# **OWNER'S MANUAL**



TEAMBMPRO.COM

# BMPRO

# **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 BMPRO range of products, please visit our website **teambmpro.com** 



# **SAFETY PRECAUTIONS**

Please read the Safety Precautions before installing or using the JControl. Be sure to observe all precautions without fail. Failure to observe these instructions properly may result in personal 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 JControl. If every consideration of these instructions has been satisfied, the JControl will be safe to operate.



Keep the JControl away from water or other liquids.



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. Do not allow any liquids to enter the housing.



The JControl 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.

MANUAL PART 032771 REV 3.0



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

**DISCLAIMER** BMPRO 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 JCONTROL**

The JControl is designed specifically to operate with BMPRO's J35 (Models A and B).

The JControl provides vital data at a glance including caravan battery voltage and charging/discharging current. The JControl also provides an indication of the battery's remaining charge capacity as well as the time remaining before the battery completely discharges-so you'll never be left on the road without battery power.

In addition to battery monitoring, the JControl enables monitoring of water levels of up to four water tanks and control of a water pump, all from the convenience of a wall mounted display fitted to the caravan interior.

### WHAT'S INCLUDED

Included with this product are:

- JControl plus front fascia cover
- JControl Owner's Manual

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# **DESCRIPTION OF PARTS**

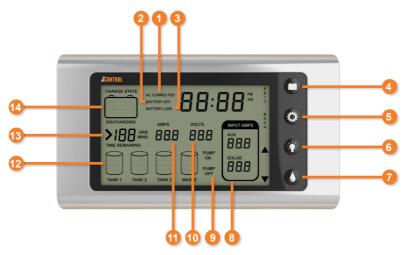


Figure 1: JControl Monitoring Panel

AC CONNECTED 1

Appears when the J35 is connected to AC mains.

### BATTERY OFF 0

Battery off will appear when:

- 1. The user presses the battery button 4 to enter Sleep Mode.
- 2. The J35 has automatically entered Sleep Mode to preserve battery capacity until the battery can be charged.

### 3

**BATTERY LOW** 

Appears when the battery voltage level falls below the low voltage warning threshold to indicate that the battery requires charging.

By default, the low voltage warning threshold is 11V and can be configured by the user



### BATTERY BUTTON

Enables Sleep Mode which powers off all caravan loads connected to the J35 load terminal block. Battery charging is not affected by Sleep Mode.

As the caravan loads are no longer powered, Sleep Mode is a convenient way to save remaining power of your battery if you are on the road and have limited ability to charge the battery.

When charging, Sleep Mode ensures that all available charging current is dedicated to charging your battery.

In Set-Up mode, the Battery button acts as the EDIT function.

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### SETTINGS BUTTON

To enter Set-Up mode on the JControl and configure user settings. In Set-Up mode, the Settings button acts as the BACK function.



### BACKLIGHT BUTTON

To turn the backlight/nightlight of the JControl screen on and off.

A single press of the backlight button will turn the backlight on. Press again to turn the backlight off, otherwise the backlight will automatically turn off after 30 seconds.

To turn the nightlight on, press and hold the backlight button for three seconds or until the backlight blinks. The nightlight will stay on for 10 hours. To turn nightlight off, press and hold the backlight button until the nightlight turns off.

In Set-Up mode, the Backlight button acts as the UP-scroll arrow function.



### WATER PUMP BUTTON

To turn the water pump connected to the J35 on and off. Whenever the J35 and JControl are powered on, or whenever you press the Battery button to exit Sleep Mode, by default, the water pump will be off.

Press the water pump button to toggle the water pump on and off.

In Set-Up mode, the Water Pump button acts as the DOWN-scroll arrow function.

### 8 INPUT AMPS

Displays the current drawn by the J35 from its auxiliary and solar inputs to power loads and charge the caravan battery.

If either of the inputs are unavailable to the J35, the JControl will display "--.-". If either of the inputs are available to the J35 but not in use, the JControl will display "00.0"

### WATER PUMP STATUS INDICATOR

Indicates if the water pump connected to the J35 is turned on or off.

### 10 VOLTS

Displays the caravan battery voltage.

### 1 AMPS

Displays the charging/discharging current of the battery connected to the J35.



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### TANK LEVEL INDICATORS

Monitor water levels of up to 4 water tanks. By default, tanks 1, 2 and 3 are set-up to monitor clean water and tank 4 as dirty water.

Tank properties are configurable in Set-Up mode.

The tank level indicator will flash when the monitored tank is empty (clean water) or full (dirty water). If a tank is not monitored, the indicator will be blank.

### 13 TIME REMAINING

Indicates the estimated time remaining until the battery is completely discharged.

Time remaining less than 180 minutes will be displayed in MINS. Time remaining greater than 180 minutes will be displayed in HRS.

### BATTERY CAPACITY BAR GRAPH

Displays an estimate of the capacity of the connected battery, and underneath indicates if the battery is either 'CHARGING' or 'DISCHARGING'.

# **USING YOUR JCONTROL**

JControl does not have an ON/OFF button. The JControl receives power directly from the J35 through the connected data cable. The JControl will automatically turn off if it is not receiving power from the J35.

Upon start-up, the JControl will display LORdn9 on its Home screen, until communication between the JControl and J35 is established.

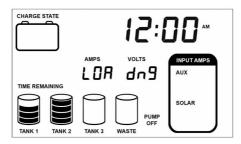


Figure 2: The JControl start-up screen

Once communication is established, the JControl will display the relevant battery and system information on its screen. If the JControl cannot establish communication to the J35, the JControl will display **Err Lo**. Please check the data cable between the JControl and J35.

### **JCONTROL SET-UP MODE**

### ENTERING SET-UP MODE

The JControl Set-Up mode allows you to access the functions to configure the JControl display, enter important battery information, set alarms and configure tanks.

To enter Set-Up mode, hold the SETTINGS button down until **SEE UP** is seen in the AMPS and VOLTS display.

The Set-Up screen also includes:

### Menu Function Display

Displays the various Set-Up menu functions that can be accessed in Set-Up mode and any associated information <sup>2</sup>. If the function can be edited, the menu function will flash on screen.

### Edit

Use the Battery button on the JControl to select a menu function or sub-function to edit.

### Back

Use the Setting button on the JControl to return to the previous 'Screen' or menu function. Repeatedly press the Setting button to return to the JControl's home screen.

### Scroll Arrows

Use the Backlight and Water Pump buttons on the JControl to navigate the Set-Up menu and change values when configuring the JControl.

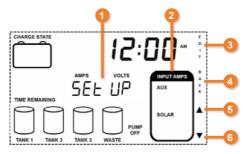


Figure 3: JControl Set-up Mode

### SET-UP MODE MENU FUNCTIONS

Table 1 lists all the menu functions available to the user from Set-Up mode. When in Set-Up mode, use the up and down scroll arrows to navigate the Set-Up menu functions.

### Table 1: JControl set-up menu functions

- **ELDEH** Set time on the JControl display
- EAnH5 Configure the water tanks
- **BRECRP** Configure battery capacity of the battery connected to the J35
- 6AEAL Adjust low voltage warning thresholds for low battery alarm
- **BAHLIE** Adjust the LCD backlight
- RduAnE Advanced menu settings. For technical personnel only. The functions available in the Advanced menu setting may vary with some versions of the J35.
- J35 5'' Displays the J35 software version
- J35 H'' Displays the J35 hardware version
- UL 5' Displays the JControl software version
- ULH' Displays the JControl hardware version
- FACE-Y To perform a factory reset

### EXITING SET-UP MODE

To exit Set-Up mode or to exit from any menu function available in Set-Up mode, repeatedly press the BACK button until the JControl enters the Home screen.

Alternatively, wait and the JControl will automatically revert to the Home screen, saving any changes made when editing the menu functions.

### **CLOCK MENU FUNCTION**

Time may be set in either 12- or 24-hour formats.

### 12-Hour Format

Enter Set-Up mode and navigate to the *CLDCH* menu function. Follow the directions in figure 4 to set the time in 12-hour format on the JControl display.

The AM and PM annunciators will automatically change as the hour changes from 11 to 12.

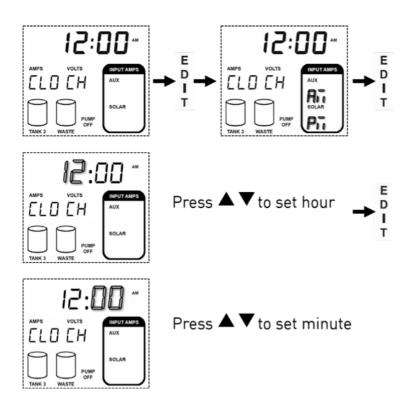


Figure 4: Setting 12-hour time format on the JControl display

### 24-Hour Format

Enter Set-Up mode and navigate to the *CLDCH* menu function. Follow the directions in Figure 5 to set the time in 24-hour format on the JControl display.

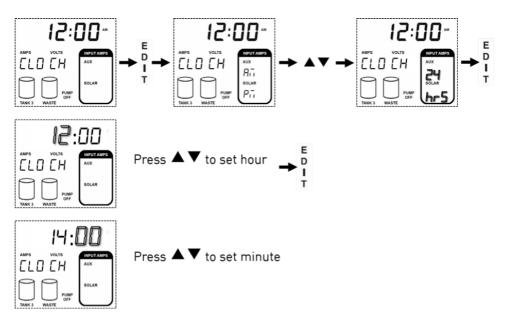


Figure 5: Setting 24-hour time format on the JControl display

### WATER TANK MENU FUNCTION

Use the Water Tank menu function to choose to monitor and display (enable ON/OFF) a water tank and configure the water tank type (clean/dirty).

### Enable and Disable Water Tank Monitoring and Display

Enter Set-Up mode and navigate to the *ERnH5* menu function. Follow the directions in figure 6 to enable or disable the monitoring and display of water tank on the JControl.

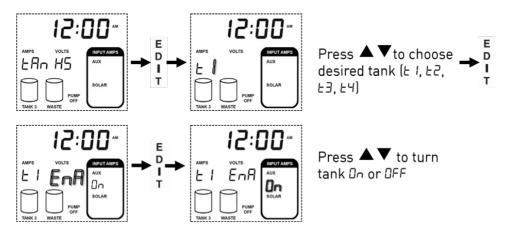


Figure 6: Enabling and disabling a water tank for monitoring and display with the JControl

### Configure Water Tank Type

Enter Set-Up mode and navigate to the *EAnH5* menu function. Follow the directions in Figure 7 to configure the water tank type. The ability to configure water tank type is only available if monitoring of the tank is enabled.

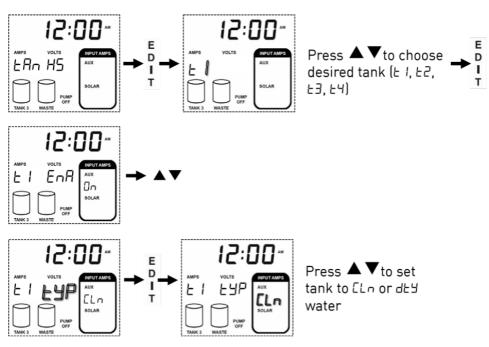


Figure 7: Configuring the water tank type

### **CONFIGURING BATTERY CAPACITY**

The battery capacity needs to be set whenever a new battery is fitted to the J35. By default, the battery capacity is set to 100AH.

Correctly configuring the battery capacity ensures that the J35 will select the best charging parameters for the caravan battery in use and the software accurately estimates battery usage including Battery Capacity and Time Remaining.

Enter Set-Up mode and navigate to the *BRE CRP* menu function. Follow the directions in Figure 8 to configure the battery capacity. The battery capacity can be adjusted between 50 and 600AH in steps of 10AH.



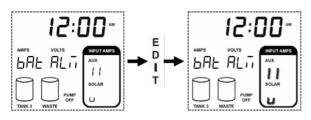
Figure 8: Configuring the battery capacity

### **CONFIGURING BATTERY ALARM**

Configure the battery alarm and set the low battery voltage warning threshold to trigger the Battery Low warning on the JControl Home screen to indicate that the battery requires charging.

By default, the low voltage warning threshold is 11V.

Enter Set-Up mode and navigate to the *BRERLi* menu function. Follow the directions in Figure 9 to configure the battery alarm. The battery alarm can be adjusted between 10.0 and 14.0V in steps of 0.5V.



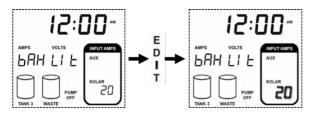
Press  $\blacktriangle \nabla$  to adjust the battery alarm threshold

Figure 9: Configuring the battery alarm

### LCD BACKLIGHT

Use the LCD Backlight function to change the brightness level of the JControl's LCD backlight.

Enter Set-Up mode and navigate to the bAHLI E menu function. Follow the directions in Figure 10 to configure the backlight brightness. The brightness can be adjusted between 0 and 100% in steps of 10%.



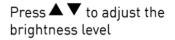


Figure 10: Configuring the LCD backlight brightness level

### FACTORY RESET

Enter Set-Up mode and navigate to the FACLOry menu function. Follow the directions in Figure 11 to perform a factory reset and restore the JControl to the factory settings.

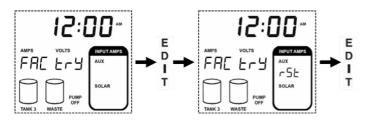


Figure 11: Factory reset

# SERVICING

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

# FAQS AND TROUBLESHOOTING

### Need more help troubleshooting your JControl?

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

### Why has the JControl screen turned off?

The JControl receives power to run the monitor from the J35. If the J35 shuts power to the monitor, the JControl screen will turn off. The J35 will shut power to the JControl if:

- The user activated the load isolation switch connected to the J35. This turns off power to the data cable connecting the JControl and J35. Check that the switch has not been activated.
- 2. The J35 has entered Storage Mode and to conserve remaining battery voltage will disable power to the JControl.

To repower the JControl, plug the J35 to a power source and begin battery charging. When the battery is sufficiently charged, the J35 will enable power to the JControl.

### Why are the battery volts and amp flashing on the JControl?

Battery volts and amps will flash on the JControl if a BC300 + CommLink external shunt has been installed and communication with the shunt has been lost.

Use the advanced menu function **EShunt** to clear the external shunt from memory and re-establish communication with the BC300 + CommLink. See the Appendices for more details.

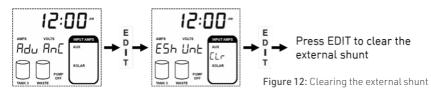
# **APPENDICES**

### ADVANCED MENU FUNCTIONS

### **Clear External Shunt**

This function is only available if the BC300 + CommLink external shunt is installed on the caravan battery. This menu item should be used when communication with the external shunt is lost. See FAQs and Troubleshooting for more details.

To clear an external shunt, enter Set-Up mode, select the AduAnE menu function and navigate to the E5hUnE menu function. Follow the directions in Figure 12.



### Adjusting Bulk Voltage

The bulk voltage is the maximum voltage at which the J35 will charge the battery. The bulk voltage may be adjusted from 13.6 to 14.8V in steps of 0.1V.



Changing the bulk voltage may result in the battery overcharging and cause damage to the battery and in extreme cases may also cause personal harm. **If unsure DO NOT change the default values.** 

To adjust bulk voltage, enter Set-Up mode, select the *AduAnE* menu function and navigate to the *EHArgE* menu function. Follow the directions in Figure 13.



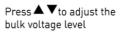


Figure 13: Adjusting bulk voltage

### **SPECIFICATIONS**

JControl	
Input Voltage Range:	8-15V DC
Battery Drain:	< 21mA with backlight off
Ambient Temperature:	0-50°C
Dimensions (mm):	164W x 95H x 22D

# **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 **teambmpro.com** to complete the online registration form for your new product today.

- 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 JControl 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@teambmpro.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.
- 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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