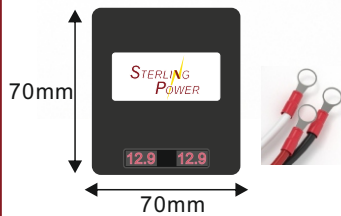


Part No:
BAL24



latest instructions



STERLING POWER

Sterling Power Products Battery Balancer - 24V Handbook

BAL24



UK
CA



RoHS
compliant



www.sterling-power.com
www.sterling-power-usa.com

Warranty (2 years return to factory)

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What does the BAL24 offer?

- Balancing across 24V batteries (12V | 12V series)
- BAL24 simply moves current from higher voltage to lower voltage until the voltages across the batteries are approximately the same.
- Balancing current varies - up to 5A.

BAL24 Installation Diagram

Welcome The BAL24 is designed to be used to balance 24V battery banks comprised of multiple 12V batteries. It is a plug and play device that does not need any adjustment. Simply connect the 3x ring terminals to the respective connections on the batteries. The two display screens simply show the voltage of the battery that the cables are connected to.

Minimum requirements For a 24V system, 1x BAL24 is required
For a 36V system, 2x BAL24 are required
For a 48V system, 3x BAL24 are required

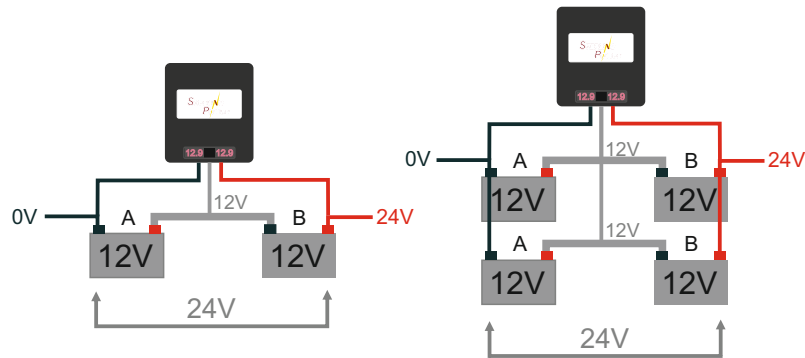
Additional BAL24s Multiple can be installed in parallel to increase balancing current. Simply stack the 8mm ring terminals on top of each other.

LED screens The left screen shows the voltage across the 0V-12V (black and white cables) and the right screen shows the voltage between the 12V-24V (white and red cables).

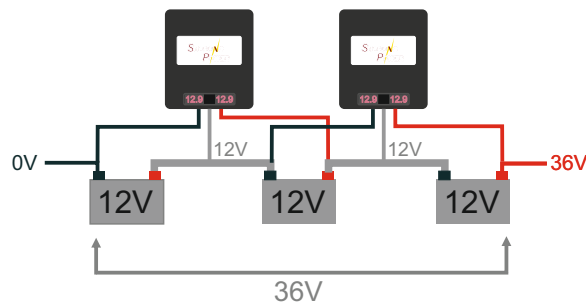
12.9 12.9

Installation We highly recommend using a voltmeter:
Red cable - 24V
White cable - 12V
Black cable - 0V

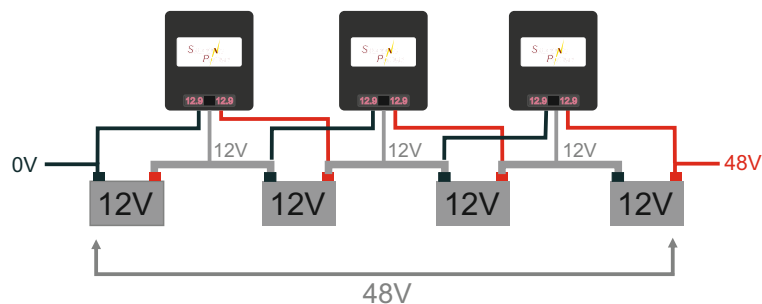
24V battery wiring



36V battery wiring



48V battery wiring



BBR Battery to Battery Charger Remote control

Battery type	Press ENTER - toggle between LEAD 1 +2, AGM 1+2 and both the lithium profiles or the User Defined Settings 1+2. This can be set further down the menu list.
EQ mode	This mode puts the BB into a desulphation charge voltage of 15.5V (only appears when in LEAD mode) - use toggle up and down to adjust.
Turn Float on or off	This mode turns float mode on or off (only available when in LITHIUM) - use toggle up and down to adjust
IGN	If the BB has been put into ignition feed mode, here you can take the BB out of ignition feed mode. Simply toggle up and down with arrows to select the desired on/off.
Backlight	Backlight timer can be set here. After you press a button the remote, you can define how long the screen remains on for. 10s - 250 seconds. There is also an 'ALL' selection. This means the screen is on all the time, whilst the charger is running. On all the time shall allow you to view what the BB is doing whilst driving and the BB charging.
Set current	The default current setting for the BB range is 100% - meaning that the performance default is full power. If you wish to reduce the performance of the BB, here you can set to 85% or 65% charge rate. Examples of why you may wish to reduce performance: 1) if you have solar panels and the weather is good, by reducing the power of the BB, you shall conserve fuel. 2) The alternator is better suited running at slightly lower current than what was expected. 3) It may be recommended by your battery supplier to charge the battery up at a slightly lower current. If one of your lithium batteries within your leisure battery bank fails, you may be exceeding the C rating of the remaining batteries. 4) future proofing. If you have installed a high powered BB, in the assumption that one day you shall put a larger alternator on and/or more batteries in your system. You can reduce the power for the immediate install and increase the performance of the unit at a later date.
User define1 set	If you enter User define1 set you can customise the charge profile and absorption time length. The first measure to adjust is the absorption voltage (14.0-15.5V) - use the cursor keys to adjust up or down the absorption voltage, then press ENTER. The next option is float (12.6V - 14.0V) - use the cursor keys to adjust and press ENTER. The last option is absorption time length in hours (0.5hr - 6.0hrs) - press enter to confirm. Once you have confirmed go back up to Battery type and select 'user define1'.
User define2 set	If you enter User define2 set you can customise the charge profile and absorption time length. The first measure to adjust is the absorption voltage (14.0-15.5V) - use the cursor keys to adjust up or down the absorption voltage, then press ENTER. The next option is float (12.6V - 14.0V) - use the cursor keys to adjust and press ENTER. The last option is absorption time length in hours (0.5hr - 6.0hrs) - press enter to confirm. Once you have confirmed go back up to Battery type and select 'user define2'.
Save and Exit	If you have made changes within the SETUP procedure and you wish to save these settings - you must press ENTER on Save and Exit.
No Save and Exit	If you have made changes within the SETUP procedure and you DO NOT wish to save these settings - you must press ENTER here.

BBR dimensions - not to scale

