

# OWNER'S MANUAL

# BATTERY CHARGE 7.5



Manual Part #030529

The BMPRO **BatteryCharge7.5 (BC7.5)** is designed by Setec, one of Australia's leading power solutions experts. The **BatteryCharge7.5** represents 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.

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# WHAT'S INCLUDED

Owner's Manual

# FEATURES


The **BatteryCharge7.5** (BC7.5) is an automatic battery charger with ten charge states. The **BatteryCharge7.5** is suitable for the charging and maintenance of compatible 12V and 24V Lead Acid Batteries (AGM, Gel, Calcium, Wet) as well as LiFePO4 Lithium batteries:

- **12 V:** with a capacity of 18 - 240 Ah
- **24 V:** with a capacity of 10 - 120 Ah
- **Lithium (12.8V LiFePO4):** with a capacity of 10 - 80 Ah

The **BatteryCharge7.5** increases your battery's life and gives high-performance, intelligent charging. Equipped with short-circuit and overload protection the **BatteryCharge7.5** also has a large LCD display panel to let you know the charging progress of your battery.

The **BatteryCharge7.5** may also be used to regenerate completely discharged batteries. The battery charger has protective circuits to prevent it from sparking and overheating.

# CLEANING AND MAINTENANCE

 **CAUTION**

Disconnect from mains power prior to carrying out any cleaning work as there is danger of electrocution.

Never immerse the charger in water. When necessary, clean the **BatteryCharge7.5** with a soft, dry, lint-free cloth.

# SAFETY PRECAUTIONS

Please read the Safety Precautions carefully before using this battery charger. Be sure to observe all the safety precautions.



## WARNING

**Failure to follow these instructions properly may result in personal injury or loss of life.**

Ensure that there is good ventilation in the battery area.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance should not be made by children without supervision.

Batteries are electrically alive at all times and must be treated with extreme caution. They can supply high short circuit currents, even if they appear damaged.

Take care that dropping or touching of metal objects onto the battery cell does not cause short circuits.

Remove any personal metal adornment such as a chain, watch or ring, which could cause short circuits and personal injury.

If the supply cord is damaged, it must not be replaced and the appliance should be scrapped.



## CAUTION

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

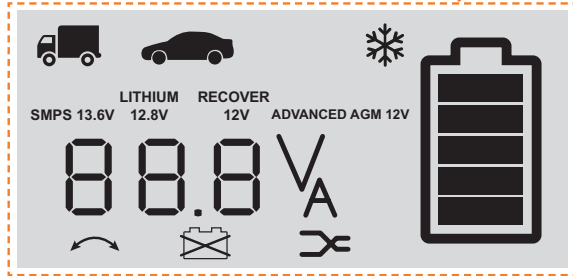
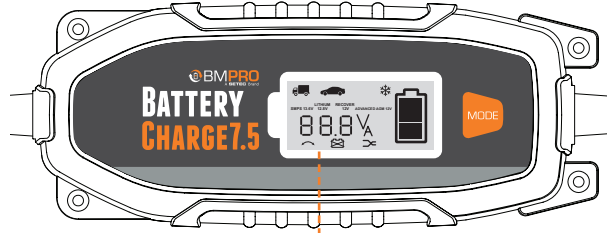
Refer to the installation section before operating. Correct installation is the most critical factor in ensuring the safe use of the power supply. If every consideration of these instructions has been satisfied the power supply will be safe to operate.

Ensure that the charger is always connected to the battery in the correct polarity.

Do not attempt to charge non-rechargeable batteries. Charging a non-rechargeable battery may result in the battery catching fire or possible explosion.

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

# LCD DISPLAY



“MODE” Selection button



This mode is for charging small 24V Lead-acid batteries



This mode is for charging 12V Lead-acid batteries



Cold mode. For use when the battery temperature is below 5C.



This mode is for charging 12V AGM batteries



For attempting to recover 12V batteries that won't charge



For use as a 13.6V 5A power supply



(12.8V 3.0A) For use ONLY with 4-cell LiFePO4 Lithium batteries



Charging battery level: Indicator flashes when charging  
1 bar (20%), 2 bars (40%), 3 bars (60%), 4 bars (80%), 5 bars (90%)



The current voltage of connected battery



The charging current when mode is selected



When flashing, indicates battery is not connected



Shows value of the current and voltage



Indicates faulty battery



Indicates incorrect polarity

# SPECIFICATIONS

<b>Input voltage</b>	220 - 240 V ~ 50 Hz 1.3A
<b>Power consumption</b>	120 W
<b>Reverse current*</b>	< 10 mA (no AC input)
<b>Nominal output voltage</b>	12 V DC / 24 V DC / 12.8V DC/ 13.6V DC
<b>Nominal output current</b>	7.5 A / 3.75 A / 5.0A / 5.0 A
<b>Charging voltage</b>	14.5V / 14.7V for 12V battery, 29 V / 29.4V for 24V battery, 14.5V for Lithium (12.8V LiFePO4), 13.6V for Switch Mode Power Supply.
<b>Charging current</b>	7.5 A ± 10 %, 3.75 A ± 10 %, 5.0 A ± 10 %
<b>Battery type</b>	12V lead-acid battery 18Ah - 240Ah 24V lead-acid battery 10 Ah - 120Ah
<b>Lithium (12.8V 4-cells LiFePO4)</b>	With a capacity of 10 - 80Ah
<b>Housing protection type</b>	IP 65 (dust-proof, water-proof)

\*Reverse current is the current used by the charging station battery, when no mains current is connected.

# OPERATION



## CAUTION

Before installing or re-connecting the **BatteryCharge7.5** always ensure that the mains plug is disconnected from the mains socket.

### Battery Connection

To connect the **BatteryCharge7.5** to a battery, follow these instructions:

Attach the (+) quick-release clamp (red) to the (+) terminal of the battery.

Attach the (-) quick-release clamp (black) to the (-) terminal of the battery.

Connect the mains lead of the **BatteryCharge7.5** to an electrical power outlet socket.

### Disconnection

Disconnect the **BatteryCharge7.5** from the mains power

Detach the (-) quick-release clamp (black) from the (-) terminal of the battery.

Detach the (+) quick-release clamp (red) from the (+) terminal of the battery.

### Memory Function / Reset

After connection to mains power or reconnection to a battery, the **BatteryCharge7.5** automatically returns to the last charge mode run. However, if that mode is not compatible with the connected battery, the **BatteryCharge7.5** automatically resets and remains in STANDBY mode.




### Select Charging Mode

Press the MODE button repeatedly until the appropriate charging mode is displayed.

**Note:** One of the modes shows only the battery voltage, with no other icons shown. This is called the Standby mode. In this mode the battery is NOT being charged. Holding the Mode button pressed for three seconds allows additional modes to be selected. If a battery is not connected, only "SMPS 13.6V" can be selected. If a battery is connected, "Advanced AGM 12V", "Lithium 12.8V", and "Recover 12V" can be selected.

**Note:** The Lithium mode cannot be selected if the battery voltage is less than 11.6V or greater than 13.8V



Long press 3sec. the MODE selection button  at no battery connected status after doing so, the corresponding LCD display  lights up. If you do not activate another process afterwards, the electronic system will automatically start the power supply output process as adaptor function together with the LCD display the  output is 13.6V DC 5.0A.

## SPECIAL FEATURES

### Overheating protection

If the **BatteryCharge7.5** becomes overheated during charging, the power output is automatically reduced. This protects against damaging both your battery and the charger.

### Trickle charging

Once the battery has been fully charged, the **BatteryCharge7.5** automatically changes to trickle charging. Depending on the measured voltage, the charging is interrupted or the battery is maintained in a fully charged condition with low voltage currents.

# PRODUCT FEATURES

This appliance has been designed for charging a variety sealed lead acid batteries, as mainly used in cars, motorbikes and other vehicles. They may be of types e.g. WET (with liquid electrolyte), GEL (with mit gel-type electrolyte) or AGM (absorbed glass mat) batteries. A special design of the appliance (also named "ten-phase-charging strategy") enables the recharging of the battery to almost 100 % of its original capacity. Connecting the battery for a long period to the battery charger is also a good way of ensuring that your battery is kept in optimum condition. The "ten-phase-charging strategy" as follows:

**Step 1:** Check

**Step 2:** Recovery

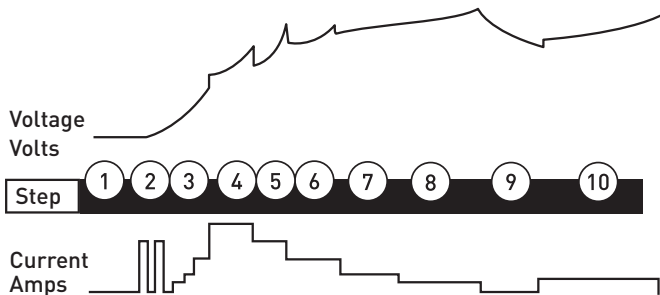
**Step 3:** Soft Start

**Steps 4-7:** Bulk

**Step 8:** Absorption

**Step 9:** Maintenance 1

**Step 10:** Maintenance 2



# 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 **BC7.5** is designed to be installed by a suitably qualified installer. You or your installer should carefully inspect the product 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 them when a product is found to be in proper working order or damaged as a result of one or more of the warranty exclusions mentioned in point 4 of this statement.

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** 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.**

**BMPRO** A Setec Brand

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