauge needed for the **B NEG** and **GND** connections on the Battery Monitor. Source lugs with a hole suitable for an M10 bolt and barrel size to suit the required cable gauge.

IMPORTANT: The sizes given are a reference only, considerations when selecting an appropriate cable for your installation include cable length, peak current draw, time spent at high current and environmental ambient temperature.

System Current	100 A	200 A	300 A	400 A	500 A
Recommended Cable Cross Section	35 mm²	70 mm²	95 mm²	120 mm²	150 mm²
Equivalent B&S, BAE, AWG	2	3/0	4/0	250 kcmil	300 kcmil

1 CONNECT LUGS TO MAIN UNIT

1.1 Remove the Terminal Cover by pushing down the centre of the Cover at the same time as lifting one of the outer tabs on the corner of the Cover. This will raise the Cover allowing it to slide out from the Main Unit.

1.2 Keep the Terminal Cover for refittment after the installation is complete.

1.3 Connect all M6 lugs to the Main Unit using the M6 screws and torque to 4 – 5 N·m (3 – 3.7 lbf·ft).

⚠ **CAUTION:** DO NOT use the side facing terminals.

2 AUXILIARY BATTERY CABLE

2.1 Ensure there are no connections to the negative (–) terminal of your auxiliary battery before making any further connections.

2.2 Mount a MIDI/MEGA fuse holder within 150 mm (6") of the auxiliary battery positive (+) terminal.

2.3 Take out the MIDI/MEGA fuse from the holder and connect the **Auxiliary Battery** cable to the MEGA fuse holder.

2.4 Connect a short cable to the other end of the fuse and to the positive (+) terminal of the auxiliary battery. The short cable must be no longer than 150 mm (6").

3 B POS (+) TO AUXILIARY BATTERY

3.1 Connect the Battery Sense Connector to the **B POS** socket on the Battery Monitor.

3.2 Connect the Battery Sense Lug to the auxiliary battery positive (+) terminal.

NOTICE: Do not fit the Battery Sense Lug in between the auxiliary battery positive terminal and lugs that carry high currents. Connect the lugs carrying high-currents to the auxiliary battery first, then add the Battery Sense Lug on top (last).

4 B NEG (–) TO AUXILIARY BATTERY

4.1 Connect a cable between the **B NEG** Terminal on the Battery Monitor and to the auxiliary battery's negative (–) terminal.

4.2 Torque the **B NEG** Terminal Bolt to 20 N·m (14.7 lbf·ft).

5 GROUND CABLE CONNECTIONS

5.1 Connect the **Ground** and **Ground to Chassis** cable to the **GND** Terminal on the Battery Monitor.

5.2 Torque the **GND** Terminal Bolt to 20 N·m (14.7 lbf·ft).

5.3 Connect the **Ground to Chassis** cable to a ground point that forms a common ground with all devices in your system.

NOTICE: If the combined thickness of the lugs connected to the **GND** terminal on the Battery Monitor is more than 4 mm (5/32"), use the supplied Long Terminal Bolt.

When using the Long Terminal Bolt, the combined thickness of lugs must be no more than 8 mm (5/16").

6 START BATTERY CABLE

6.1 Mount a MIDI/MEGA fuse holder within 150 mm (6") of the start battery positive (+) terminal.

6.2 Take out the MIDI/MEGA fuse from the holder and connect the **Start Battery** cable from the Main Unit to one end of the fuse.

6.3 Connect a short cable between the fuse holder and the positive (+) terminal of the start battery. The short cable must be no longer than 150 mm (6").

7 VEHICLE IGNITION CABLE

7.1 Determine if your vehicle has a variable voltage alternator by checking for a battery sensor on your vehicles start battery.

STANDARD ALTERNATOR

No connection required.

VARIABLE VOLTAGE ALTERNATOR

7.2 Connect the **Ignition** cable by sliding a 6.35 mm (0.25") sized FASTON onto the vehicle ignition terminal. The FASTON should firmly attach to the Main Unit.

7.3 **For CONTINUOUS IDLE vehicles**, connect the **Ignition** cable to a fused point that is live only when the ignition is turned on.

For IDLE STOP vehicles, connect the **Ignition** cable to **D+**.

8 SOLAR CABLE

DON'T:

- ✕ DO NOT connect solar panels that have inbuilt regulators. The Main Unit has an inbuilt regulator that may not function correctly if regulated solar panels are connected.
- ✕ DO NOT connect solar panels that have an open circuit voltage that exceeds the 48 V limit of the Main Unit input.

DO:

- ✓ Make sure all wiring, components, and fuses used with your solar panel or solar array are compliant with local codes and standards.

8.1 Cover the solar panel/s before wiring into the system.

8.2 Connect the **Solar** cable to the solar panel/array using suitable connectors (e.g. MC4 connectors) for your system setup.

CONNECTING MULTIPLE SOLAR PANELS

Refer to the full-length manual for instructions on how to connect multiple solar panels.

9 FUSE CONNECTIONS

9.1 To complete the **Auxiliary Battery** cable connection, install and secure the auxiliary battery fuse to the fuse holder.

9.2 Install and secure the start battery fuse to the fuse holder to complete the **Start Battery** cable connection.

10 CONNECT REDVISION R-BUS DEVICES

10.1 Connect the **R-Bus** cable into the **R-Bus** socket on the Battery Monitor and to the R-Bus socket on the Main Unit.

10.2 To expand your RedVision system, remove the Terminating Resistor and insert it into another R-Bus device (e.g. the RedVision Display). If not, keep the Terminating Resistor fitted to the Main Unit.

11 FIT THE TERMINAL COVER

11.1 Align the small tabs on the Cover to the holes above the terminals on the Main Unit then click the Cover back in place.

12 REMOVE THE SWARF BARRIERS

12.1 Once the installation is complete, remove the swarf barriers from the Main Unit.

SYSTEM CONFIGURATION

13 CONFIGURE YOUR SYSTEM

Once installed, configure the system by pairing your smartphone to the Battery Monitor via Bluetooth.

PAIRING INSTRUCTIONS

1. Download the Configurator App.
2. Make sure Bluetooth is enabled on your smartphone.
3. Press and hold the Control Button on the Battery Monitor for 0.5 to 3 seconds. The Status LED will flash blue (pairing mode).
4. Open the Configurator App and allow the required permissions.
5. Tap **"Read Device"** then select the system that matches the Product Serial Number on the Battery Monitor.
6. When the **"Pair"** banner appears, tap **Pair**.

CONFIGURE THE BATTERY MONITOR

7. Under the **"Charger Settings"** heading, tap **"Battery Sensor"** to navigate to the **"Configure Battery Sensor"** screen.
8. Under the **"Battery Settings"** heading, enter your auxiliary battery's **Type**, **Size**, and the **Max Charge Current**. Refer to your battery manufactures specifications for these values.
9. The **Nominal Battery Voltage** MUST be set to '12 V'.
10. Under the **"Alarms"** heading, configure the **Low SoC Alarm** and **Low Voltage Alarm**. When your battery goes below these configured values, the Status LED on the Battery Monitor and the Control Button on the Main Unit will turn red, and an alert will display in the RedVision App.
11. Once completed, tap **Save** ☑.

CONFIGURE THE BATTERY CHARGER

12. Under the **"Charger Settings"** heading, tap **"Charger Unit"** to navigate to the **"Configure BCDC Alpha"** screen.
13. Enter in the **Vehicle Input Trigger** and **Vehicle Input Current Limit**. These dictate the start battery turn on/off voltage of the Main Unit and defines the maximum current drawn from the start battery.
14. Set the **Start Battery Charge Mode** to On/Off.
15. Once completed, tap **Save** ☑.

COMPLETE CONFIGURATION

16. Re-select your system — Do not exit the App until the success banner appears and the Status LED on the Battery Monitor is solid Blue. The system is now configured, and Bluetooth pairing is complete.

OPERATION

START BATTERY CHARGE MODE*

If enabled in the Configurator App, the BCDC Alpha 100R will keep the vehicle's start battery topped up to 12.8 V using the solar input once the auxiliary battery is fully charged.

START BATTERY RECOVERY*

Start Battery Recovery charges a flat start battery from the auxiliary battery for approximately 15 minutes, providing enough charge to safely start the vehicle in the event of a flat battery.

The Main Unit delivers 50 A to the start battery (unless the Max Charge Current or Vehicle Input Current Limit is configured lower) and aims to charge the start battery up to 14.6 V.

START BATTERY RECOVERY VIA THE REDVISION APP

1. In the App, tap **Menu** ☰, then tap **Recovery**.
2. When the **"Initiate Recovery Mode"** banner appears, tap **Accept**, the under **"Battery Recovery Ready"** heading on the home screen, tap **Go** to begin the Recovery process,
3. In the App, the screen will display the Recovery progress.
4. The App will indicate when the Recovery is complete.

***NOTE:** This mode is only available for 12 V vehicle batteries and require the **Vehicle Input Trigger** to be set to 'Auto' or '12 V' mode.

CARE & MAINTENANCE

Periodically check that all wiring and connections are secure. Parts of the system may have moved during normal use.

On the Main Unit a cable tie can be used to secure the **R-Bus** cable and **Vehicle Ignition** cable.

TROUBLESHOOTING

Refer to the full-length manual for complete troubleshooting information.

FAULTS

Faults are indicated by the Status LED on the Main Unit and Battery Monitor. In the event of any Status LEDs flashing or solid red, refer to the RedVision App or to the full-length manual to identify the cause of the fault.

DOWNLOAD THE APPS

CONFIGURATOR APP

The Configurator App lets you configure and customise the features and functions of your BCDC Alpha 100R and other RedVision devices in your system.

PAIRING INSTRUCTIONS

See "System Configuration" for pairing instructions.

REDVISION APP

The RedVision App gives you remote access to BCDC Alpha 100R functions and features including battery and system monitoring, and start battery recovery.

PAIRING INSTRUCTIONS

1. Download the RedVision App and make sure Bluetooth is enabled on your smartphone.
2. Press and hold the Control Button on the Battery Monitor for 0.5 to 3 seconds. The Status LED will flash blue (pairing mode).
3. Open the RedVision App and allow the required permissions if it's the first time using the App.
4. Tap the **Menu** ☰ Icon, then under the devices heading, tap **+ Add Device**.
5. Find and select the device that matches the Product Serial Number on your Battery Monitor. Read and agree to the disclaimer.
6. When the Bluetooth pairing request appears, tap Pair (first time pairing may take a few minutes).
7. Once the Status LED turns solid blue, and the system information appears on your smartphone the Bluetooth pairing is complete (first time pairing may take a few minutes).

CALIBRATION

When the battery is first connected, the system will start a calibration process to determine the State of Charge (SoC) of the battery — this value does not appear instantly after completing your installation. Calibration will continue until your auxiliary battery is fully charged.