



OWNER'S MANUAL

MINI BOOST



TEAMBMPRO.COM



POWERING YOUR ADVENTURES

Born by the innovative spirit of our parent company Setec, with over 50 years' experience in power solutions, and design and manufacturing facilities in Melbourne, we are the leading experts in RV power management.

Inspired by the great Australian outdoors, we have created a range of rugged, smart and reliable products to power your adventures.

Our range of battery chargers, monitors and power management systems for caravans gives you peace of mind when you are on the road, so that you can relax in even the most far-flung destinations, knowing that you have control over your vehicle power.

To learn more about the BM PRO range of products, please visit our website teambmpro.com



SAFETY PRECAUTIONS

Please read the Safety Precautions before installing or using the MiniBoost. Be sure to observe all precautions without fail. Failure to observe these instructions properly may result in property damage, or personal injury which depending on the circumstances may be serious and cause loss of life.



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 and must be treated with extreme caution. They can supply high short circuit currents, even if they appear damaged or undamaged.



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 in environments that are excessively hot, cold, dusty or humid or where it will be exposed to magnetic fields or long periods of sunshine. Such exposure may cause the product or your battery to fail, catch fire or explode.



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



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

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MANUAL PART 033300

REV 4.0



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Designed by BM PRO, one of Australia's leading power solution experts, the BM PRO product range is proudly designed and manufactured in Melbourne, Australia, and represent a high-quality product that will provide years of service.

DISCLAIMER BM PRO accepts no liability for any loss or damage which may occur from the improper or unsafe use of its products. Warranty is only valid if the unit has not been modified or misused by the customer.

ABOUT THE MINIBOOST

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 and J35.

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.

The MiniBoost can be used to charge all types of lead acid batteries. While the MiniBoost can charge LiFePO₄ batteries to around 90%, please be aware that the output voltage of the MiniBoost is slightly lower than the LiFePO₄ optimal charging voltage required to achieve full charge.

WHAT'S INCLUDED

Included with this product are:

- ▣ MiniBoost
- ▣ MiniBoost Owner's Manual

INSTALLATION INSTRUCTIONS

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
- ▣ 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. The MiniBoost may be mounted in any orientation.

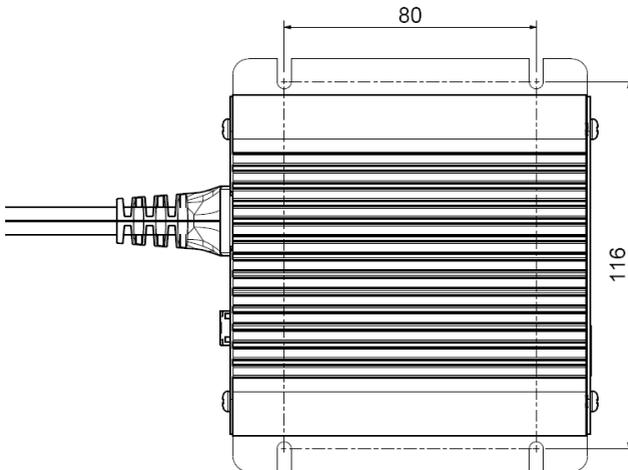


Figure 1: Mounting Dimensions

WIRING

It is recommended that the MiniBoost connect to the vehicle through a 30A (minimum) Isolating Relay and 30A (minimum) fuse. The relay function is to prevent the vehicle battery from discharging when the vehicle is not in use.

WIRE SIZE

Cables should be sized to carry 30A. The minimum recommended wire size is 5mm².

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 degrade.

FUSING

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

WIRING THE MINIBOOST TO THE BATTERYPLUS35

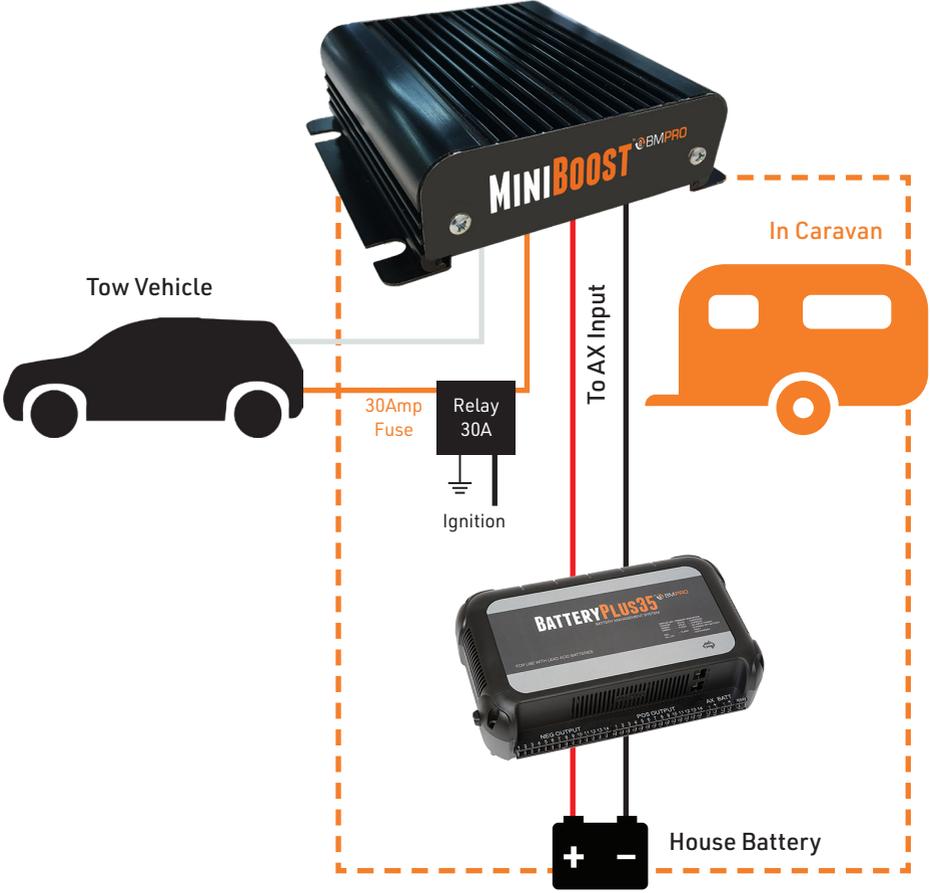


Figure 2: Wired to BatteryPlus35

WIRING THE MINIBOOST TO THE J35

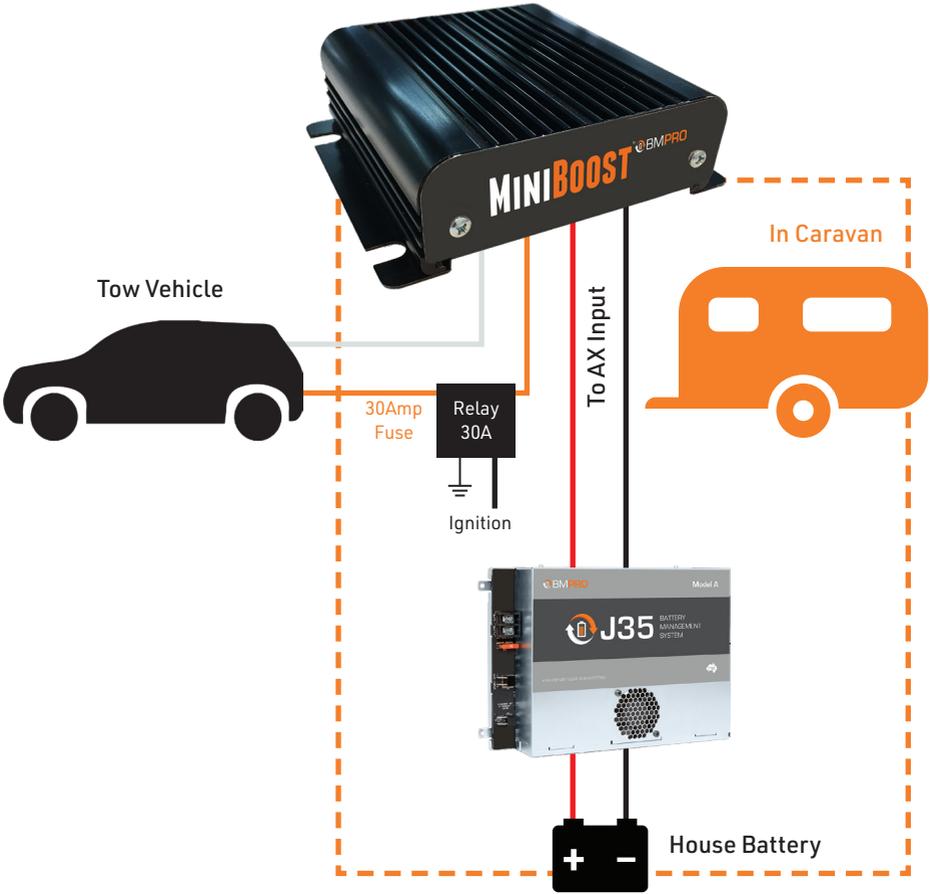


Figure 3: Wired to J35

SERVICING

Do not attempt to service the MiniBoost, OR dismantle, modify or repair the MiniBoost yourself; this will void your warranty. If your MiniBoost requires servicing, please consult your BMAPRO dealer or visit teambmp.com for assistance.

FAQS AND TROUBLESHOOTING

Need help troubleshooting your MiniBoost?

Contact our customer service team online at teambmp.com/technical-support/ or give us a call on (03) 9763 0962..

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 product is an important step to ensure that you receive all the benefits you are entitled to. Please visit teambmp.com to complete the online registration form for your new product today.

1. BMPRO 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).
2. BMPRO 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

3. 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.
4. 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.
5. BMPRO may seek reimbursement of any costs incurred by BMPRO when a product is found to be in proper working order or damaged as a result of any of the warranty exclusions mentioned in point 4 of this statement.
6. To enquire or make a claim under this warranty, please follow these steps:
 - a. Prior to returning a BMPRO product, please email service@teambmp.com to obtain a Return Material Authorisation (RMA) number
 - b. Package and send the product to:
BMPRO 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.
7. BMPRO 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.

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