THOR MOTOR COACH

OWNER'S MANUAL

RVMASTER

POWERED BY BMPRO

TEAMBMPRO.COM

SAFETY PRECAUTIONS

Please read the Safety Precautions before installing or using the RVMaster.

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.

⚠ WARNING
Correct installation is the most critical factor in ensuring the safe use of the RVMaster. If every consideration of these instructions has been satisfied, the RVMaster 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 RVMaster 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 the cable connections to the battery are of the correct polarity.
Do not install this product in the same compartment where flammable materials such as petrol are stored.
Product specifications are subject to change and improve without notice.

⚠ WARNING

⚠	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 licence-except 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 that may cause undesired operation.

⚠ WARNING

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

⚠ 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 device meets the government's requirements for exposure to radio waves. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health. The SAR limit of USA (FCC) is 1.6 W/kg averaged. Device types: 77" Quad Core Android Tablet without battery (FCC ID: 2ASJH-BMPRO7DI4) has also been tested against this SAR limit. SAR information on this and other pad can be viewed on - line at http://www.fcc.gov/oet/ea/fccid/. Please use the device FCC ID number for search. This device was tested simulation typical 0mm to body. To maintain compliance with FCC RF exposure requirements, the use of accessories should maintain a separation distance between the user's bodies mentioned above, the use of accessories should not contain metallic components in its assembly, the use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

For body worn operation, this device has been tested and meets the IC RF exposure guidelines when used with an accessory designated for this product or when used with an accessory that contains no metal and that positions the handset a minimum of 0 mm from the body. Noncompliance with the above restrictions may result in violation of RF exposure guidelines.

En cas d'usure du corps, cet appareil a été testé et répond aux directives d'exposition aux RF IC lorsqu'il est utilisé avec un accessoire désigné pour ce produit ou lorsqu'il est utilisé avec un accessoire qui ne contient pas de métal et qui place le combiné à au moins 0 mm du corps. Le non-respect des restrictions ci-dessus peut entraîner une violation des lignes directrices sur l'exposition aux RF.

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 and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is not guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception 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.

⚠WARNING

- **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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REV 11.0

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

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

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ABOUT THE RVMASTER

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

NODE

The heart of the RVMaster, 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.

DISPLAY/CONTROLLER (MODEL DEPENDENT)

The sleek, wall-mounted Display or Controller gives you the freedom to monitor and control multiple RV functions, all from one convenient location in your RV.

With a user-friendly, easy to understand app for Android and iOS, the RVMaster App brings information to your fingertips and allows monitor and control of your RV from up to 3 personal devices.

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

Control: Lighting, Slide-outs, Awnings, Climate (model dependent), Generators plus Auto Generator Start and more.

SWITCH (MODEL DEPENDENT)

Available in three types of configurations, the Switch provides additional control of RV features and accessories.

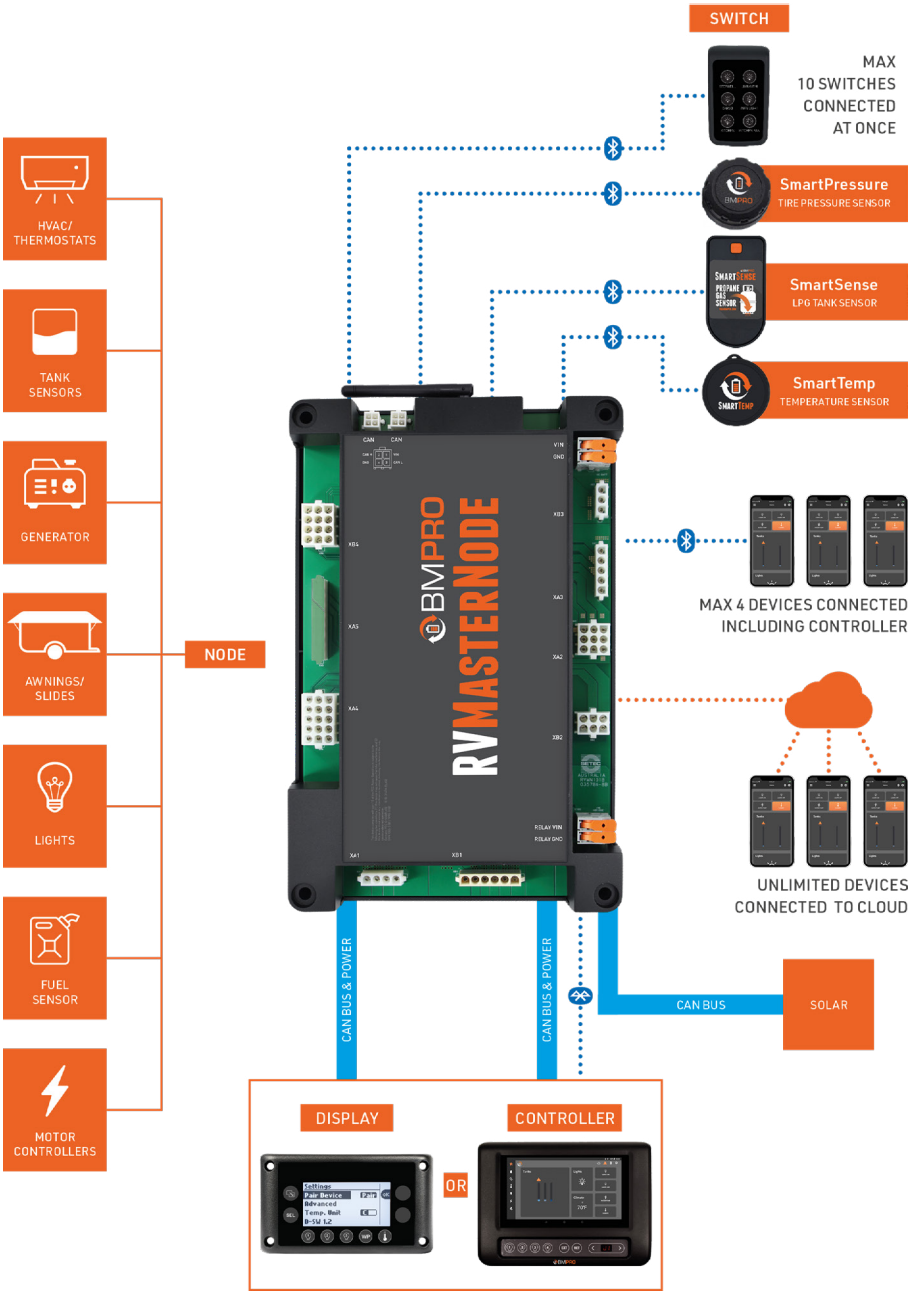
SMARTCONNECT

RVMaster models built in 2021 or later are **SmartConnect** ready!

With SmartConnect, you can remotely control various aspects of your caravan, such as tire pressure, propane tank levels and RV temperatures through the Controller or RVMaster App by using a range of Bluetooth sensors connected to RVMaster.

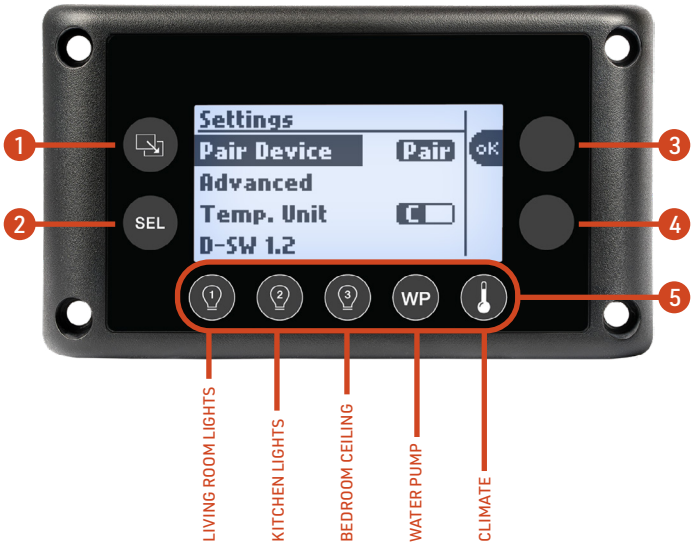
For more details, refer to **teambmpro.com/products/smartconnect**

RVMASTER SYSTEM DIAGRAM



DESCRIPTION OF PARTS

DISPLAY (MODEL DEPENDENT)



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

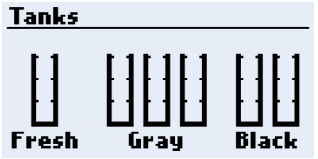
QUICK press toggles between off and the previous stored brightness.

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 SEL to move between menu items within a page.



Tanks

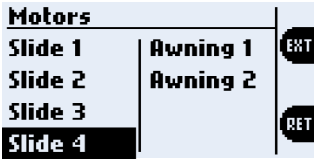
The Tanks display shows the levels of fresh, gray and black water tanks. Levels are displayed as:

FULL
2/3 FULL
1/3 FULL
EMPTY

Water

From the Water screen, the Pump, the Electric and Gas Heaters can be switched on and off.

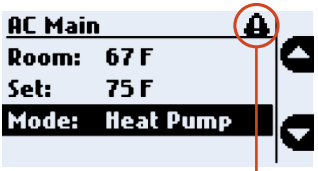
NOTE: A warning will appear if the Gas Heater fails to ignite after three attempts.



Motor

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

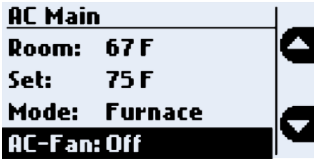
This menu list is RV model dependent.



Climate

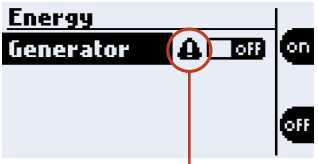
Room: The ambient room temperature.
Set: User-controlled temperature setting.
Range: 33°F – 90°F (1°C to 32°C)
Modes: Off / Fan / Cool / Auto-Cool / heat PUMP / FURNACE / HEAT-BOTH
Fan: Settings: HIGH / LOW
AC Controls are RV model dependent.

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**



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

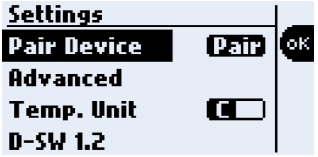
AC-Fan: Settings: OFF / LOW



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)

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. **Warning Icon**
   Appears if the power cord has been connected to a faulty power source. Tap the icon for more information.
4. **Settings Icon**
   Access to the RVMaster App General Settings.

   This button is only available on the Home screen.
5. **Return Button**
   Navigate to the previous page.
6. **Main Screen Button**
   Navigate to the Controller's tablet Android screen.
7. **Recent Applications Button**
   Display a list of recently used/background applications on the Controller.

8. Reset Pin Hole

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.

9. Control Panel (Model Dependent)

To provide quick access to lights 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.

10. Lights (Model Dependent)

Turn lights on and off for your:

Living Room

Kitchen

Bath Ceiling

Bed Ceiling

11. Motor Operation (Model Dependent)

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

As a safety precaution, motor control in 2022 model year RVMaster units will only operate if the engine is running and the park brake is set.

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

12. Navigation Buttons (Model Dependent)

Press either key to gain access and navigate through menu functions available from the Control Panel.

Press > to navigate forward and < to navigate back through the menu functions.

For more information on available functions, see **Menu Functions**.

13. Menu Display (Model Dependent)

MENU FUNCTIONS (MODEL DEPENDENT)

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

Awnings

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

Bunk-Lifts

Navigate to the desired bunk-lift, then press **EXT** or **RET** to operate.

Jacks

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

Slide-outs

Navigate to the desired slide-out, then press **EXT** or **RET** to operate.

As a safety precaution, slide-out control will be disabled if the vehicle's ignition is running and the park break is not in use.

For more information, see the **Motors Screen** section.

Off

Navigate to **OF**, then press **EXT** to turn power off to all loads connected to the Node.

The Controller will also turn off. The OF function does not shut down generators connected to the Node.

The Controller can be turned back on by pressing any of the Light buttons on the Control Panel.

Pairing

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

For more information, see **Pairing to the Node** and **Clearing the Node**.

PAIRING TO THE NODE

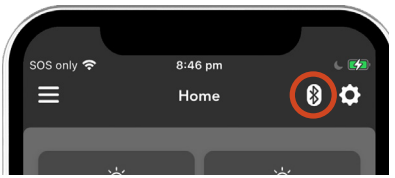
PAIRING TO THE NODE WITH A DISPLAY (MODEL DEPENDENT)

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.

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



CONGRATULATIONS, YOU'RE CONNECTED!

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

PAIRING TO THE NODE WITH A CONTROLLER (MODEL DEPENDENT)

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

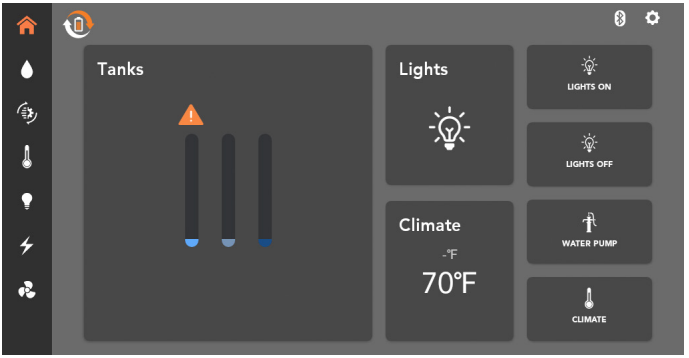
> The Controller will have been paired to your Node at the factory. You should only need to pair your own device or smartphone to the Node.

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. Using the **<** or **>** buttons on the Controller, navigate to the 'PA' menu item.

2. When 'PA' appears on the display, press the **EXT** button to start the pairing process to the Node. 'PA' will blink during the pairing process.

Congratulations, you are now connected!



Once connected the RVMaster App will return to the Home Screen.

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.

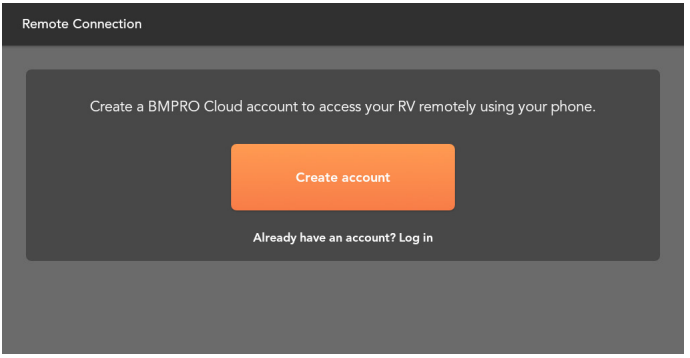
BMPRO CLOUD

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 RVMaster App.
3. From the App Home Screen, press the Settings icon.
4. Press **Remote Connection**.
5. Press **Create account.**

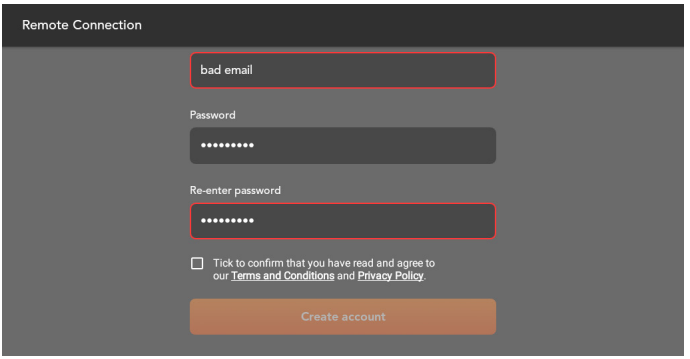


6. Enter your full name, email address and a password of your choice.

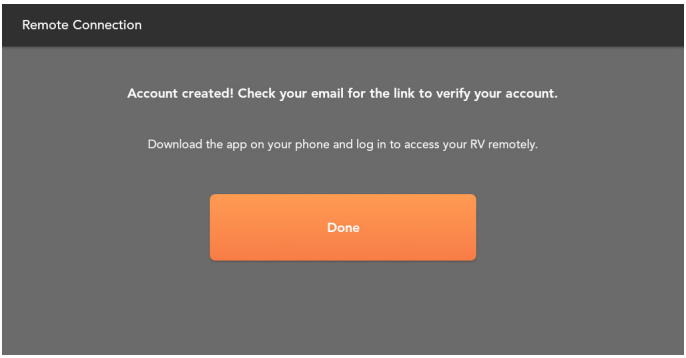
WARNING

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.



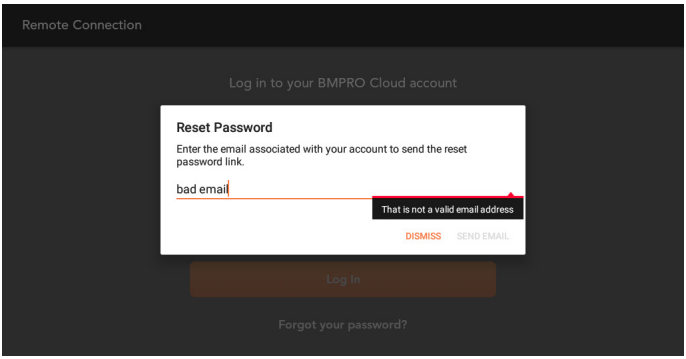
Account Not Verified

If the email address was not verified, a message will appear.

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

Forgot Your Password

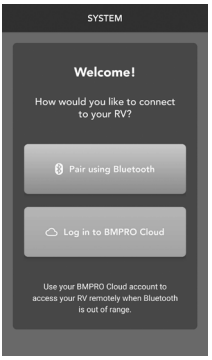
If you have forgotten your Cloud account password, press **Forgot your password** in the login page, enter your email address and press **SEND EMAIL**.



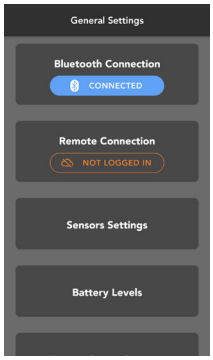
CLOUD CONTROL

To control the RV from cloud:

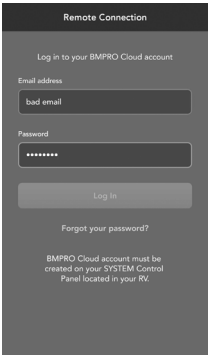
1. Launch the RVMaster App on your smart device.
1. Press **Log in to BMPRO Cloud**, or in General Settings, press **Remote Connection.**

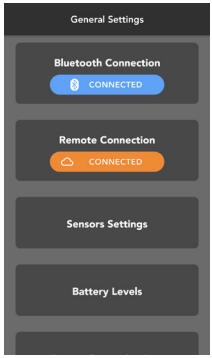


OR



2. Enter your email address and password.
3. Press **Log in**.





SUCCESS!

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.

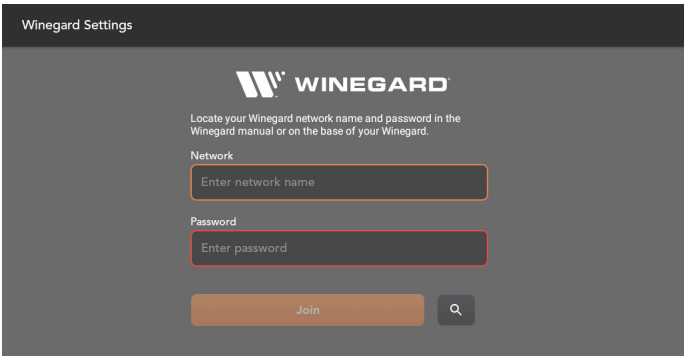
WINEGARD

To set up Winegard:

1. From the App home screen, press the Settings icon .
2. Select **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**.



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.
2. 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 RVMASTER APP

Download the **RVMaster** app and enjoy the freedom to monitor and operate your RV's on-board features and accessories, on-the-move, from your own smartphone or tablet.

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

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

The RVMaster App is compatible with Android 8.0 or later and iOS 11 or later.

Available on the App Store

ANDROID APP ON Google play

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.

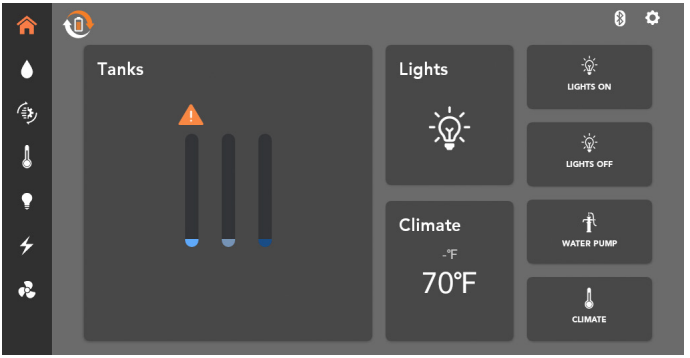
For more information on SmartConnect sensors, refer to the **SmartConnect user manual.**

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

The Fans screen, which allows you to control fans.

RVMASTER APP HOME SCREEN

The RVMaster 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, the water pump and the RV's climate system (model dependent), direct from the home screen.

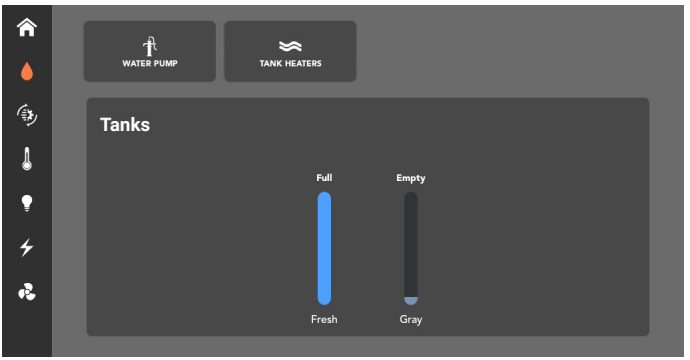


TANKS SCREEN

Control water pumps, and turn water heaters and tank line heaters on and off from the Tanks screen.

If equipped, water heaters can be used with electricity or gas, either independently or together.

If a fault is detected with a water heater, a warning sign will appear. Information about the fault will be displayed in the RVMaster App.



The water screen displays water levels in your fresh, gray and black water tanks.

The water levels are displayed as:

- Empty
- 1/3
- 2/3
- Full

MOTORS SCREEN

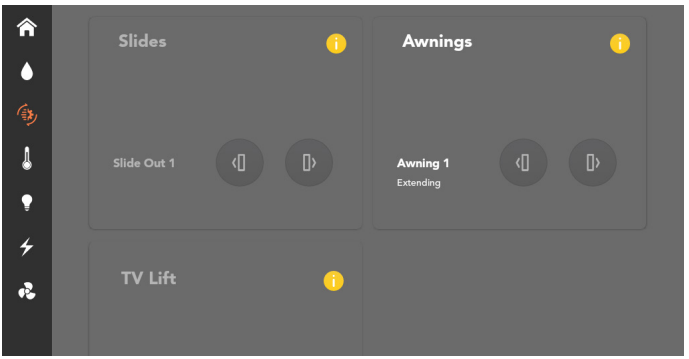
⚠ WARNING

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.

The motor screen provides access to operate any slides, awnings, bed-lifts or jacks available in the RV.

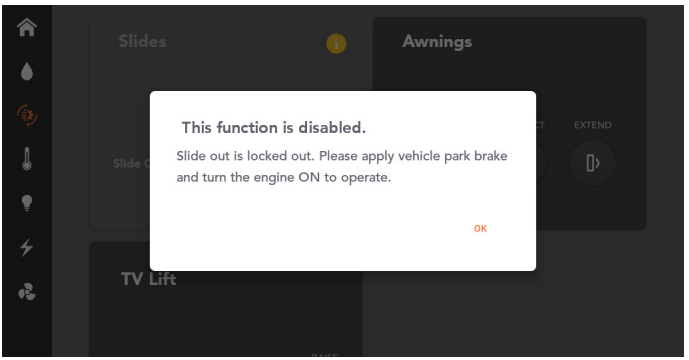
As a safety precaution, the RVMaster App will disable all motor control if the vehicle's ignition is running and the park brake is not in use.

This safety feature prevents any accidental operation of the motors while you are driving on the road.



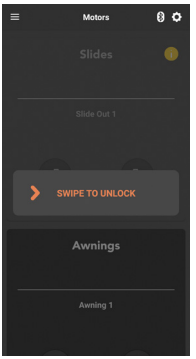
Slide outs in 2022 model year RVMaster units will only operate when the engine is on and the park brake is applied. This safety feature is designed to prevent unwanted battery discharge.

All other motors will continue to be locked out whenever the ignition is on.



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 RVMaster App.

To use motors from your own device, you need to swipe to unlock the motors screen.



CLIMATE SCREEN (MODEL DEPENDENT)

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

Choose from Cool, Cool Auto or Heat to adjust temperature between 32°F to 90°F (0°C to 32°C).

Cool will continuously run the fan.

Cool Auto cycles the fan on and off with the compressor in order to achieve the target temperature.

If available, the RV may be heated from the furnace, heat pump or a combination of both. If you are using the furnace, you can also turn on the fan.

Select Fan if you wish to cool your RV without setting a specific temperature.

To set the temperature of your RV:

1. Turn climate on.
2. Select your mode of operation.
3. Adjust the temperature to your desired setting.

   The desired temperature is displayed in color, below the actual temperature of the RV.
4. If you are using heat, select your heat mode.
5. If available, select your fan setting.

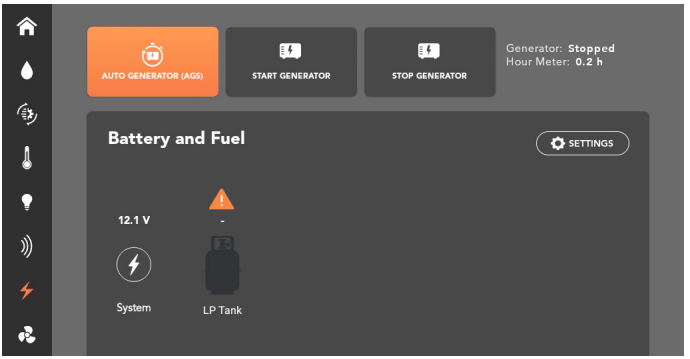
LIGHTS SCREEN

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 coach and/or chassis voltages and gas consumption. If no coach and chassis batteries are connected, the RVMaster App will monitor the system voltage of the Node.

A warning sign will appear if voltage drops below 12V.



The Energy Center also permits the generator to be turned on and off as needed or enable Auto Generator Start, as well as monitor generator run time and status.

If the Generator Status (applies only to gas generators, and not to diesel generators) indicates a fault:

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

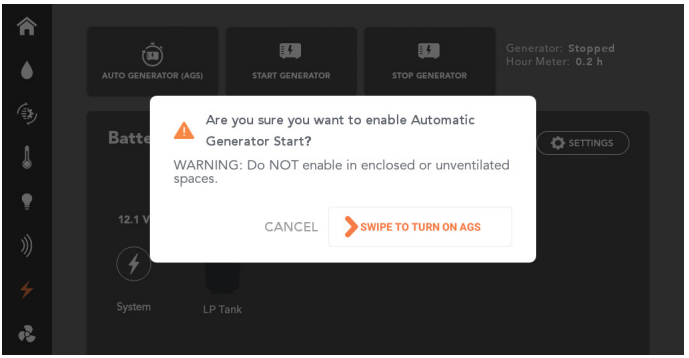
If the fault has been fixed, when you next turn the generator on from the RVMaster App, the Generator Status will display "No fault".

Auto Generator Start (AGS)

To use AGS from your Controller, you may need to update the RVMaster App on the Controller.

When enabled, Auto Generator Start (AGS) will monitor battery and/or climate levels and automatically turn the generator on and off to support these functions.

To use AGS, press the **Auto Generator (AGS)** button, then swipe to turn on AGS.



If AGS is enabled and conditions determine that the generator should start to support battery and climate functions, the Node will automatically attempt to start the generator a total of four times. After four failed starts, the Node will no longer attempt to start the generator.

Please consult your generator's owner's manual if AGS fails because the generator could not be started.

ENERGY SETTINGS

Press **Energy Settings** to set the parameters to control AGS usage.

Use AGS to Support

Choose if AGS is to support battery levels, climate or both.

Battery Levels

Nominate the battery voltage (min) level which automatically starts battery charging from the generator. Battery charging stops when the target voltage is reached.

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

Run Time Limits

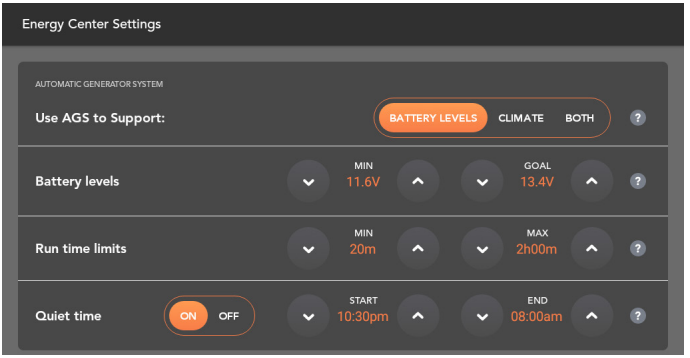
Set the *minimum time* that the generator will continue to run after the goal battery voltage and/or temperature is achieved. The *maximum time* is the total run time that the generator will operate to achieve the target battery voltage and/or temperature. If targets are not achieved and the generator run time exceeds the maximum run time limit set in the Energy Settings, the generator will automatically turn off.

Quiet Time

Quiet Time allows you to choose the hours when the generator will always be turned off, even if AGS has been enabled.

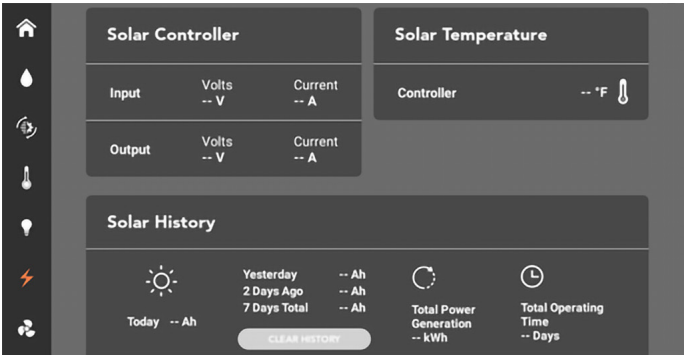
If you are using Quiet Time, ensure that the time is correct on your RV. If the time is incorrect, there will be a pop-up with an error message.

For help on 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.



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.

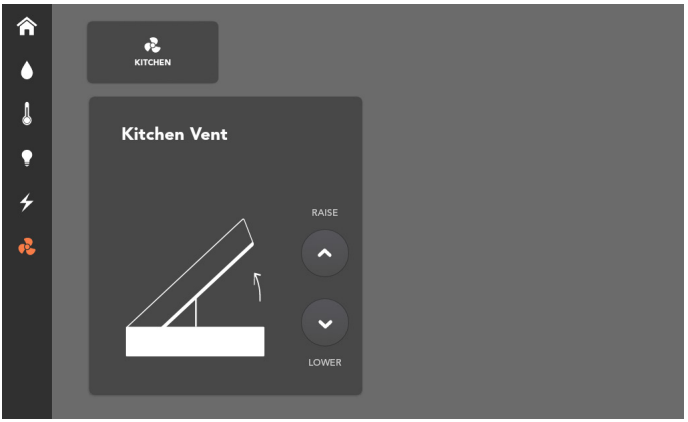
The total power generation is displayed in kilowatt-hours.

Clear History

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

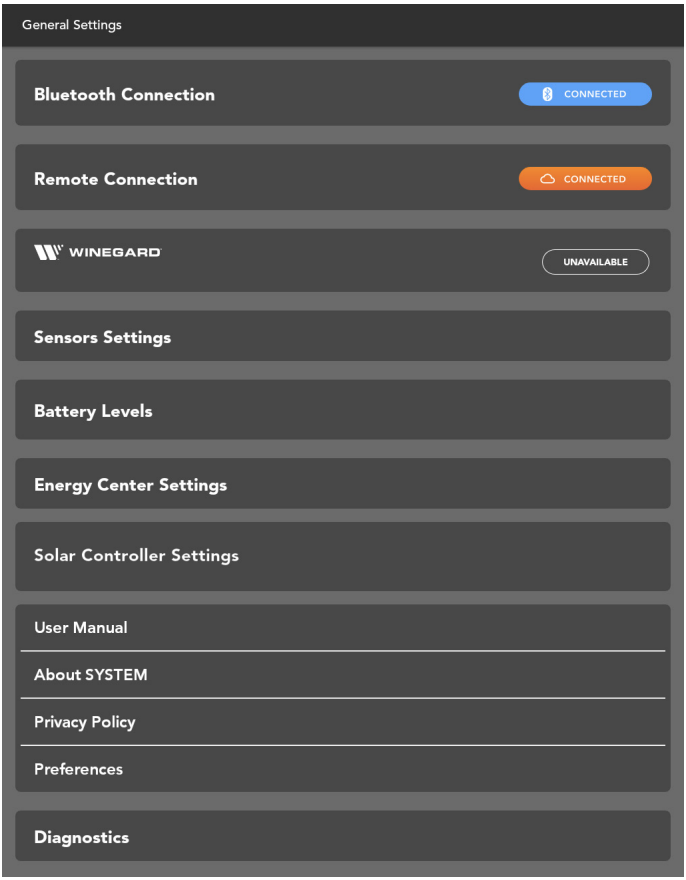
FANS AND VENTS SCREEN

Turn kitchen and bathroom fans on and off, and if available, operate any bathroom and kitchen vents.



GENERAL SETTINGS

The General Settings may be accessed by pressing the Settings icon on the RVMaster App homescreen.



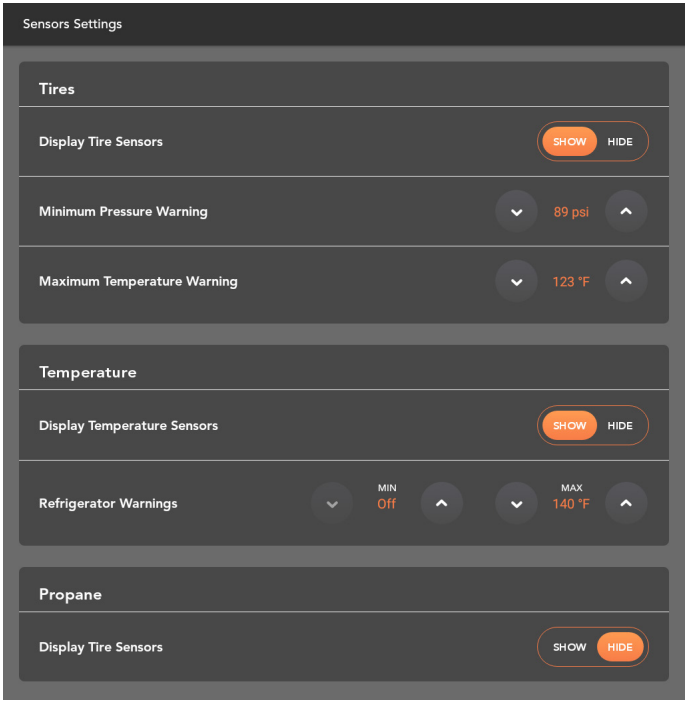
Use General Settings to:

- Check the **Bluetooth Connection** between the Node and Controller.
- Log in to the BMPRO Cloud using a **Remote Connection**.
- Enter the **Winegard** network name and password to connect to the internet.
- Set **Sensors Settings**, allowing for the setting of tire pressure sensor underpressure and over-temperature limits.
- Check the wireless **Battery Levels** of any installed Switch.
- View **Energy Center Settings**.
- View **Solar Controller Settings**.
- Access a digital version of the **User Manual**.
- View information **About SYSTEM**: all about the RVMaster system, Node firmware version, RVMaster App version, etc.
- Access BMPRO's **Privacy Policy**.
- Set your unit **Preferences** for temperature and pressure.

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.**



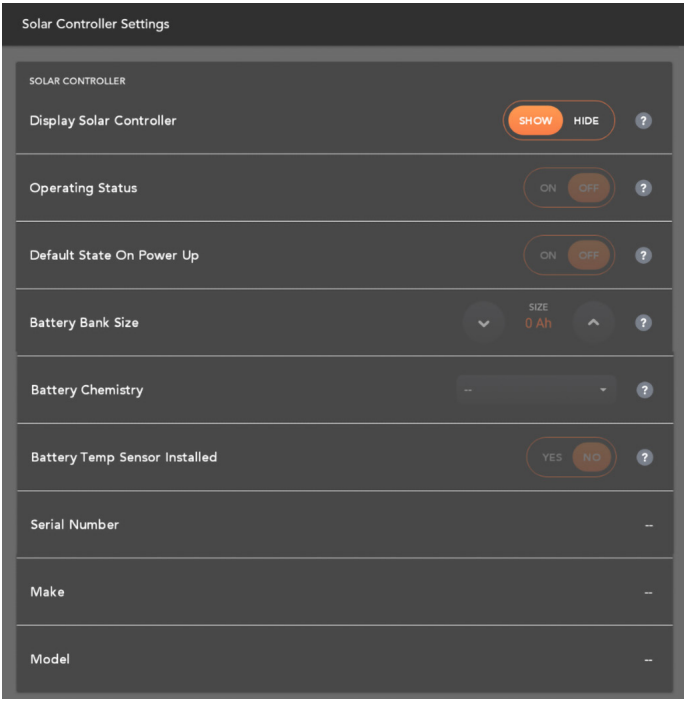
SmartConnect user manual QR code

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**.



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.

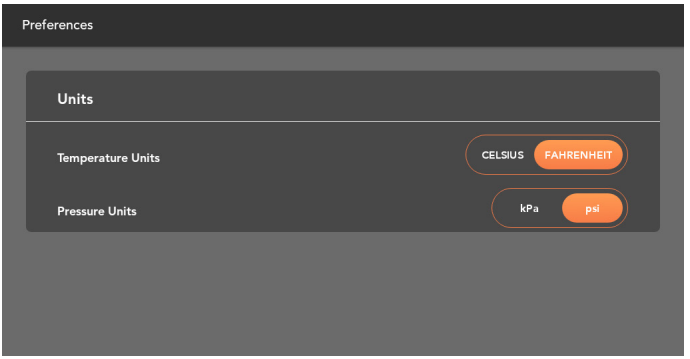
Model

Displays the Solar Controller model number.

UNIT PREFERENCES

To change temperature or pressure units, go to the settings menu on the App 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 or gas heaters.

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

WARNING

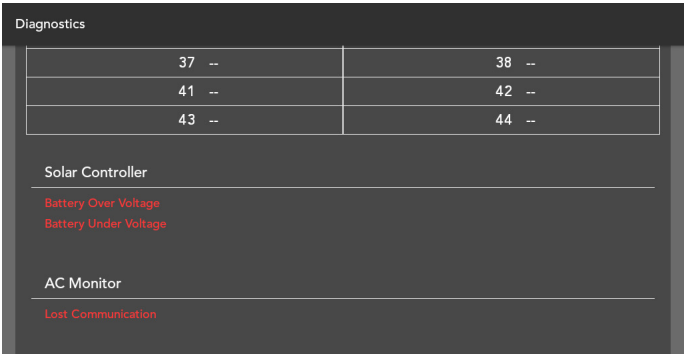
Motor outputs do not indicate a warning if the wires are shorted.

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



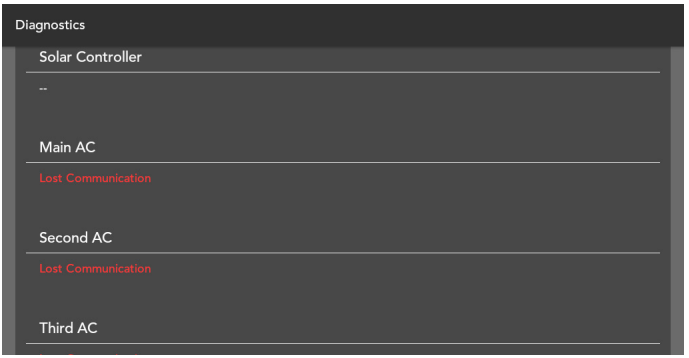
WARNING

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.



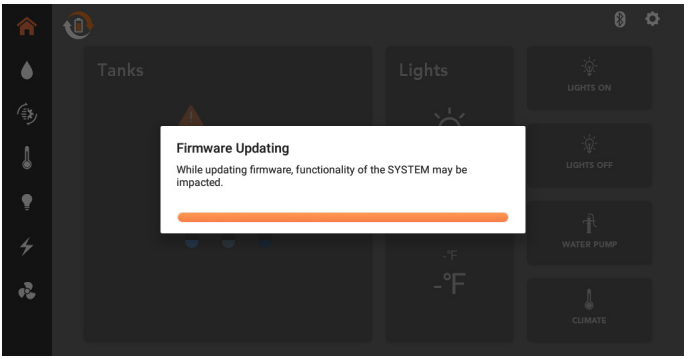
UPDATING FIRMWARE

The Node will receive updates over-the-air, meaning you will always get the latest feature updates immediately, without needing to bring your RV to your local RV dealer.

To keep the Node updated, make sure that the Controller is connected to the internet.

When there is an update to the Node it will begin updating immediately.

Please keep the Node powered while it is updating.



Notifications to update the Node firmware may be received after updating the RVMaster App on the Controller. These updates cannot be postponed.

While the Node is powered, update the Node at the prompt to ensure that the Node is compatible with the RVMaster App.

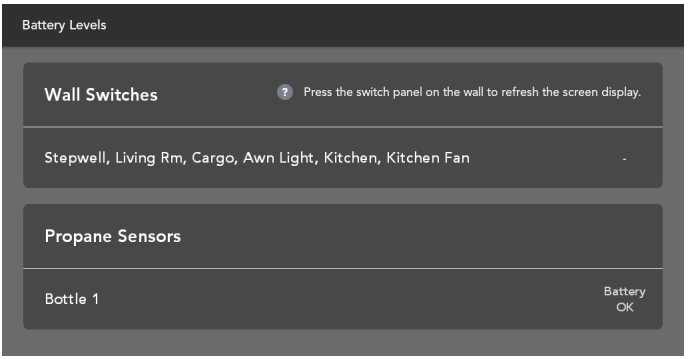
SWITCH

The Switch is an optional wall switch available in three types of configurations to suit your RV. The Switch communicates by Bluetooth to the Node to provide additional control of RV features and accessories.

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

REPLACING THE BATTERY IN YOUR SWITCH

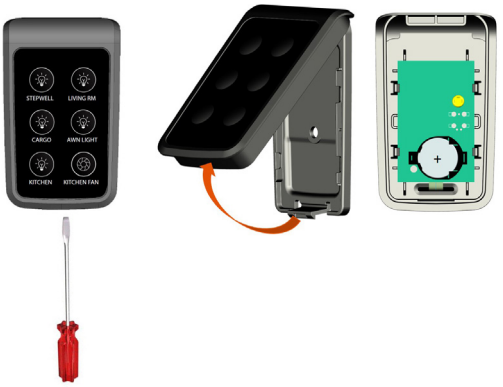
The Switch is powered by a standard, 3V Lithium Cell coin battery (CR2032).You can check if the battery needs replacing from the RVMaster App General Settings. Open the BLE Wall Switches settings, then press any button on the switch whose battery you are checking. The RVMaster App will refresh with the switch battery status.



To replace the battery, unclip the Switch button pad.

You may need a flathead screwdriver or similar to pry open the Switch button pad, and to remove the battery from the battery holder.

Insert the new battery in the battery holder with the positive side facing up.



FAQS AND TROUBLESHOOTING

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

CONTROLLER AND APP

Does the Controller connect to Wi-Fi?

Yes, the Controller can connect to your local Wi-Fi network:

1. Press the Main screen icon to return to the Controller main screen.
2. From the main screen, press the Settings icon.
3. Press **Network & Internet** and then **Wi-Fi**, then choose and connect to your Wi-Fi network.

How do I update the RVMaster App on my Controller?

If the Controller is connected to the internet and logged into a Google account, it may automatically receive RVMaster App updates and notifications.

RVMaster App updates may also be searched from the Google Play Store. Open Google Play and search for RVMaster to find the latest app updates.

How do I create a Google account?

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

How do I change the time on my Controller?

To change the date and time on your Controller:

1. Press the Main screen icon to return to the Controller's main Android screen.
2. Press the Settings button.
3. Press **Systems.**
4. Press **Date & Time.**
5. Press **Set Date.**
6. Select the date.

Ensure the correct year is set. The year can be changed by tapping the year in the top left of the calendar.

7. Press **Set Time.**
8. Select the current time.

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, contact your RV dealership for more assistance.

I've left my RV on for a few days; now the screen on my Controller is blank and I can't use the RVMaster App?

The Controller will go to sleep if it has been left on for more than 48 hours and not been used in that time.

Touching the screen will not wake up the Controller. To wake up the Controller and use the RVMaster App again:

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

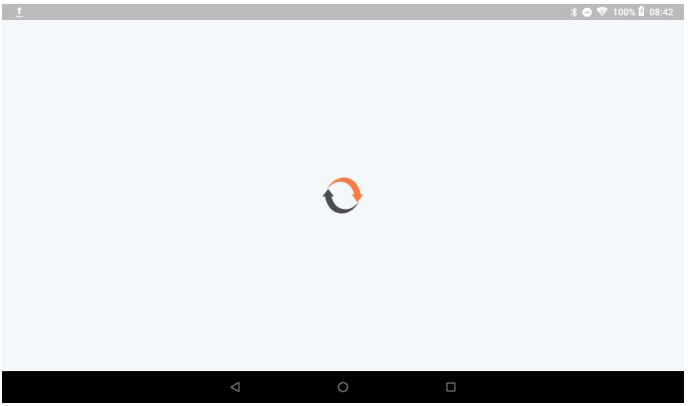
2. Press **EXT** to wake the display on the Controller.

   This will put the RVMaster in standby mode and turn off the lights.

3. Press ① to take the RVMaster out of standby mode and begin using the RVMaster App.

I've launched the RVMaster App on my Controller but the app is not starting?

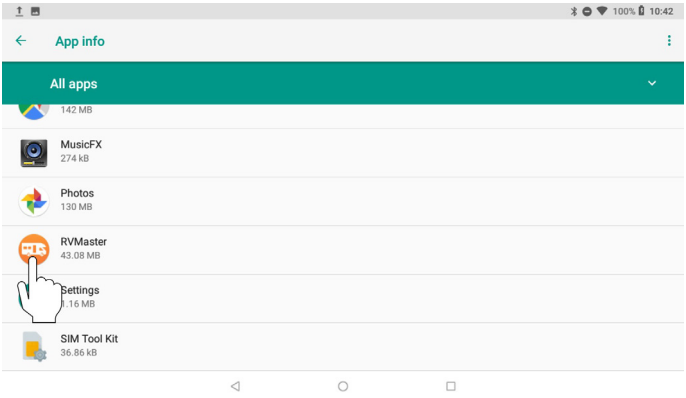
If booting the RVMaster and the RVMaster App is then launched, wait three minutes for the Node to communicate to the Controller and for the app to start. If the RVMaster App still has issues starting and is frozen on the logo page, clear the app data on the Controller then relaunch the app.



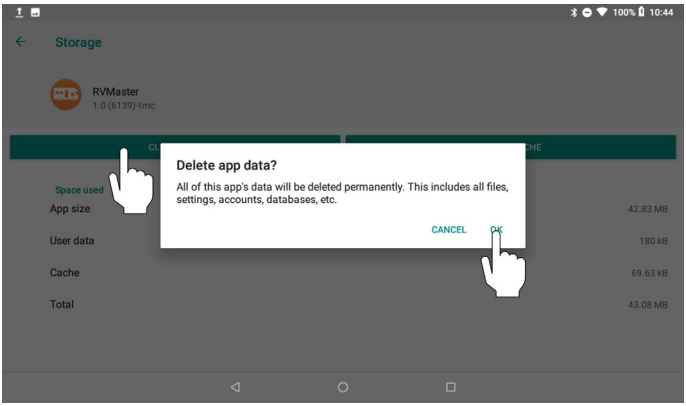
To clear the app data:

1. Press the Recent applications ▢ icon and close the RVMaster App.
2. Press the Main screen icon ○ to return to the Controller main screen.
3. From the main screen, press the Settings icon. ⚙
4. Press **Apps & notifications** and then **See all apps.**
5. Scroll to find the RVMaster App icon and press to select.

6. Press **Storage**.



7. Press **Clear Data** and press **OK** at the prompt to clear the RVMaster App data.
8. Return to the Main screen and relaunch the RVMaster App.



I am receiving a shore power fault message, what do I do?

If the Node has been connected to a faulty power source, the following error message will display on the Controller or RVMaster App:

SHORE POWER FAULT! The power cord has been connected to a faulty power source. Power will not be restored until connected to a properly working source.

A warning icon will also appear at the top of the page. ⚠

You will not be able to continue using your RVMaster until the Node is connected to a non-faulty power source.

PAIRING WITH THE NODE

I tried pairing my smartphone 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.

If the above does not solve the problem, clear the Node's memory of all paired devices and try pairing the smartphone again.

I tried pairing my smartphone 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.

I tried pairing my smartphone 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.

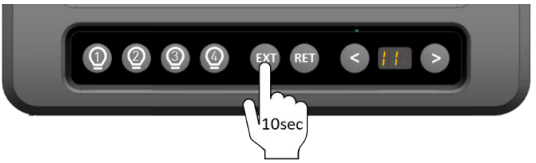
Follow the instructions in **Clearing the Node**, then pair your smartphone. Don't forget to also pair the Controller again.

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**.

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.

SWITCH

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

You 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**:

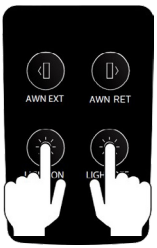
1. Using the button on the Display, navigate to the **Settings** menu.
2. Using the button on the Display, navigate down to **Advanced**.
3. In the **Advanced** setting menu, use the button to navigate down to **Pair Switch**.
4. Press the **OK** action button to put the node into Switch pairing mode.
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 **<** or **>** 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 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.

SPECIFICATIONS

NODE	
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 CR15.109, 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 to 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

DISPLAY	
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	
Input Voltage Range	2.2V to 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.

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