

## OWNER'S MANUAL



























With over 50 years' experience in power solutions combined with manufacturing and design facilities in Melbourne, Australia, BMPRO are the leading experts in RV power and control management.

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

Our range of battery, power and RV management control systems gives you peace of mind when you are on the road, so that you can relax in even the most far flung destinations, knowing you have control over your power needs

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 system. 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.

## **MARNING**



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



Do not drop or vigorously shake the product as this may cause damage. Do not shock the product or its accessories as this may cause the product to fail, catch fire or explode.



Stay away from magnetic equipment. Radiation may erase the information stored on this product, causing it to become inoperative.



Electricity and water do not mix. Keep this product and your battery dry and do not expose it to water or water vapor. Do not operate this product or battery near any sort of liquid. Do not operate this product with wet hands.



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 system 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 unauthorized person will void the warranty.



Before using this product, check that cable connections to the battery are of correct polarity. To protect against accidental short circuit, ensure that the shrouding supplied with the batteries are always fitted to the battery terminals.



Do not install this product in the same compartment where flammable materials, such as petrol is stored.



Product specifications are subject to change and improve without notice.

#### INFORMATION FOR THE USER

This device complies with Part 15 of the FCC Rules, and Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including what may have cause undesired operation.



Any changes or modification are not approved by BMPRO and will void compliance of the product and the user's authority to operate this equipment.

Le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- 1. L'appareil ne doit pas produire de brouillage;
- 2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement



## AVERTISSEMENT

Tout changement ou modification non expressément approuvé par BMPRO pourrait annuler la conformité du produit et le pouvoir de l'utilisateur d'utiliser cet équipement.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency and energy. If not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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MANUAL PART 036190 REV 5.0 Designed by BMPRO, one of Australia's leading power solution experts, the BMPRO range of products are proudly Australian made in Melbourne, Victoria 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.

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# **ABOUT THE SYSTEM**

The system brings smart home technology to your RV, taking control and management of your RV features to new horizons!

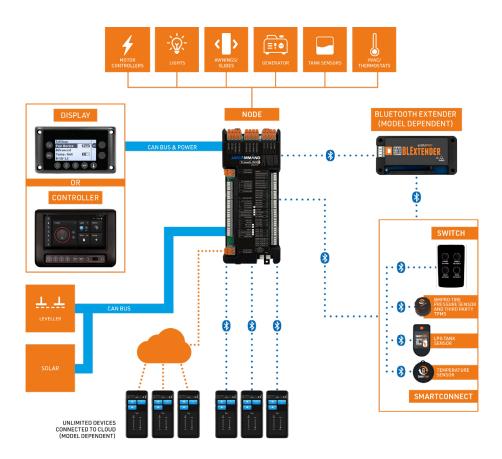


FIGURE 1: System Diagram

#### Node

The heart of the system, the Node, is an RV management system that powers and monitors your RV features and accessories. The Node communicates via RV-C to the Display or Controller (depending on your model) and Bluetooth Low Energy with your smartphone, to receive the commands to control power to all your RV features and accessories.

### Firmware Updates

The Node can be updated over-the-air, meaning you get the latest feature updates without the need to bring your RV to your local RV dealer. The App on your smartphone or Controller (depending on your model) will need to be updated regularly to receive the latest firmware.

Notifications to update the Node firmware may be received after updating the App. These may not be postponed and may start automatically. While the Node is powered, update the Node at the prompt to ensure that the Node is compatible with the App.



FIGURE 2: Updating Firmware

For more information, refer to **Updating Firmware (Model Dependent)**.

### Display/Controller (Model Dependent)

The sleek, wall-mounted Display or Controller gives you the freedom to monitor and control multiple RV functions.

## App

The App allows you to monitor and control your RV on up to 4 personal devices via Bluetooth

The App is available both for Android and iOS.

#### Monitor

Water tanks, Temperature, Tire Pressure, Battery and LPG.

#### Control

Lighting, Slide-outs, Awnings, Jacks, Heating and Cooling Systems, Generators and leveling.

#### **SMARTCONNECT**

Your system is SmartConnect ready!

With SmartConnect Bluetooth sensors, you can remotely monitor various aspects of your RV, such as tire pressure, propane tank levels and individual temperatures.

Through the App these sensors are a great addition to enhance your overall experience.

SmartConnect sensors are available through your local RV dealership. For more details, refer to **teambmpro.com/products/smartconnect** 

## DESCRIPTION OF PARTS

### **DISPLAY (MODEL DEPENDENT)**



FIGURE 3: The Display

## 1. Page Navigation Button

Move between function screens, eg. From Tanks to Water screen.

## 2. Menu Navigation Button

Navigate between items within a page, e.g. in the Water page move from Pump to Elec Heater.

#### 3-4. Action Buttons

The function for each of the action buttons changes depending on the selected menu item. These functions will be displayed on the screen, eg. OK, EXT, RET, On, Off.

## 5. Redundancy Buttons

Turn lights and water pump on or off. The climate button takes you to the main climate page.

## Adjusting the Lights

**QUICK press** toggles between off and the previous stored brightness.

**LONG press** sets the light brightness to 100%.

#### **DISPLAY NAVIGATION (MODEL DEPENDENT)**

Use the Page Navigation Button to move from page to page.

Use the Menu Navigation Button st to move between menu items within a page.

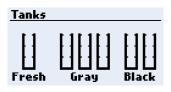


FIGURE 4: Tanks Screen

#### **Tanks**

The Tanks display shows the levels of fresh, gray and black water tanks. Levels are displayed as:

FULL 2/3 FULL 1/3 FULL **FMPTY** 



FIGURE 5: Water Screen

#### Water

From the Water screen, the Pump, the Electric and Gas Heaters can be switched on and off. A warning will appear if the Gas Heater fails to

ignite after three attempts.

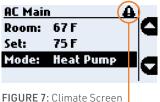


#### Motor

Press the **EXT** or **RET** Action buttons to control the motors.

This menu list is RV model dependent.





### Climate

**Room:** The ambient room temperature. **Set:** User-controlled temperature setting.

Range: 33°F - 90°F (1°C to 32°C)

Modes: OFF / FAN / COOL / AUTO-COOL / HEAT

PUMP / FURNACE / HEAT-BOTH Fan: Settings: HIGH / LOW

AC Controls are RV model dependent.

NOTE: This indicates a fault with one of the climate outputs or the temperature sensor. A sensor fault is also indicated by no room temperature value being shown, eg. -- F



FIGURE 8: Climate Screen with AC-Fan

If **Furnace Mode** is selected, the AC-Fan option displays.

AC-Fan: Settings: OFF / LOW

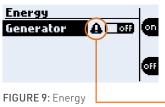






FIGURE 10: Settings Screen



FIGURE 11: Advanced Screen

## Energy

ON: Press and hold the ON action button, until the generator turns on.

OFF: Press and hold the OFF action button, until the generator turns off.

NOTE: A generator warning will appear if the generator fault LED is actively blinking.

### Settings

Pair Device: Press OK to pair to a device.

**Advanced:** Press OK to go to the Advanced menu. Temp. Unit: Toggle between Fahrenheit & Celsius. D-SW: Indicates the software version on the

Display.

#### Advanced

Forget All Dv: Forget ALL Bluetooth Devices.

Pair Switch: Pair BLE Switches.

Forget All Sw: Forget all BLE Switches.

SW: Node software version.

#### CONTROLLER (MODEL DEPENDENT)



FIGURE 12: The Controller

#### 1. Controller Home Screen Button

#### 2. Connection Bar

When connected to Bluetooth, the icon will appear on screen.

When connected to the cloud, the icon will appear on screen.

Both icons will appear when both services are available.

## 3. Settings Icon

Access to the App General Settings.

This button is only available on the Home Screen.

#### 4. Return

Navigate to the previous page.

#### 5. Main screen

Navigate to the Controller's tablet Android screen.

## 6. Recent Applications

Display a list of recently used / background applications on the Controller.

#### 7. Reset Pinhole

To reset the Controller, insert an item (eg. a paper clip) into the reset pinhole. Control Panel

#### 8. Control Panel

To provide quick access to lights, water pump and motor operation while the Controller is in use.

## 9. Lights

Turn lights and water pumps on/off:

- All Interior Lights
- ② All Exterior Lights
- All Lights
- or WP Water Pump Control

### 10. Motor Operation

To extend (EXT) and retract (RET) any motors installed in the RV.

**NOTE:** These buttons are also used during the pairing process between the Node and devices such as the Controller and smartphone.

## 11. & 13. Navigation Buttons

Use navigation buttons to scroll through the Control Panel menu functions. For more information on available functions, refer to the **Control Panel Menu Functions** section.

### 12. Menu Display

Displays the current menu function.

#### CONTROL PANEL MENU FUNCTIONS (MODEL DEPENDENT)

The menu functions on the Controller's Control Panel allow you to operate various motors, quickly switch off loads and pair or clear the Node.

The following functions apply depending on what is available in your RV.



#### **Awnings**

Navigate to the desired awning: A1 (Awning 1)

A2 (Awning 2)

then press **EXT** or **RET** to operate.



#### Slide-outs

Navigate to the desired slide-out:

S1 (Slide-out 1)

S2 (Slide-out 2)

S3 (Slide-out 3)

S4 (Slide-out 4)

S5 (Slide-out 5)

S6 (Slide-out 6)

then press EXT or RET to operate.



#### **Pairing**

To pair the Node with the Controller, your own smartphone, or to clear the Node of any pairings.

For more information, see **Pairing** to the Node with a Controller and Clearing the NODE.



#### Jacks

Navigate to the desired Jack:

J1 (Landing Jack)

J2 (Front Stabilizing Jack)

J3 (Rear Stabilizing Jack)

then press **EXT** or **RET** to operate.



### Ramp Door

Navigate to the desired ramp door, then press **EXT** or **RET** to operate.



#### Off

Navigate to **OF**, then press **EXT** to turn power OFF to all appliances.

The OF function will not shutdown generators connected to the Node.
Navigate to the OF function, then press EXT to confirm that power to all accessories should be turned off.

Note: The Controller will turn off after 10 seconds. The Controller can be turned back on by pressing any of the Light buttons on the Control Panel.

## PAIRING TO THE NODE

### PAIRING TO THE NODE WITH A DISPLAY (MODEL DEPENDENT)

Pairing your smartphone to the Node is simple. The App will guide you through the process.

The Node can be paired to a total of four devices.

- 1. Launch the App on your phone and choose the device installed in your RV
- 2. Press the Page Navigation Button to navigate to the 'Settings' page
- **3.** When "Pair Device" is highlighted, press the OK function button and your smartphone will begin pairing to the Node.



FIGURE 13: Pairing to the NODE

When your smartphone is paired with the Node, the Bluetooth icon is displayed on the App home screen.



For additional support, refer to the **FAQs and Troubleshooting** section.

#### PAIRING TO THE NODE WITH A CONTROLLER (MODEL DEPENDENT)

Pairing your Controller, smartphone or tablet to the Node is done in three easy steps. The App will guide you through the pairing process.

**NOTE:** The Controller will have been paired to your Node at the factory. You should only need to pair your own device or smartphone to the Node.

While the Node can be paired to a total of four devices (including the Controller), you can only pair one device at a time to the Node.

- 1. Launch the App on your phone.
- 2. Using the < or > buttons on the Controller, navigate to the PA menu item.



FIGURE 14: Navigate to the 'PA' menu item

3. When 'PA' appears on the display, press the EXT button to start the pairing process to the Node. 'PA' will blink for a maximum of 30 seconds or until a device is connected.



FIGURE 15: Start the Pairing Process

4. When pairing is successful, you will be taken to the App home screen and the Bluetooth icon will be visible.



FIGURE 16: Pairing Successful

## **CONGRATULATIONS, YOU'RE CONNECTED!**

For additional support, refer to the **FAQs and Troubleshooting** section.

#### Cannot Pair to the Node

If you are pairing a mobile device to the Node and "--" appears on screen, it is mostly likely that four devices are connected to the Node simultaneously. To resolve this, either:

- Close the app on one of the devices that are connected to the Node and try again, or
- Clear the memory of the Node of all the previously paired devices.



FIGURE 17: Pairing Failure

# **BMPRO CLOUD (MODEL DEPENDENT)**



## WARNING

You can only connect to the BMPRO Cloud if your RV is equipped with a Controller.

Systems with a Controller have cloud control, which allows you to remotely connect, monitor and control your RV from your smart device.

#### CONNECTING TO THE BMPRO CLOUD

To connect to the BMPRO Cloud for the first time:

- 1. Connect your Controller to the Internet via Wi-Fi.
- 2. Launch the App.
- 3. From the App home screen, press the Settings icon.
- 4 Press Remote Connection
- 5. Press Create account.
- **6.** Enter your full name, email address and a password of your choice.



## WARNING

Keep your password in a safe place and only share details with others if you want them to access and control your RV!

- 7. Press Create account.
- 8. An email will be sent to your account to verify your email address. Click on the link provided in the email to complete verification.
- 9. Now connect your smart device using your BMPRO account details to get started.

#### Account Not Verified

f the email address was not verified, the following message will appear:



RESEND VERIFICATION EMAIL DISMISS

FIGURE 18: Email Not Verified

Press **RESEND VERIFICATION EMAIL** to complete the email verification process.

#### CLOUD CONTROL

To control the RV from cloud:

- 1. Launch the App on your smart device.
- Select Log in to BMPRO Cloud, or in General Settings, select Remote Connection.
- 3. Enter your email address and password.

Use cloud control to remotely monitor and control features in your RV.

For your safety and for the prevention of unintentional damage, the leveling, motor controls and the water pump ON switch can not be controlled from the cloud.

#### WINEGARD



You can only set up Winegard if your RV is equipped with a Controller.

## To set up Winegard:

- 1. Go to the Settings menu.
- 2. Scroll down and press Winegard Settings.

## Logging into Winegard network

- 1. Press the search button to search for the available networks.
- 2. Select the desired network and enter the password or enter the network name and password. If your network is not seen, make sure the Winegard is turned on and scan again.
- 3. After the network name and password are entered correctly, press Join.

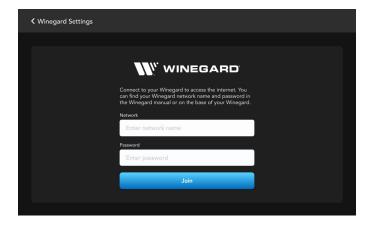


FIGURE 19: Winegard login

#### Internet Preferences

You can select from the following options:

- **4G**: Connect to a 4G network. SIM card required.
- WiFi: Connect to an external WiFi network.
- Internet OFF: No internet source selected.



FIGURE 20: Winegard Internet Preferences

### Winegard Status

The current status of the Winegard is displayed on the Winegard tile in the General Settings area.

- **SETUP:** This is seen when no Winegard network has been connected previously. Press the tile to connect to a Winegard network.
- UNAVAILABLE: This means that the Winegard network is not available and may be seen during a transition from one mode to another. If Unavailable is displayed for a long time, check that the Winegard module is ON.
- **FETCHING INFO, CONFIGURING:** This may be seen during a transition from one mode to another, e.g. changing from WiFi to 4G.
- 4G: This is seen when the Winegard is set to 4G. The status of the network is also displayed, e.g. Connected to 4G/LTE "NetworkName Data Plan"
- WiFi: This is seen when the Winegard is set to WiFi. The status of the network is also displayed, e.g. Connected to WiFi "NetworkName"
- Internet OFF: This is seen when the Winegard is set to WiFi. The status of the network is also displayed Internet is off.

### WiFi Properties

To log in to a WiFi network:

- Press the Search button for a list of available networks and select desired network.
- If your network is not seen, make sure the Winegard is turned on and scan again. After the network name and password are entered correctly, press Done.



FIGURE 21: Logging into WiFi

## Save and/or forget WiFi Network

After the WiFi credentials are entered, the WiFi network will be saved.

- Press Done to connect last saved network.
- Press X to delete the saved network.



FIGURE 22: WiFi Credentials

## THE APP

Download the JAYCOMMAND/TravelLINK powered by BMPRO app to your smartphone or tablet and enjoy the freedom to monitor and control the onboard features of your RV remotely.

If your system has a Display, the App allows you to access more features of your connected RV that otherwise may not be available.



#### WARNING

Available features on the App may vary depending on your RV model.

#### **COMPATIBLE DEVICES**

The App is compatible with Android 6.0 or later and iOS 11 or later.









FIGURE 23: QR Codes

#### APP HOME SCREEN

The App home screen provides a general overview of the key features of your RV. It also provides a quick way to control specific RV lights and the RV's climate system, direct from the home screen.





FIGURE 24: App Home Screen

#### **TANKS SCREEN**

You can control the water pump, electric, gas heaters and tank heaters from the Tanks screen, if applicable.

The Tanks screen displays the levels of your fresh, gray and black water tanks. The water levels displayed are: Empty, 1/3, 2/3 and Full.





FIGURE 25: Tanks Screen

#### LEVELING AND MOTORS SCREENS

The Leveling and Motors Screens control the Slide-outs, Awnings, Landing Legs and Jacks. It contains controls for certain Leveling Systems installed in the RV.

**NOTE:** All Jayco-approved leveling systems are compatible.



## WARNING

Before operating any motors, ensure the area is free from obstacles and other hazards. Please ensure that any persons near the RV are not in any danger from moving parts.

## Leveling Control

If equipped, the leveler can be controlled from the Controller (model dependent) or your smartphone. Individual jack controls and zero point calibration are also available on some models.

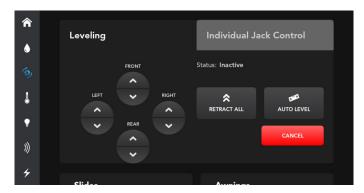




FIGURE 26: Leveling Screen

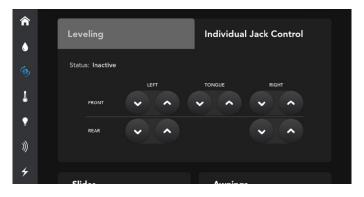




FIGURE 27: Jack Control

## Zero Point Calibration (Model Dependent)

If your model supports zero point leveling, you can calibrate perfrom zero point calibration from the **Motor Settings** screen in the Settings menu.

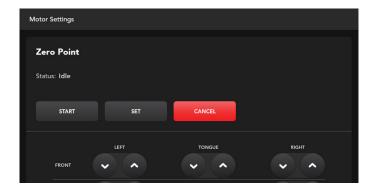


FIGURE 28: Zero Point Leveling

For more information on zero point calibration, refer to the **Zero Point Calibration Sequence help guide**.

FIGURE 29: Zero Point Calibration Sequence help guide QR code



**Note:** Depending on the type of leveling system installed, the tongue jack may not be available.

## **Leveling Faults**

If a fault occurs with the leveling system, a pop-up will appear. To clear the fault, follow the instructions in the pop-up and press "OK".

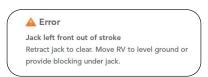


FIGURE 30: Fault Error Message

#### Motor Control

Only one motor may be operated at a time. Once a motor is in operation, motor control will be disabled in any other device running the App. This does not include the leveling system.

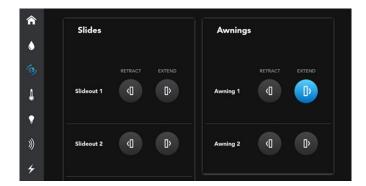




FIGURE 31: Motors Screen

To operate motors on your own device, swipe to unlock the Motors screen.



FIGURE 32: Swipe to Unlock

## Motor Lockout Feature (Model Dependent)



The motor lockout feature is only available if your RV is equipped with a Controller.

Systems with a Controller will automatically lockout the motor if a high input is detected on the brakes. This will be shown on the Node at pin 64.

The motor cannot be turned back on until the lockout is disabled.

If the motor is locked, the App will show a pop-up.

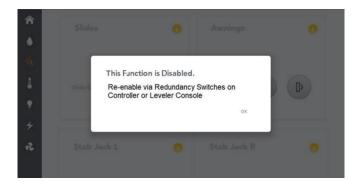


FIGURE 33: Motor Lockout

The motor can be turned back on by:

- Using the redundancy switches on the Controller.
- Sending leveling commands with the leveler.

#### **CLIMATE SCREEN**

The Climate Screen allows you to control the temperature inside your RV. The zones that appear depend on the vehicle configuration.





FIGURE 34: Climate Screen

### Cool & Cool Auto

Cool will run the fan continuously and cycle the compressor, as it needs to achieve the target temperature.

Cool Auto is similar, but will only turn on the fan when the compressor is operating.

There may be a three minute delay in turning the compressor on.





FIGURE 35: Cool / Cool Auto

#### Fan

The fan can be operated for air circulation in each zone.





FIGURE 36: Fan Mode

#### Heat

If available, the RV may be heated from the furnace, heat pump or a combination of both. The furnace can only be controlled from the Main Climate Zone.

To set the temperature:

- 1. Turn climate on.
- 2. Select your mode of operation.
- **3.** Adjust the temperature to your desired setting (if available in the selected mode).
- **4.** If the mode is set to Furnace, you can then set the main A/C fan to off or low.

There may be a three minute delay in turning the Heat pump on.

To prevent unwanted circulation of cool air, in furnace mode the main A/C fan will wait 60 seconds before coming on to allow time for the furnace to heat the RV.





FIGURE 37: Heat Mode Screen

## **LIGHTS SCREEN**

Lights can be turned on and off from the light screen. Brightness can also be adjusted on certain lights.





FIGURE 38: Lights Screen

## **ENERGY CENTER**

#### **BATTERY MONITORING**

Battery Monitoring allows you to monitor RV and/or chassis voltages. If no RV and chassis batteries are connected, the App will monitor the system voltage of the Node.

If the voltage drops below 12V, a warning will appear on the screen.





FIGURE 39: Energy Center Display

#### **GENERATOR**

To turn on the generator, press and hold the start generator button until the generator starts. The App will also show the running status of the generator. To stop the generator, press and hold the stop generator button until the generator stops.

If the Generator Status section in the App indicates a fault:

- **1.** Press the Stop Generator button.
- 2. Fix the fault with the generator.
- 3. Press the Start Generator button.

If the fault has been fixed, when you next turn the generator on from the App, the Generator Status section will display "No fault".

#### **AUTOMATIC GENERATOR START**

You can keep your battery and climate levels steady by using Automatic Generator Start (AGS).

AGS will keep your levels steady by automatically turning your generator on or off.

To use AGS, you may need to update the App on your smartphone.

If AGS is enabled, the App will attempt to start the generator a total of four times to try and keep levels steady.

If there are four failed starts, the App will stop attempting to start the generator.

If the generator fails to start, please consult your generator's owner's manual.

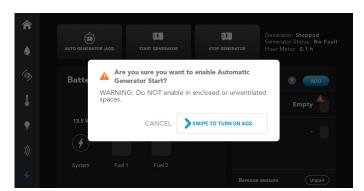




FIGURE 40: Automatic Generator Start

#### **ENERGY CENTER SETTINGS**

The Energy Center Settings are used to set the parameters to control AGS usage.

To access Energy Center Settings:

1. From the App home screen, press the Settings button



2. Press Energy Center Settings.

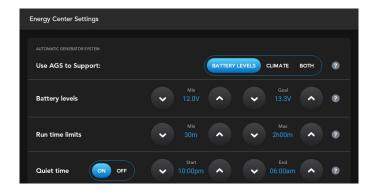


FIGURE 41: Energy Center Settings

### Use AGS to Support

This setting is used to determine if AGS will support battery levels, climate or both.

- Battery Levels: the generator will turn on and run until the battery is charged to the set target voltage.
- Climate: the generator will turn on so the air conditioner can run. If the temperature of the RV climbs above the set point in the Climate screen, AGS will turn the generator on and the generator will run until the temperature comes back down to the set point.
- Both: the generator will turn on and run until both the battery and climate levels reach the set points.



FIGURE 42: Use AGS to Support

## **Battery Levels**

Used to nominate the minimum battery voltage level which will automatically start battery charging from the generator. Battery charging will stop when the target voltage is reached.

AGS monitors both system voltage and RV battery voltage and uses the greater of the two to determine whether to turn the generator on or off.



FIGURE 43: Battery Levels

#### **Run Time Limits**

Used to set the minimum time the generator will continue to run for after the target battery voltage and/or temperature is reached.

The maximum time is the total run time that the generator will operate to reach the target battery voltage and/or temperature. If targets are not reached and the generator run time exceeds the maximum run time limit set in the Energy Settings, the generator will automatically turn off.

FIGURE 44: Run Time Limits



FIGURE 45: Quiet Time

#### **Quiet Time**

Used to choose the hours when the generator will always be turned off, even if AGS has been enabled.



## WARNING

If you are using Quiet Time, ensure that the time is correct on your RV. For help setting the time, refer to FAQs and Troubleshooting.

## **SOLAR CONTROLLER**

When solar is connected to a compatible RVC controller, the Solar Controller screen allows you to view the status of any connected solar panels.

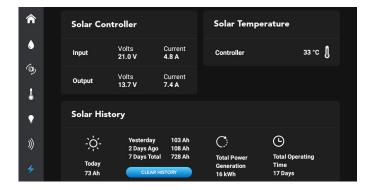


FIGURE 46: Solar Controller Tablet Screen

#### Solar Controller

This section displays the input voltage and current from the solar panel and the output voltage and current of the battery.

## Solar Temperature

This section displays the solar controller regulator and battery temperature.

If no battery sensor is present, the battery temperature can be hidden from view.

The temperature can be displayed in either °F or °C, depending on what preference has been set in the App's General Settings.

## **Solar History**

This section displays the total electric charge produced in ampere hours for today, yesterday, and two days ago, and the total charge produced over the last seven days.

Electric charge is displayed in ampere hours.

The total power generation is displayed in kilowatt-hours.

## **Clear History**

The Clear History button will clear all the solar history, including the total power generation and total operating days.



FIGURE 47: Solar Controller Mobile Screen

#### **SOLAR CONTROLLER SETTINGS**

The Solar Controller Settings are used to configure the Solar Controller to your liking.

To access Solar Controller Settings:

- 1. From the App home screen, press the Settings icon
- 2. Press Solar Controller Settings.

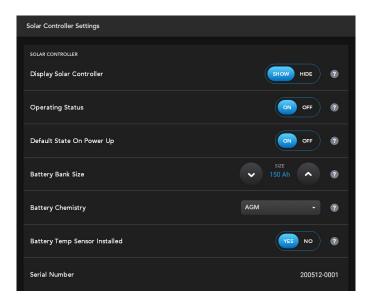


FIGURE 48: Solar Controller Settings Tablet Screen

## Display Solar Controller

Allows you to toggle Solar Controller information to be hidden if you do not want it to be displayed in the App.

If Solar Controller information is hidden, you can toggle it to be displayed.

## Operating Status

Displays the current operating status of the Solar Controller.

## Default State On Power Up

Displays the default state of the Solar Controller when powered up.

## Battery Bank Size

Allows you to set your battery bank size.

## **Battery Chemistry**

Displays your battery chemistry.

## Battery Temp Sensor Installed

Displays if a battery temperature sensor is installed.

### Serial Number

Displays the Solar Controller serial number.

#### Make

Displays the Solar Controller make.

#### Model

Displays the Solar Controller model number.



FIGURE 49: Solar Controller Settings Mobile Screen

## **GENERAL SETTINGS**

General Settings may be accessed by selecting the Settings icon in the App home screen.

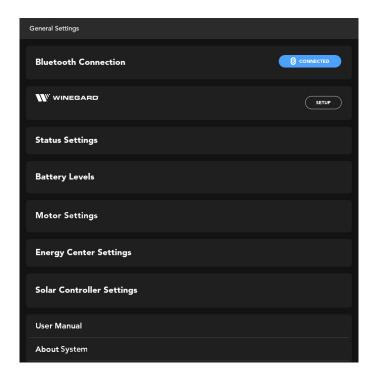


FIGURE 50: General Settings Tablet Screen

From General Settings, you can:

- Check the Bluetooth Connection between the Node and your smartphone.
- Set Status Settings, allowing for the setting of tire pressure sensor underpressure and over-temperature limits.
- View Energy Center Settings.
- View Solar Controller Settings.
- Access a digital version of the User Manual.
- Set Motor Settings, which depending on the level of controller installed, can be used to set zero-point calibration. (Model Dependent)
- View information About System: all about the system, Node Firmware version, App version, etc.
- Set your unit Preferences for temperature and pressure.
- View the Diagnostics page, showing any detected faults.

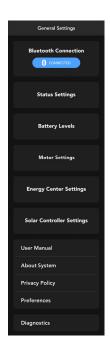


FIGURE 51: General Settings Mobile Screen

#### **UNIT CONVERSION**

To change the temperature unit, go to the settings menu on the App home screen and select Preferences.

From there, the temperature unit can be toggled between Fahrenheit and Celsius



FIGURE 52: Unit Conversion

#### DIAGNOSTICS

The diagnostics page will display any detected faults in the system.

To clear circuit faults, remove the suspected short and toggle the suspected output to clear the fault indicator.

1. For lights, tank heaters, water heaters, water pumps, electric heaters or gas heaters, if a short occurs on these outputs, a red fault indicator will appear.



FIGURE 53: Device Information Screen

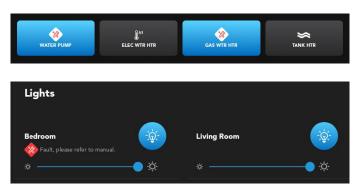


FIGURE 54: Red Fault Indicator

2. The gas water heater has its own warning output. If it signals a fault, a warning will appear on the gas water heater button.



FIGURE 55: Gas Water Heater Warning

- **3.** The motor outputs do not indicate a warning if the wires are shorted.
- **4.** If a fault occurs on a Climate output (e.g. the compressor output), a fault icon will appear in the zone. To clear the Climate fault, diagnose that Climate zone, remove the short, turn the Climate off and then turn it back on to reset the fault display.

The Diagnostics page will display any faults detected on the Solar Controller.

The following types of faults will be displayed in the Diagnostics page if detected:

- Battery Over Voltage
- Battery Under Voltage
- Battery Over Temperature
- Battery Under Temperature
- Solar Controller Over Temperature
- Solar Array Over Voltage
- Solar Array Short Circuit

**NOTE:** If Solar Controller information is set to be hidden in the Solar Controller settings, no solar faults will display in the Diagnostics page.



FIGURE 56: Solar Controller Diagnostics

# **UPDATING FIRMWARE (MODEL DEPENDENT)**

## **MARNING**

The App will only check the Node's firmware version if your RV is equipped with a Controller.

If a Controller is part of your system, the Node will check the app revision that is installed on the Controller.

If the Node has a higher firmware version than what is embedded in the App, a yellow information icon will display in the top toolbar of the App.



FIGURE 57: Firmware Update Available

To update the firmware:

- 1. Press the yellow information icon.
- 2. Follow the instructions in the App.

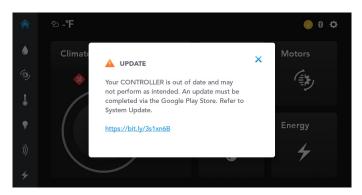


FIGURE 58: Firmware Update Pop-up

# FAQS AND TROUBLESHOOTING

#### PAIRING WITH THE NODE

## 1. I tried pairing my phone to the Node, but it didn't connect?

If pairing fails, before you attempt to pair your smartphone again:

- 1. Toggle the smartphone's Bluetooth off and on.
- 2. Toggle the smartphone's Airplane mode on and off.
- 3. Restart the App.
- **4.** Cycle power to the Node off and on.

## 2. I tried pairing my phone to the Node but the Display failed?

If your system has a Display, and the Display failed when pairing with the Node, this indicates the Node is already paired to four devices and cannot support any more devices.

In this case, unpair one of the connected devices and try again.

Alternatively, clear all previously paired devices and pair your smartphone and the Display again.

## 3. I tried pairing my phone to the Node but the Controller displays --?

If your system has a Controller, and the Controller displays -- when pairing with the Node, this indicates the Node is already paired to four devices and cannot support any more devices.

In this case, unpair one of the connected devices and try again.

Alternatively, clear all previously paired devices and pair your smartphone and the Controller again.

## 4. How do I unpair the Node from my device?



- 2. Press Bluetooth Connection.
- 3. Press Unpair RV.

If you have a Controller installed in your RV, you can also clear the Node's memory of all paired devices.



Clearing the Node memory will also clear the pairing between the Node and Controller. After clearing, the Controller will need to be paired to the Node again.

- 4. Navigate to the PA function on the Controller display.
- 5. Press and hold EXT until the number 1 scrolls across the Controller display.



FIGURE 59: Clearing Devices

The Node is now clear of all connected devices.

**6.** Pair the Controller and your device to the Node again. Refer to **Pairing to the Node with a Controller.** 

#### **APP**

## 1. How do I update the App on my smartphone?

Most smartphones allow automatic updates.

To confirm your App is up-to-date, try the following:

- 1. Verify the mobile network or WiFi connection on your smartphone.
- 2. Launch your App store app. (Google Play Store or Apple App Store)
- 3. Search for the JAYCOMMAND/TravelLINK powered by BMPRO app.
- **4.** Verify there is no option to update. If the option to update is available, select update and allow the App to download and install on your device.

## 2. How do I update the App on my Controller?

If your system has a Controller, it is set up to automatically receive App updates and will automatically update whenever a new release is available. To allow this to happen, make sure that you are:

- 1. Connected to the internet.
- **2.** Logged into your Google account.

## **CONTROLLER (MODEL DEPENDENT)**

## 1. How do I create a Google Account on my Controller?

If your system has a Controller, and you don't have a Google Account, you can create one by pressing the Google Play icon on the Controller main screen and following the prompts.

## 2. How do I change the date and time on my Controller?

If your system has a Controller, and you need to change the date and time:

- 1. Tap the Main screen icon to return to the Controller main screen.
- 2. Press the Settings icon 🖸.
- 3. Press Systems.
- 4. Press Date & Time.
- **5.** Adjust the date, time or timezone to your needs.

## 3. The Controller is displaying the code 88 and is unusable, what do I do?

The Controller will display **88** on its menu display if there is a system error which prevents the use of the system.

If you encounter an **88** error, please contact your RV dealership for further assistance.



FIGURE 60: 88 Error

#### SWITCH (MODEL DEPENDENT)

## 1. I've replaced the Switch in my RV, but it doesn't work?

You may need to pair the Switch to the Node before you can use the Switch.

The instructions are different depending on if you have a Display or a Controller as part of your system.

## If you have a Display:

- 1. Using the button on the Display, navigate to the **Settings** menu.
- 2. Using the button on the Display, navigate down to Advanced.
- 3. In the Advanced setting menu, use the Sulton to navigate down to Pair Switch.
- **4.** Press the **OK** action button to put the node into Switch pairing mode.
- **5.** While in paring mode, press any TWO buttons at the SAME TIME on the switch you want to pair.

## If you have a Controller:

1. Using the < > buttons on the Controller, navigate to the PA menu item.



FIGURE 61: PA Menu Item

2. When 'PA' appears on the display, press the RET button to start the pairing process between the Switch and the Node.



FIGURE 62: Press RET

- **3.** Press any two buttons on the Switch at the same time.
- **4.** Press **EXT** on the Controller to accept the pairing of the Switch to the Node.



FIGURE 63: Press EXT

# **APPENDICES**

## **SPECIFICATIONS**

NODE SPECIFICATIONS		
Input Voltage Range	8V to 15V DC	
Ambient Temperature	-4°F to 140°F (-20°C to 60°C)	
IP Rating	IP20	
Approvals	FCC 47 CR15, CAN ICES-3 (B) / NMB-3 (B), IEC 61000-4-2 Level III, IEC60068-2-27 Table A.1, IEC 60068-2-64 Spectrum A.3 Category 1	

DISPLAY <b>SPECIFICATIONS</b>		
Input Voltage Range	8V to 15V DC	
Ambient Temperature	-4°F to 140°F (-20°C to 60°C)	
IP Rating	IP40	
Approvals	FCC 47 CR15, CAN ICES-3 (B) / NMB-3 (B), IEC 61000-4-2 Level III, IEC60068-2-27 Table A.1, IEC 60068-2-64 Spectrum A.3 Category 1	

SWITCH SPECIFICATIONS		
Input Battery	2.2V to 3.0V CR2032	
IP Rating	IP40	
Approvals	FCC 47 CFR 15, CAN ICES-3 (B) / NMB-3 (B), IEC 61000-4-2 Level III, IEC60068-2-27 Table A.1, IEC 60068-2-64 Spectrum A.3 Category 1	

## LIMITED 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.

## What this Limited Warranty Covers

This warranty covers any defect or malfunction in your BMPRO product. Under this warranty you are entitled to have such goods replaced, repaired or refunded.

#### What this Limited Warranty Does Not Cover

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, unauthorized repair, modification or alteration, natural disaster, corrosive
  environment, insect or vermin infestation and failure to comply with any additional instructions
  supplied with the product.
- BMPRO may seek reimbursement of any costs incurred when a product is found to be in proper working order or damaged as a result of any of the warranty exclusions listed above.
- BMPRO will not be liable for any costs, charges or expenses incurred in the process of returning a
  product to initiate a warranty claim.

#### How Long the Warranty Lasts

BMPRO warrants products against defects for a period of two years, commencing from the original date of purchase.

#### Claims Process

Proof of purchase is required before the product can be deemed to be within the warranty period. 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 UNIT 1 821 E WINDSOR AVE ELKHART IN 46514

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.

#### How State Law Applies

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.