

# OWNER'S MANUAL **MINI BOOST**



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Manual Part #030874

The BMPRO **MiniBoost** is proudly Australian-made in Melbourne, Australia. Designed by Setec, one of Australia's leading power solutions experts. They represent a high quality product that will provide years of service.

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**Disclaimer**

Setec accepts no liability for any loss or damage, which may occur as a result of improper or unsafe use of its products. Warranty is only valid if the unit has not been modified or misused by the customer.

# SAFETY PRECAUTIONS

Please read the Safety Precautions carefully before installing the power supply.  
After completing the installation, conduct a trial operation to check for faults.



## CAUTION

Failure to observe these instructions properly may result in property damage or personal injury, which may be serious depending on the circumstances.

Correct installation is the most critical factor in ensuring the safe use of the **MiniBoost**. If every consideration of these instructions has been satisfied the **MiniBoost** will be safe to operate.

Batteries are electrically live at all times and must be treated with extreme caution.

Do not allow water or other liquids to enter the power supply area.

Contact with water will cause the device to short-circuit or corrode.

Do not use this product where it is excessively hot, cold, dusty or humid, or where it is exposed to strong magnetic fields or long periods of sunshine. Such exposure may cause device.

Clean the housing of the device lightly with a dry or moist cotton cloth. Do not use alcohol, thinners, benzene or any other chemical cleaner.

This device is a high precision electronic product. It contains no user-serviceable parts inside. Do not try to dismantle, modify or repair it yourself. Disassembly by unauthorised persons will void the warranty.

## ABOUT

The **MiniBoost** is intended for the RV market to enable the effective charging of the Caravan/Camper house battery from the towing vehicle's electrical system even if the voltage delivered from the towing vehicle is lower than that normally required to charge the house battery.

The **MiniBoost** has been specially designed to work with the BMPRO **BatteryPlus35, J35, ST-III** and **Genius** power supplies, but might also work with other battery chargers and configurations.

The input fuse is illuminated from behind with a green light when the input voltage is sufficient for the unit to operate.

The MiniBoost is not a power supply and must be connected to a battery. If the battery voltage is too low the MiniBoost will not connect.

## INSTALLATION

### Personnel

Installation is to be carried out only by suitably qualified personnel.

### Ventilation, Orientation, and Thermal Considerations

The **MiniBoost** may be installed in any orientation, but located such that there is free air movement around the product. This allows for the lowest operating temperature of the internal electronics and highest reliability of the product.

The **MiniBoost** should be located in the Caravan preferably close to the House Battery. The compartment into which the **MiniBoost** is installed must be well ventilated to provide adequate ventilation to the outside world (or larger internal cavity) to prevent excessive heating of the air within the compartment, resulting in reduced performance.

### Required for Installation

- Relay 30A
- Wire Connector
- Anderson tometor
- In Line 30A Fuse
- Trailer Connector

## Mounting

The **MiniBoost** should be securely mounted to a suitably strong surface. Dimensional details are provided in Figure 1 below. It may be mounted in any orientation.

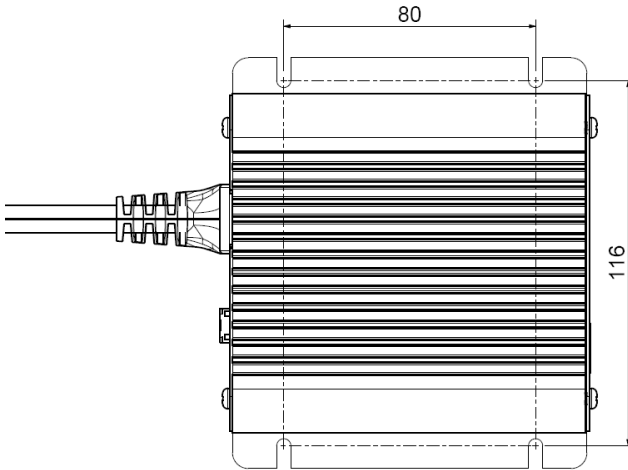


Figure 1: Mounting Dimensions

## Wiring

It is recommended that the **MiniBoost** connect to the vehicle battery through a 30A (min) "Isolating Relay" and Fuse (30A min). The relay function is to prevent the vehicle battery from being discharged when the vehicle is not in use.

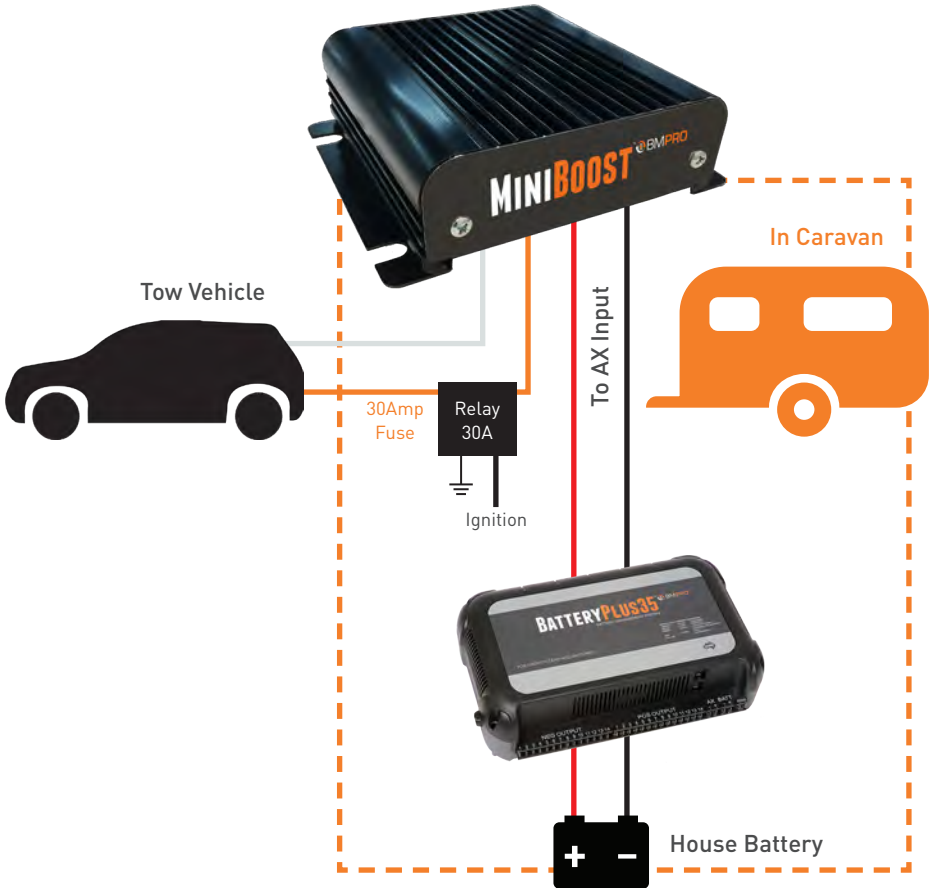


Figure 2: Wired to BatteryPlus35

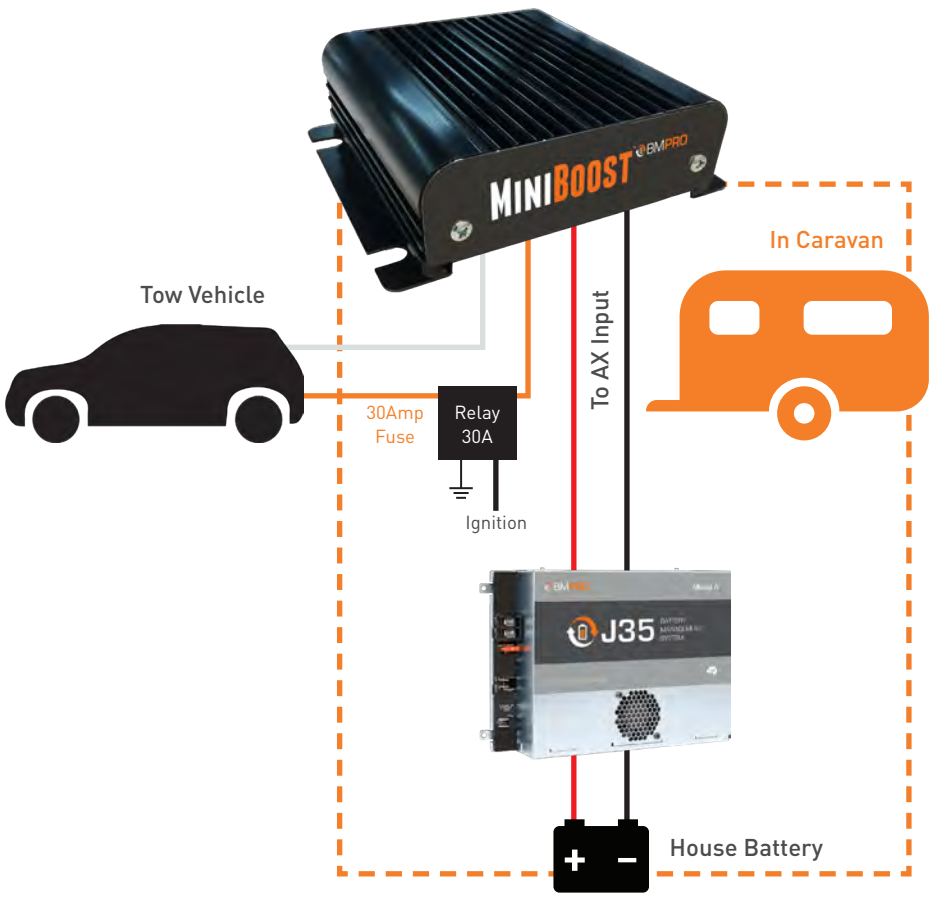


Figure 3: Wired to J35



Figure 4: to House Battery

### Wire Size

Cables should be sized to carry 30A. The minimum recommended wire size is 5mm<sup>2</sup>

Wiring resistance inclusive of connectors should be less than 100mR total (Vehicle battery to **MiniBoost** input wires). If the circuit resistance (including fuse, relay, and connectors) is too high, the performance of the **MiniBoost** may be degraded.

### Fusing

Over current protection is provided by a 30A automotive fuse (Green mini-blade). Always replace with the same type and rating.



# SPECIFICATIONS

Input Voltage Range	10V to 15V
Output Current	Boost Mode: 20A Bypass mode: 30A
Output Voltage	Boost mode: 14.4V Bypass mode: <1V Less than Input Voltage
Output Ripple Voltage	< 150 mV
Over Current Protection	Boost Mode: 21A (electronic) Bypass mode: 30A (fuse)
Start Voltage	12.2V – 12.9V
Disconnect Voltage	9.1V – 10.5V
Battery Drain (tow vehicle disconnected)	< 20 mA
Efficiency	> 80 %
Ambient:	0°C – 50°C
Standards:	RCM Approval, EMC CISPR 11
Weight	0.8kg

# WARRANTY TERMS AND CONDITIONS

Registering your BMPRO by Setec product is an important step to ensure that you receive all of the benefits you are entitled to. Please visit [www.teambmp.com](http://www.teambmp.com) to complete the online registration form for your new product today.

BMPRO by Setec goods come with guarantees that cannot be excluded under Australian Consumer Law. You are entitled to a replacement or refund for major failure and for compensation for any reasonably foreseeable loss or damage. You are entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. The benefits under this Warranty are in addition to your other rights and remedies under a law in relation to the goods to which this Warranty relates (the Australian Consumer Law).

Setec, as the manufacturer of BMPRO by Setec goods warrants products against defects for a period of two years, commencing from the original date of purchase. Proof of purchase is required before you can make a claim under this warranty.

**HOW TO PROTECT YOUR RIGHTS UNDER THIS WARRANTY:** The **MiniBoost** is designed to be installed by a suitably qualified installer. You or your installer should carefully inspect the products before installation for any visible manufacturing defects. We accept no responsibility in addition to our consumer guarantee obligations where a product has been installed incorrectly.

This warranty does not extend to product failures or defects caused by, or associated with, but not limited to; failure to install or maintain correctly, unsuitable physical or operating environment, accident, acts of God, hazard, misuse, unauthorised repair, modification or alteration, natural disaster, corrosive environment, insect or vermin infestation and failure to comply with any additional instructions supplied with the product.

Setec may seek reimbursement of any costs incurred by Setec when a product is found to be in proper working order or damaged as a result of any of the warranty exclusions mentioned above.

To enquire or make a claim under this warranty, please follow these steps:

- a. Prior to returning a BMPRO by Setec product, please email [warranty@teambmp.com](mailto:warranty@teambmp.com) to obtain a Return Material Authorisation (RMA) number
- b. Package and send the product to: BMPRO by Setec Warranty Department, 19 Henderson Road, Knoxfield, VIC 3180. Please mark RMA details on the outside of the packaging
- c. Please ensure the package also includes: a copy of the proof of purchase, a detailed description of the fault and your contact details including phone number and return address

Setec will not be liable for any costs, charges or expenses incurred in the process of returning a product in order to initiate a warranty claim



**SWITCH OFF. POWER UP.**