



TEAMBMPRO.COM

# **SAFETY PRECAUTIONS**

Please read the Safety Precautions before installing or using the BMPRO Connect 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.

	\Lambda WARNING
	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.
	Do not use this product in any manner not specified by the manufacturer, or the protection provided by the equipment may be impaired.
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Product specifications are subject to change and improve without notice.



Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do NOT dispose of batteries in household trash or incinerate. Even used batteries may cause severe injury or death. ∕♪ Call a local poison control center for treatment information. Non-rechargeable batteries are not to be recharged. ∕♪ Do not force discharge, recharge, disassemble, heat above 55°C / 131°F or incinerate. Doing ∕₽\ so may result in injury due to venting, leakage or explosion resulting in chemical burns. Ensure the batteries are installed correctly according to polarity (+ and -). Do not mix old and new batteries, different brands or types of batteries, such as alkaline, ∕₩ carbon-zinc, or rechargeable batteries. Remove and immediately recycle or dispose of batteries from equipment not used for an extended period of time according to local regulations.



Always completely secure the battery compartment. If the battery compartment does not close securely, stop using the product, remove the batteries, and keep them away from children.

#### 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 not expressly approved by BMPRO could 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



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.

### 

- INGESTION HAZARD: This product contains a button cell or coin battery.
- DEATH or serious injury can occur if ingested.
- A swallowed button cell or coin battery can cause Internal Chemical Burns in as little as 2 hours.
- KEEP new and used batteries OUT OF REACH of CHILDREN
- Seek immediate medical attention if a battery is suspected to be swallowed or inserted inside any part of the body.



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MANUAL PART 039445 REV 2.0

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 Copyright © 2024 or misused by the customer.

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# ABOUT BMPRO CONNECT

BMPRO Connect brings smart home technology to your RV, taking control and management of your RV to new horizons!



CONNECTED TO CLOUD

#### NODE

The heart of the BMPRO Connect 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 Controller and Bluetooth Low Energy with your smartphone, to receive the commands to control power to all your RV features and accessories.

#### CONTROLLER

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

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

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

#### APP

The BMPRO Connect 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.

#### SMARTCONNECT

BMPRO Connect 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** 

#### BLEXTENDER

BMPRO Connect is compatible with BMPRO's BLExtender.

The BLExtender is a Bluetooth range extender, designed to allow you to use your SmartConnect Bluetooth sensors from every corner of your RV without worrying about losing Bluetooth signal.

For more details, refer to teambmpro.com/products/bluetooth-range-extender

### **DESCRIPTION OF PARTS**

#### 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 General Settings.

This button is only available on the Home screen.

4. Return

Navigate to the previous screen.

5. Main Screen Button

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, vertically insert an item (eg. a paper clip) into the reset pinhole.

The item must be inserted vertically as the reset hole is in a plastic housing.

#### 8. Control Panel (Model Dependent)

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

Any button press on the Control Panel will turn the tablet on if it has turned off.

#### 9. Lights (Model Dependent)

Turn lights and water pumps on/off:



All Interior Lights

All Exterior Lights

All Lights

### Adjusting the Lights

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

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

#### 10. Motor Operation (Model Dependent)

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

The EXT and RET buttons are also used during the pairing process between the Node and devices such as the Controller and smartphone.

#### 11. & 13. Navigation Buttons (Model Dependent)

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 (Model Dependent)

Displays the current menu function.

#### CONTROL PANEL MENU FUNCTIONS

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 3) S5 (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** and **FAQs and Troubleshooting**.



#### 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.

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

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.



**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.



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



### **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 pairing fails, or "--" 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.



# **BMPRO CLOUD**

Cloud control 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 BMPRO Connect app.
- 3. From the home screen, press the Settings icon.
- 4. Press Remote Connection.
- 5. Press Create account.

Remote Connection	
	_
Create a BMPRO Cloud account to access your RV remotely	y using your phone.
Create account	
Already have an account? Log in	

**6.** Enter your full name, email address and a password of your choice.



- 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.

Remote Connection		
	Create a BMPRO Cloud account	
	Full Name	
	Enter your full name	
	Email address	
	Enter your email address	
	Password	
	Must be at least 6 characters	
	Re-enter password	
	Must match above	
	Tick to confirm that you have read and agree to our <u>Terms and Conditions</u> and <u>Privacy Policy</u> .	

### Account Not Verified

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



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

#### Forgot Your Password

If you have forgotten your Cloud account password, press **Forgot your password** in the login screen, enter your email address and press **SEND EMAIL**.

#### **CLOUD CONTROL**

To control your RV from the cloud:

- 1. Launch the BMPRO Connect app on your device.
- 2. Press Log in to BMPRO Cloud, or in General Settings, press 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.

#### DELETING A CLOUD ACCOUNT

If you want to delete your BMPRO cloud account:

- 1. From the home screen, press the Settings icon.
- 2. Press Remote Connection.
- 3. Press Delete Account.
- 4. In the pop-up, enter your password.
- 5. Press Delete Account.

Your BMPRO cloud account will be deleted. If you want to control your RV from the cloud again, you will need to create a new BMPRO cloud account.

#### WINEGARD

To set up Winegard:

- 1. From the home screen, press the Settings icon.
- 2. Press Winegard Settings.

#### Logging into the 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**.

Winegard Settings	
	Locate your Winegard network name and password in the Winegard manual or on the base of your Winegard.
	Network
	Enter network name
	Password
	Q

#### 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.

#### 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:

- 1. Press the Search button for a list of available networks and select your 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 Join.

### Save and/or forget WiFi Network

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

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

# THE APP

Download the **BMPRO Connect** app to your smartphone or tablet and enjoy the freedom to monitor and control the onboard features of your RV remotely.

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

The BMPRO Connect app is compatible with Android 8.0 or later and iOS 11 or later.



BMPRO Connect app QR code

#### SIDEBAR

A sidebar provides easy navigation to all the main screens of the app.

The Home screen, which provides a general overview of the key features of your RV.



The Tanks screen, which allows you to control connected pumps and heaters.

The Motors screen, which allows you to control motors and leveling systems.

The Climate screen, which allows you to control the temperature inside your RV.



The Lights screen, which allows you to control lights inside your RV.

The Sensors screen, which allows you to view and configure connected SmartConnect sensors.

For more information on SmartConnect sensors, refer to the **SmartConnect user manual.** 

The Energy Center screen, which allows you to monitor energy usage.

#### **HOME SCREEN**

The 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.



#### TANKS SCREEN

You can control the water pump, electric heaters, 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 are displayed in percentages.



#### **MOTORS SCREEN**

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



Before operating any motors, ensure the area is free from obstacles and other hazards. Ensure that any persons near the RV are free from danger of any moving parts.

#### Leveling Control

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



Individual jack control is only available on electric levelling systems.

#### 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**.



#### 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.



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

#### Motor Lockout Feature

The system will automatically lock out one or all of the motors if either of the following conditions are met:

 All motors are disabled: If 12V are detected on pin 64 (Brake High Input), the motors will be disabled, motor controls will be greyed out and a pop-up message will appear.

The pin 64 wire is connected to the turn signals and brake lights on the 7-way plug to the tow vehicle. Whenever a turn signal is activated or a hard brake is detected, the system will shut down and lock the motors to prevent operation.

Motors can be re-enabled by:

- Pressing any of the light buttons below the touch screen on the Controller.
- Pressing any of the keys on the outside leveling touchpad if a compatible leveling controller is installed.
- Slides will not retract: If a potential crush hazard could occur when a specific slide is retracted, an an (i) will appear next to Slides with a pop-up message relating to the lockout.

Check around the slide for a door that should be opened or closed to prevent the slide from crushing it.

### **CLIMATE SCREEN**

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

Additional ACs can be configured by scrolling down from the Main AC.

Choose from Cool, Cool Auto or Heat to adjust the temperature between 33°F – 90°F (1°C – 32°C).

If a fault is detected, a fault icon will appear. For more information, refer to the section **Diagnostics**.

#### 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 running.

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



#### Fan

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



#### 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.



#### LIGHTS SCREEN

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



# ENERGY CENTER

The Energy Center screen allows you to monitor energy usage within your BMPRO Connect system.

#### **BATTERY AND FUEL**

The Battery and Fuel section allows you to monitor RV voltages, chassis voltages and fuel levels.

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.

<ul><li>♠</li></ul>	Battery and Fuel
4	13.1 V
l	
ţ	System
)))	
4	Solar Controller Solar Temperature

Fuel levels are monitored and displayed in 8 levels.

A warning is displayed if the fuel level is empty.

If applicable, a running indicator will be displayed under Fuel 1 whenever you turn the pump on.

### **GENERATOR (MODEL DEPENDENT)**

#### Using the Generator over Bluetooth

To turn on the generator using Bluetooth, 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.

#### Using the Generator over the Cloud (Model Dependent)

To turn on the generator over the cloud, press the **Start Generator** button. A confirmation message will appear. Swipe right on the **Swipe to Enable** button to start the generator.

#### **Generator Fault**

If the Generator Status section 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".

#### Generator Lockout (Model Dependent)

The generator will be automatically locked out if a high input is detected on the brakes. This will be shown on the Node at pin 64.

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

The app will not show a pop-up if the generator is locked out.

The lockout can be disabled by:

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

### 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 BMPRO Connect 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.



#### SOLAR CONTROLLER

When solar is connected to a compatible RV-C controller, the Energy Center screen will display the Solar Controller section, allowing you to view the status of any connected solar panels.



### 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 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.

#### **ENERGY MANAGEMENT**

The Energy Management section displays the status of any load shedding occuring within your BMPRO Connect system, and allows you to set current limits to determine how much load shedding should occur.

By shedding loads, you can ensure that the circuit breakers of your AC Mains supply are not tripped.

<ul><li><b>∩</b></li><li><b>●</b></li></ul>	2 Days Ag 7 Days To Today Ah	go Ah tal Ah Total Pow Generatic R HISTORY kWh	rer Total Operating m Time Days
<b>()</b>	Energy Management	t	
	OFF 15A 20A 30A	Status: Energy Management	
*	L1 Current L2 Current	Not Detected Second AC Not Detected Second AC	READY READY
4			READY

If an appliance is shed, it will be temporarily disabled in the BMPRO Connect app. A pop-up message will appear if you try to interact with a shed appliance while load shedding is active.

The load shedding current limit can be configured:

- OFF: Turns load shedding off
- 🗈 15A
- 🖻 20A
- 🗈 30A
- GEN: Uses a connected generator. This option only displays if a generator is detected.

#### Line Currents

The current drawn from each connected AC line is displayed as L1 and L2 Current.

If both lines are detected at once, load shedding is unneccesary and will be automatically disabled.

#### Load Status

The status of each load will change depending on which loads are being shed.

- **READY:** The load is ready to be used.
- **SHED:** The load is being shed.
- WAITING: The load has recently been shed. It will wait two minutes before it becomes ready again.

# **GENERAL SETTINGS**

General Settings may be accessed by pressing the Settings icon from the home screen.



From General Settings, you can:

- Check the **Bluetooth Connection** between the Node and your smartphone.
- Establish a Remote Connection to the BMPRO Cloud.
  For more information, refer to the section Cloud Control.
- Enter the Winegard network name and password to connect to the internet (model dependent).

For more information, refer to the section **Winegard**.

Set Sensors Settings, allowing for the setting of tire pressure sensor underpressure and over-temperature limits, and the toggling of sensors on and off.

For more information, refer to the section **Sensor Settings**.

- Check the wireless Battery Levels of any installed Switch.
  For more information, refer to the section Checking the Battery in Your Switch.
- Set Motor Settings, which depending on the level of controller installed, can be used to set zero-point calibration (model dependent).
   For more information, refer to the section Motor Settings.
- View Energy Center Settings.
  For more information, refer to the section Energy Center Settings.
- View Solar Controller Settings.
  For more information, refer to the section Solar Controller Settings.
- Access a digital version of the User Manual.
- View information About SYSTEM: all about the BMPRO Connect system, Node firmware version, app version, etc.
- View the BMPRO Privacy Policy.
- Set your Preferences for measurement units and notifications.
  For more information, refer to the section Preferences.
- View Diagnostics, showing any detected faults.
  For more information, refer to the section Diagnostics.

About SYSTEM	
RV	
Serial Number: TEST Model: Luxury 5th wheels	
Floorplan: 39RKFB	
NODE	
Serial: A0000AA0000	
Master-uC: 0.4.2	
Slave-uC: 2.5	
Product-Rev.: XXX	
Hardware-Rev.: XXX	
Floorplan IO Version: 01.07.01	
BLE Protocol Version: 3.0.0	
APP	
Build Number: 17678	
Version Number: v3.4.0	
IO Version: 1.7.2	
CONTROLLER	
SW: 2.0	
AC MONITOR	
SW: 0.3	



#### SENSOR SETTINGS

The Sensors Settings screen allows you to configure push notification warning limits for any connected tire and temperature SmartConnect sensors, and allows you to toggle the sensor displays on or off.

For more information about SmartConnect sensors, refer to the **SmartConnect user manual**.

Sensors Settings	
Tires	
Display Tire Sensors	SHOW HIDE
Minimum Pressure Warning	✓ 70 psi ▲
Maximum Temperature Warning	✓ 155 °F ∧
Temperature	
Display Temperature Sensors	SHOW HIDE
Propane	
Display Propane Sensors	SHOW HIDE



SmartConnect user manual QR code

#### ENERGY CENTER SETTINGS

Energy Center Settings can be used to adjust Automatic Generator Start usage.

Energy Center Settings		
AUTOMATIC GENERATOR SYSTEM		
Use AGS to Support:	BATTERY LEVELS CLIMATE BOTH	
Battery levels	✓ 11.6V ∧ ✓ 12.7V ∧	?
Run time limits	✓ 10m ▲ ✓ 30m ▲	?
Quiet time ON OFF		?

#### 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 if the air conditioner is enabled and set to Cool, Cool Auto or Heat mode.
- Both: the generator will turn on and run until the battery reaches the set point and the air conditioner is enabled and set to Cool, Cool Auto or Heat mode.

#### **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.

#### **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.

#### Quiet Time

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

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

#### **MOTOR SETTINGS**

If your model supports zero point leveling, you can use the Motor Settings screen to perform zero point calibration.

To access Motor Settings:

- 1. From the home screen, press the Settings icon.
- 2. Press Motor Settings.

Motor Settings						
Zero Point						
Status: Idle						
START		SET		CANCEL		
		FRONT				
	LEFT	~	RIGHT			
	^		^			
	~		<b>~</b> /			

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

#### LOAD SHEDDING SETTINGS

The Load Shedding Settings screen is used to configure load shedding.

To access Load Shedding Settings Settings:

- 1. From the home screen, press the Settings icon.
- 2. Press Load Shedding Settings.

Load Shedding Settings		
LOAD SHEDDING		
Main Compressor - Fan	Low SA	ні <u>д</u> н • 11А •
AC2 Compressor - Fan	✓ 6A ▲	нідн • 12А •
Turn On Time		✓ 2 MIN ▲

#### SOLAR CONTROLLER SETTINGS

The Solar Controller Settings screen is used to configure the Solar Controller to your liking.

To access Solar Controller Settings:

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

Solar Controller Settings	
SOLAR CONTROLLER	
Display Solar Controller	SHOW HIDE ?
Operating Status	ON OFF
Default State On Power Up	ON OFF 2
Battery Bank Size	
Battery Chemistry	
Battery Temp Sensor Installed	
Serial Number	
Make	-
Model	-

#### 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.

#### **UNIT PREFERENCES**

To change temperature or pressure units, go to the settings menu on the home screen and press **Preferences**.

From there, temperature units can be toggled between Fahrenheit and Celsius, and pressure units can be toggled between kPa and psi.



#### DIAGNOSTICS

The Diagnostics screen displays any detected faults in the system, and allows you to force reset the Node.

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

A red fault indicator will appear if a fault is detected on the lights, tank heaters, water heaters. water pumps, electric heaters, gas heaters or load shedding.



An orange fault indicator will appear on the gas water heater button if a fault is detected on the gas water heater output.





Motor outputs do not indicate a warning if the wires are shorted.

#### Solar Controller Faults

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

The following types of faults will be displayed in the Diagnostics screen 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

Diagnostics	
37	38
41	42
43	44
Solar Controller	
AC Monitor	
Lost Communication	



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

#### **Climate Faults**

The Diagnostics screen will display any faults detected in the climate system.

The fault message will disappear from the Diagnostics screen once the fault has been externally cleared.

Diagnostics
Solar Controller
Main AC
Second AC
Third AC

#### **Resetting the Node**

If the Node is not behaving correctly, you can force reset it.

To reset the Node:

- 1. From the home screen, press the Settings icon.
- 2. Press Diagnostics.
- 3. Press Reset NODE.
- 4. In the pop-up, press Confirm.

The Node will now reset.

Diagnostics	
	Reset NODE
СН 7	СН 8
CH 6	СН 1
CH 2	СН 3
CH 4	СН 5
1	2
3	4
6	7
8	9
	4.0

# **UPDATING FIRMWARE**

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 BMPRO Connect app on your smartphone or Controller 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.

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.



To update the firmware:

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



### SWITCH

The Switch communicates via Bluetooth to the Node, giving you additional control of RV features.

Any Switch you install in your RV has been paired to the Node at the factory and is ready for immediate use.

#### CHECKING THE BATTERY IN YOUR SWITCH

The Switch is powered by a standard CR2032 3V Lithium Cell coin battery.

To check if the battery needs replacing:

- 1. From the home screen, press the Settings icon.
- 2. Press Battery Levels.
- **3.** Press any button on the Switch you are checking.

Once the button has been pressed, the app will refresh with the Switch battery status.

LOW indicates the battery in the wall switch needs replacing.

#### **REPLACING THE BATTERY IN YOUR SWITCH**

To replace the battery, unclip the Switch Button Pad. Using a flathead screwdriver, pry open the Switch Button Pad and remove the battery from the holder. Insert the new battery in the holder with the positive side facing up.



# FAQS AND TROUBLESHOOTING

Need more help troubleshooting your BMPRO Connect system? Email our customer service team at **service@teambmpro.com** 

#### PAIRING WITH THE NODE

#### 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.

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

If 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.

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

- 1. From the app home screen, press the Settings icon.
- 2. Press Bluetooth Connection.
- 3. Press Unpair RV.

#### How do I clear the Node's memory of all paired devices?

- 1. Navigate to the **PA** function on the Controller display.
- 2. Press and hold EXT for about 10 seconds until the number 1 scrolls across the Controller display.



The Node is now clear of all connected devices.

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

### APP

#### How do I update the BMPRO Connect 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. Open either the Google Play Store or Apple App Store.
- 3. Search for the BMPRO Connect app.
- Verify there is no option to update. If the option to update is available, press Update and allow the app to download and install on your device.

### How do I update the BMPRO Connect app on my Controller?

The Controller 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

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

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

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

If you need to change the date and time:

- 1. At the bottom of the screen, tap the main screen button to return to the Controller's main Android screen.
- **2.** Press the Settings button.
- 3. Press Systems.
- 4. Press Date & Time.
- **5.** Adjust the date, time or timezone to your needs.

### 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.



#### SWITCH

### 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.

1. Using the <> buttons on the Controller, navigate to the **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.



- **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.



### **APPENDICES**

### SPECIFICATIONS

NODE		
Input Voltage Range	8V-15V DC	
Ambient Temperature	-4°F to 140°F (-20°C to 60°C)	
IP Rating	IP20	
Approvals	FCC 47 CR15.109, 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	

CONTROLLER	
Input Voltage Range	8V-15V DC
Ambient Temperature	-4°F to 140°F (-20°C to 60°C)
IP Rating	IP40
Approvals	FCC 47 CFR 15.109, 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

AC MONITOR	
AC Input	90Vac - 135Vac
DC Input	8VDC - 16VDC
Quiescent Current	<30mA
Operating Main Frequency	50-60Hz
Maximum Current Measurement	80A
Temperature (Operating)	-4°F to 131°F (-20 °C to 55°C)
Temperature (Non-operating)	-22°F to 167°F (-30 °C to 75°C)
Humidity (Operating)	10-85%, RH non-condensing
Humidity (Non- operating)	0-95%, RH non-condensing
Maximum Operating Altitude	2000m
Pollution Degree Rating	Pollution Degree 2
Overvoltage Category	Overvoltage Category III
Dimensions	88mm x 87mm x 26mm

SWITCH	
Input Voltage Range	2.2V-3.4V DC
IP Rating	IP40
Lithium Battery Type	CR2477
Battery Voltage	3V
Approvals	FCC 47 CFR 15.109, 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

Please contact your RV manufacturer for specific warranty period information.

#### **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.

**POWERING YOUR ADVENTURES.** 



BMPRO service@teambmpro.com Unit 1, 821 E Windsor Ave, Elkhart IN 46514 USA teambmpro.com