



JAYCO SERVICE SCHOOL 2021



Jayco



INSTALLED IN OVER 200k RVs IN THE LAST DECADE

AN INDUSTRY PIONEER OF DIGITAL PLATFORMS IN RVs

ONE OF THE WORLD'S LARGEST INSTALLED SMART MANAGEMENT SYSTEMS

INDEPENDENT INTEGRATOR OF RV PRODUCTS

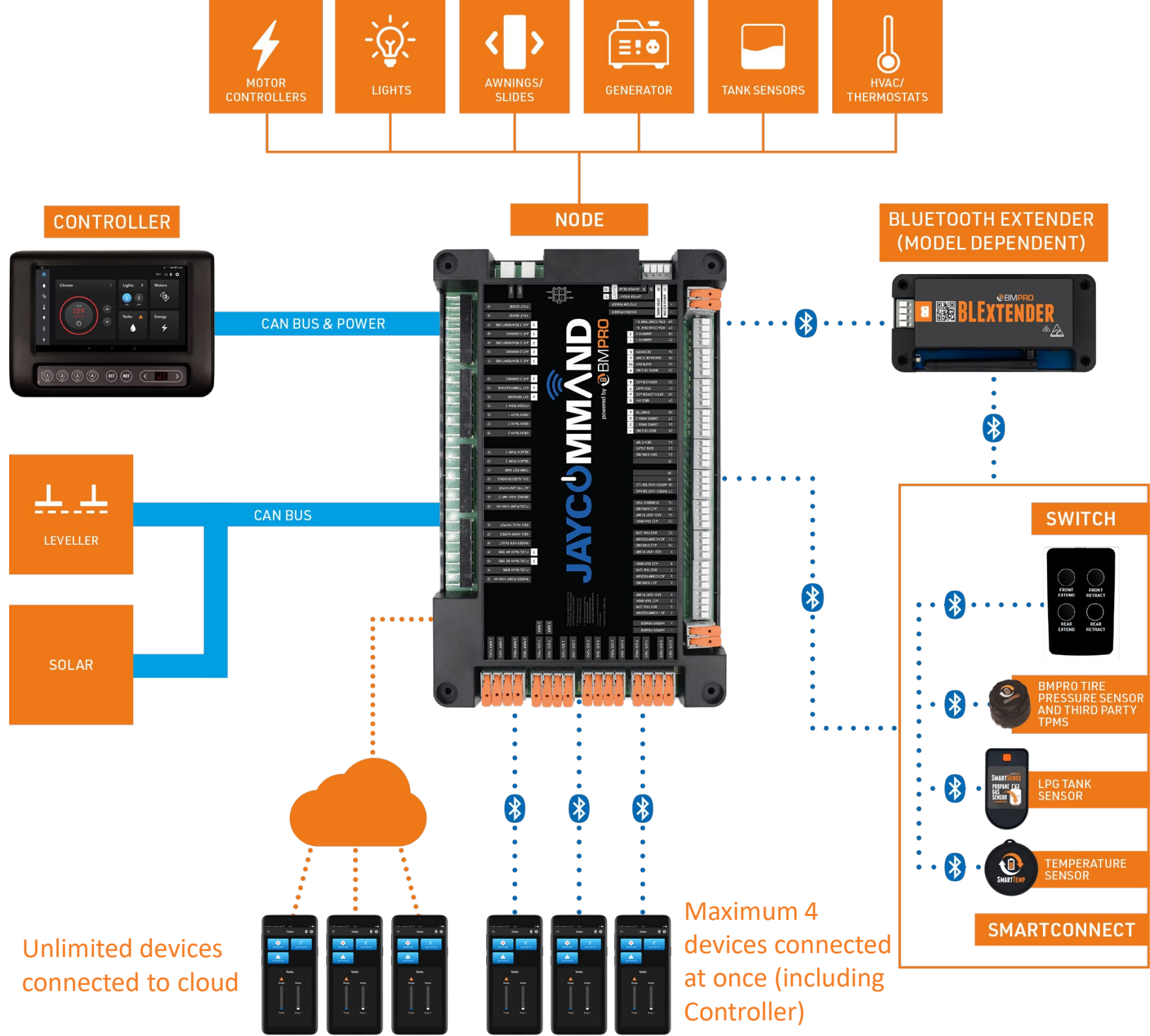
PRODUCT MADE IN MELBOURNE, AUSTRALIA

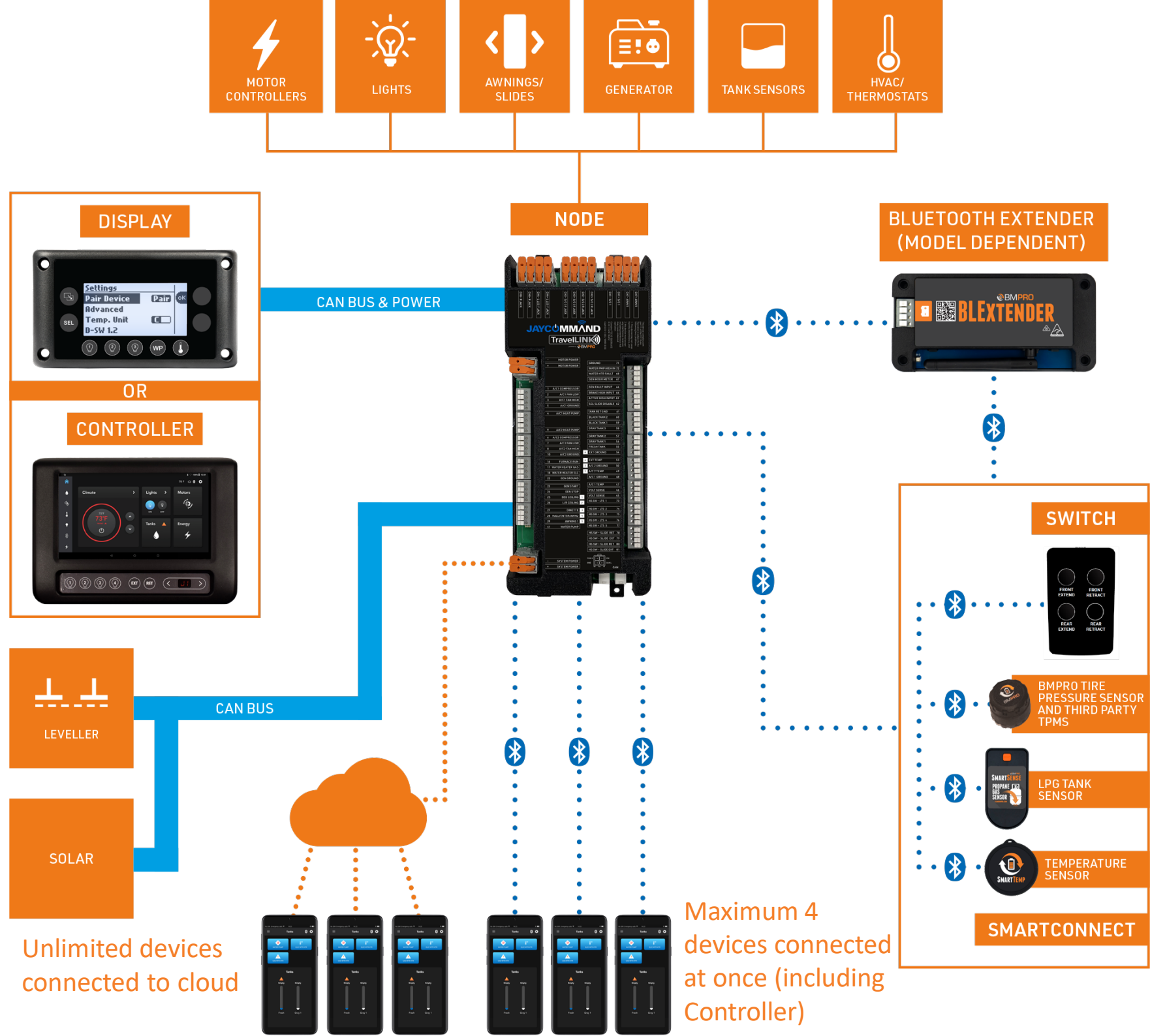
OFFICE IN INDIANA, USA



FEATURES

- Control and Monitor Functions
 - Lighting
 - HVAC
 - Water Tanks, Pumps and Heaters
 - Motorized – Slides, Awnings, Ramp Door
 - Energy – Generator, Battery Voltage
- Auto Leveling with LCI and Equalizer
- Redundancy Switches on Control for Lights and Motorized
- Tire Pressure Monitoring
- Propane Tank Monitoring
- Temperature Monitoring
- Ability to Add Accessories to the System with Sensors
- Cloud Control
- Wall Mounted Control and BYOD

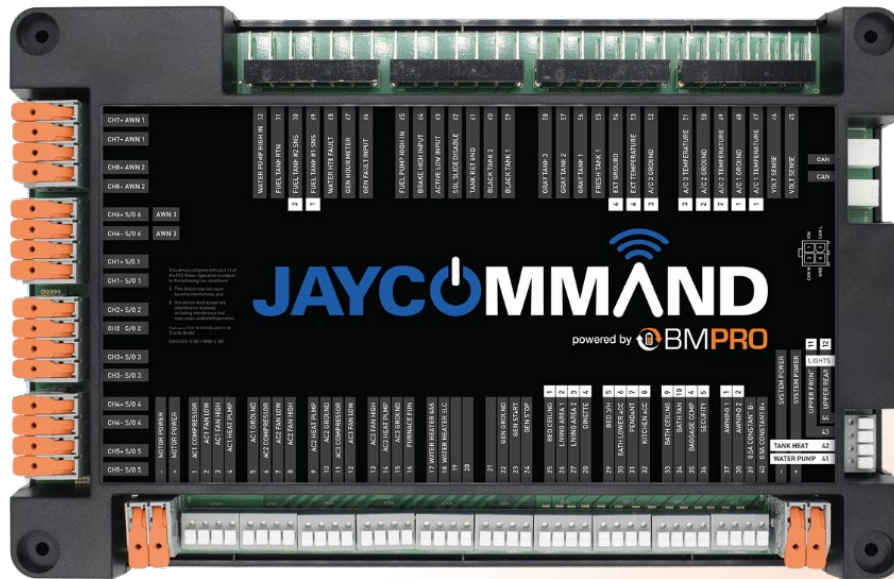




Up to 10 switches able to connect at one time

JAYCOMMAND[®] NODES

powered by  BM PRO



Maxi Node



Mini Node

CONTROLLER



-  All interior lights
-  All exterior lights
-  All lights
-  / WP Water pump

"Reset" Hole



EXT= Extend
RET= Retract

Awnings



Jacks



Slides



Ramp



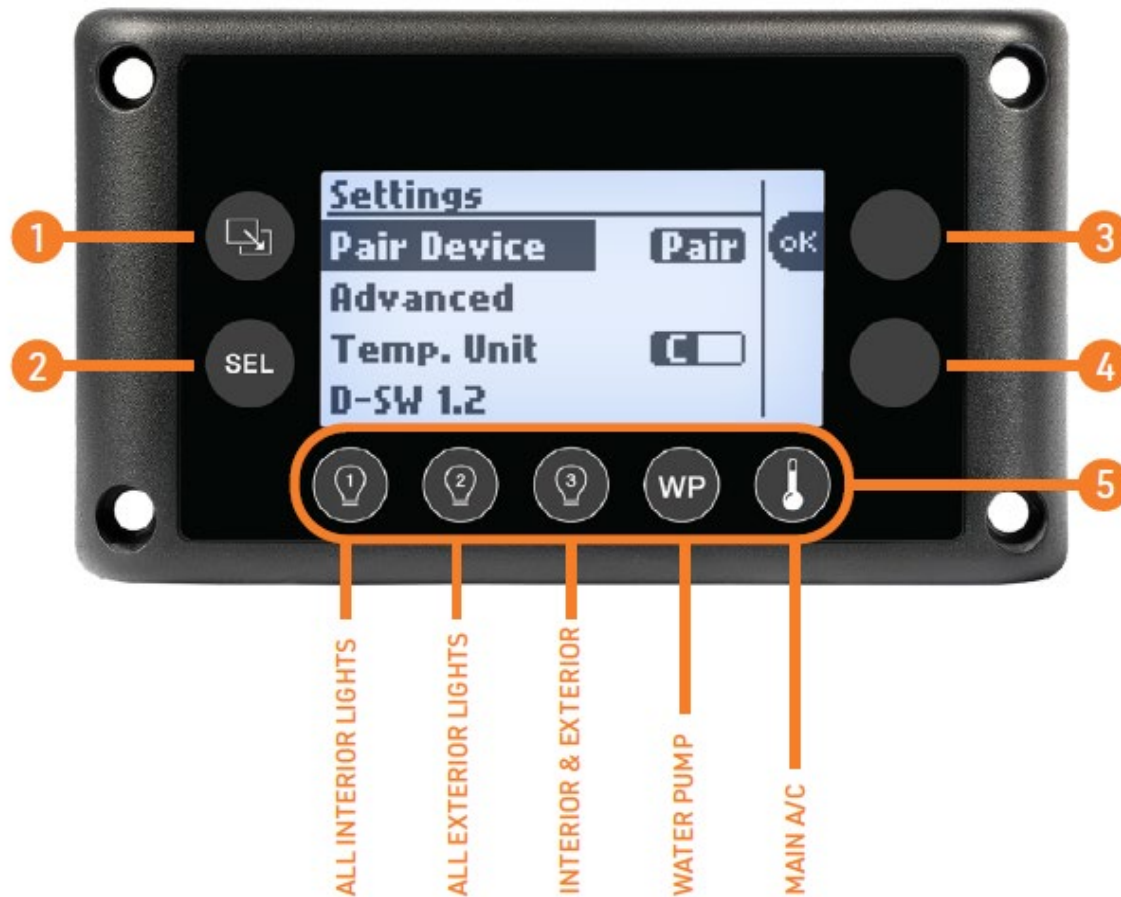
Off



Pairing



MINI DISPLAY



1. Page Navigation Button
2. Menu Navigation Button
3. Action Button
4. Action Button
5. Redundancy Light, Water Pump, and Climate buttons.

CONTROLLER-LITE



The “Lite” variation of the controller was introduced due to the Global microchip shortage.

It is the same as the standard controller, but we have removed the redundancy buttons below the touch screen.

Because of the lack of redundancy buttons, pairing smartphones and the controller itself has changed.

BLE WALL SWITCHES

- There can be up to 6 switches depending on floorplan.
- End customer can add additional switches. The system can support up to 10 total switches.



TPMS

- There can be up to 6 TPMS sensors depending on model.
- TPMS will come in the foam tray from the OEM. It is up to the dealer to install on the correct tire.



TEMP



Jayco Luxury Fifth wheels come with ONE sensor standard in the refrigerator.

The system can support up to FOUR sensors.

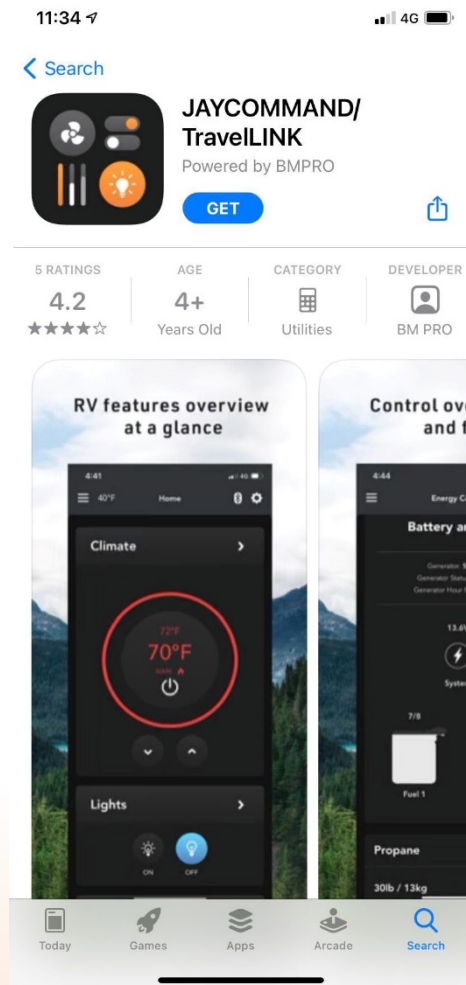
LP



There can be up to 3 LP sensors paired to the system.

These are only available aftermarket.

MOBILE APP



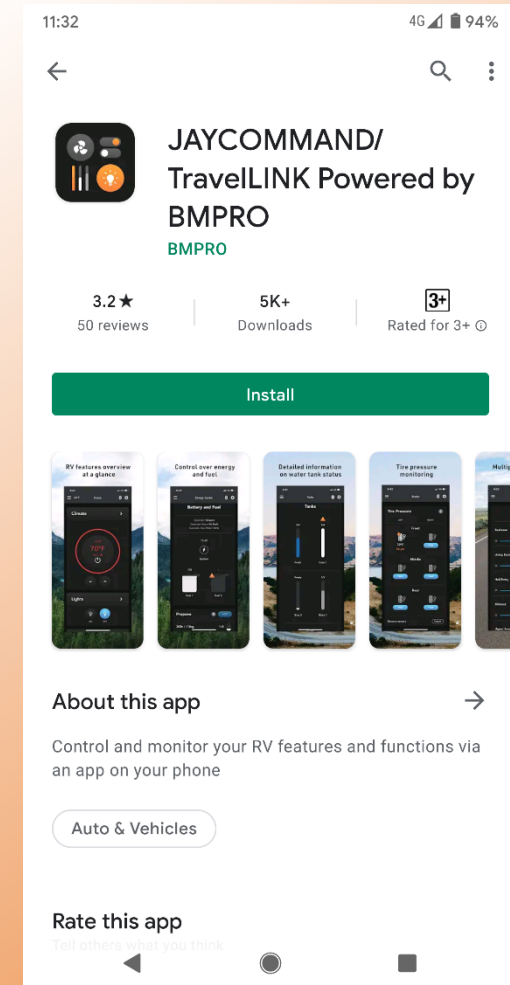
iOS and Android
mobile apps



App Store



Google play



QUESTIONS ON OVERVIEW
OF THE SYSTEM??

I/O FUNCTIONS

- 8 H-Bridge polarity reversing motor drivers
- Supports up to 3 A/Cs with optional heat pump outputs
- Furnace
- Electric and gas water heater
- Water pump
- 16 light outputs, 12 of which are dimmable
- Generator start, stop, hour meter, fault
- 6 holding tanks
- Tank heaters
- 2 fuel tanks
- Outside temp sensor

CAN/BLE/CLOUD FUNCTIONS

- LCI hydraulic and electric leveling (2020-21 lux 5ths have Equalizer)
- RVC Go Power solar support
- Voice control (Jay Control)
- Extended motor control on RVMN5X 2nd awning
- Remote capability with Cloud
- BLE TPMS Sensors
- BLE Temperature Sensors
- BLE Propane Sensors
- BLE Wall Switches

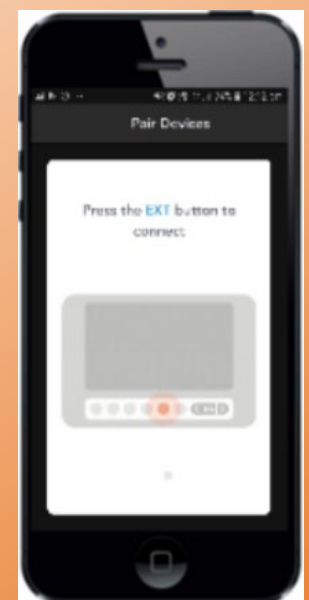
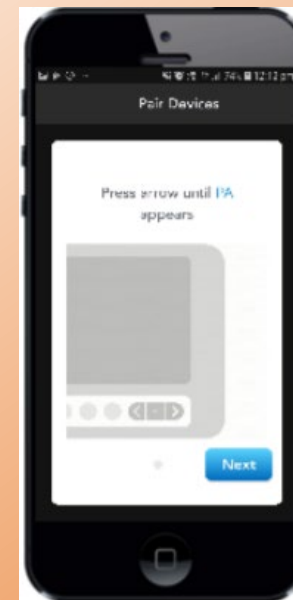
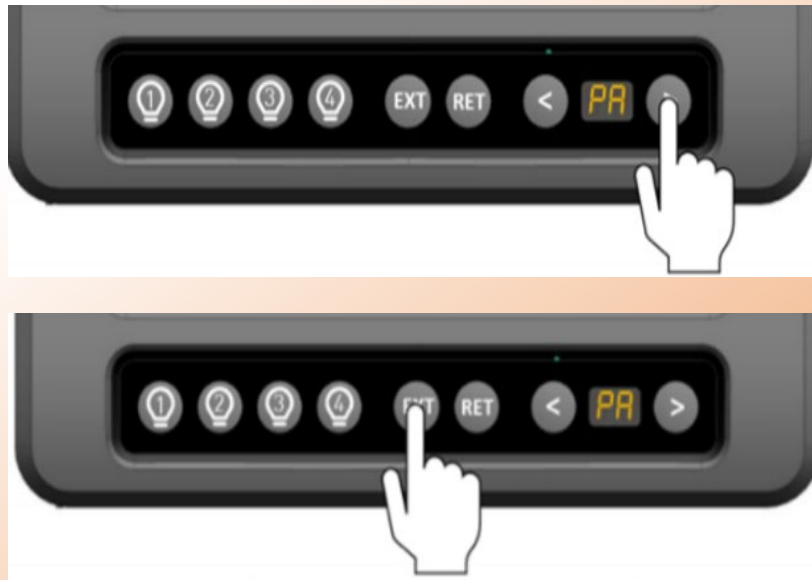
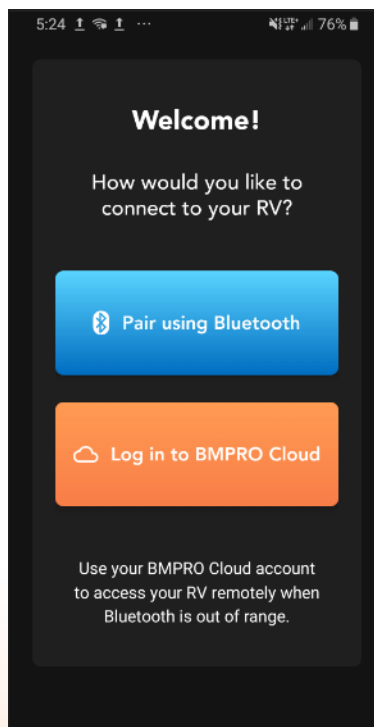
PAIRING CONTROLLER TO NODE

- Ensure all Powered Up
- Press PA
- Press EXT



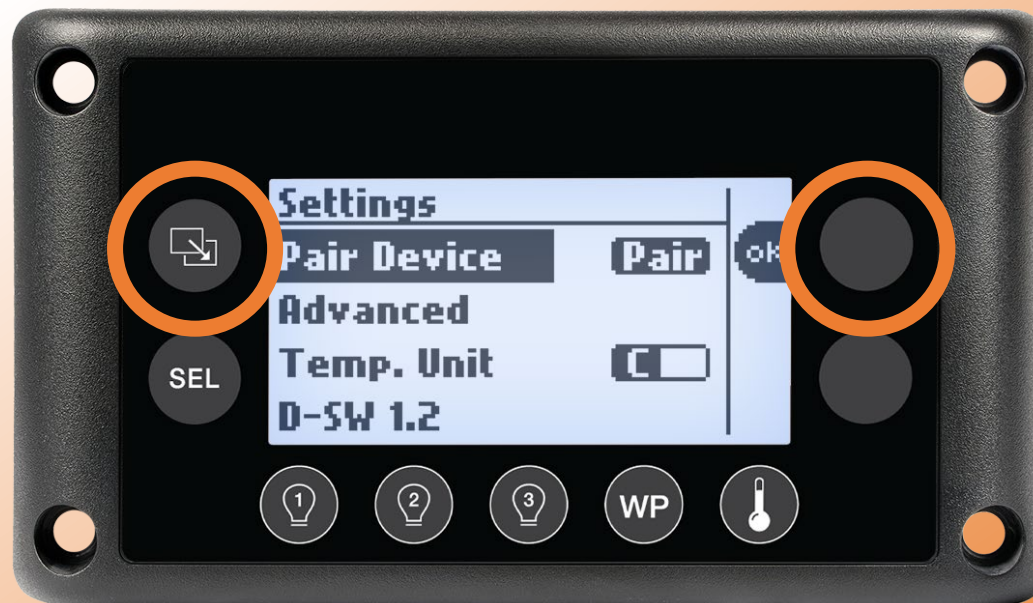
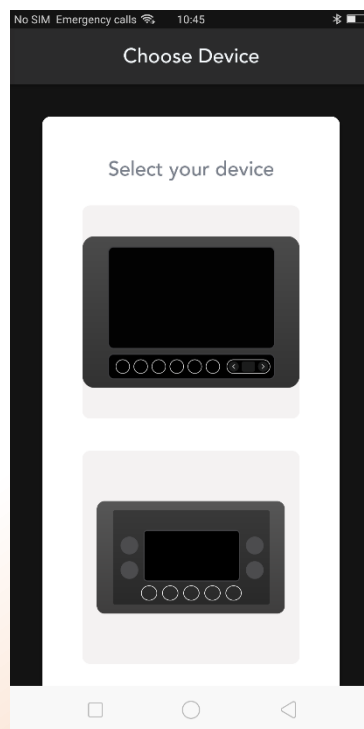
SMARTPHONE PAIRING TO NODE

- In the app, select Pair using Bluetooth
- Use < or > to navigate to PA
- Press EXT to accept pairing



SMARTPHONE PAIRING TO MINI NODE WITH MINI DISPLAY

- In the app, select the device installed in the RV
- Press the Page Navigation Button to navigate to Settings
- When Pair Device is selected, press OK

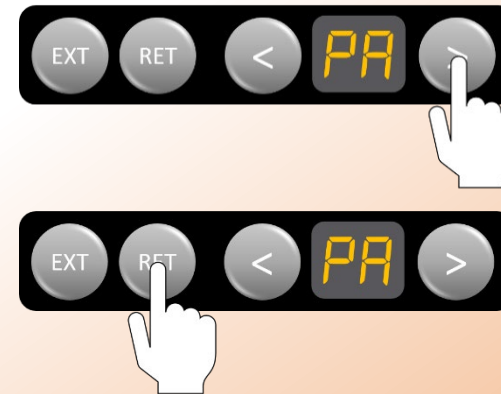


PAIRING ON SYSTEMS WITH THE CONTROLLER-LITE

- Open the app on the mobile device or the Controller
 - Press and hold the WATER PUMP switch for 5 seconds
 - Wait for the circular loading indicator in the center of the screen to appear.
- NOTE: There is no immediate feedback telling you that the pairing process has begun. If the home page of the JAYCOMMAND/TravelLink doesn't pop up, repeat the process.

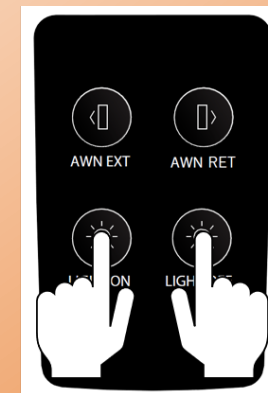
SWITCH PAIRING

- Press PA
- When PA Flashing press RET
- Press any two buttons on Switch
- Press EXT to accept pairing



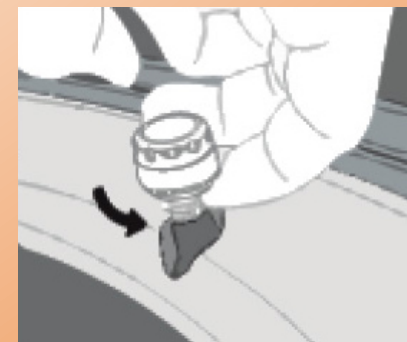
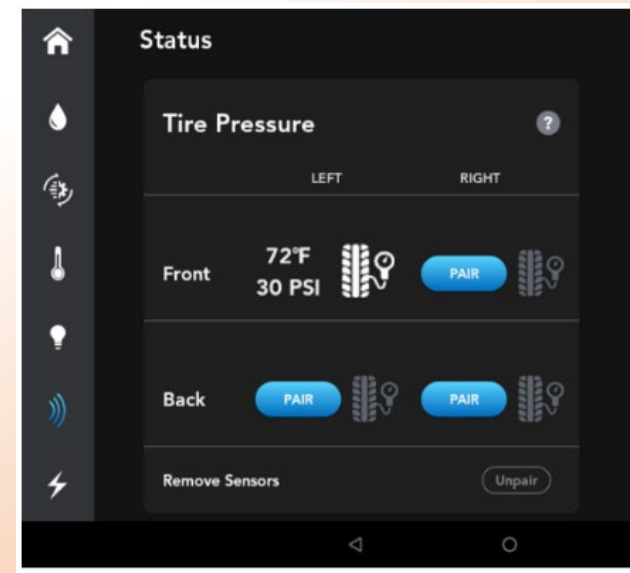
To check what Switches are to be paired with the vehicle configuration follow the instructions below:

- Click on “Settings” menu on the home page
- Scroll down and click on “Battery Levels”



TPMS PAIRING

- Screw on the anti-theft nut
- Tighten the sensor
- Screw the nut anti-clockwise to lock the sensor
- Tighten the anti-theft nut.
- Press Pair
- Apply pressure to sensor by screwing on to valve stem of tire within 30 seconds



QUESTIONS ON PAIRING??

HOMEPAGE



Quick access

Shows fault symbols

Quick access side ribbon

Settings

Connection type(s)

Outside temp

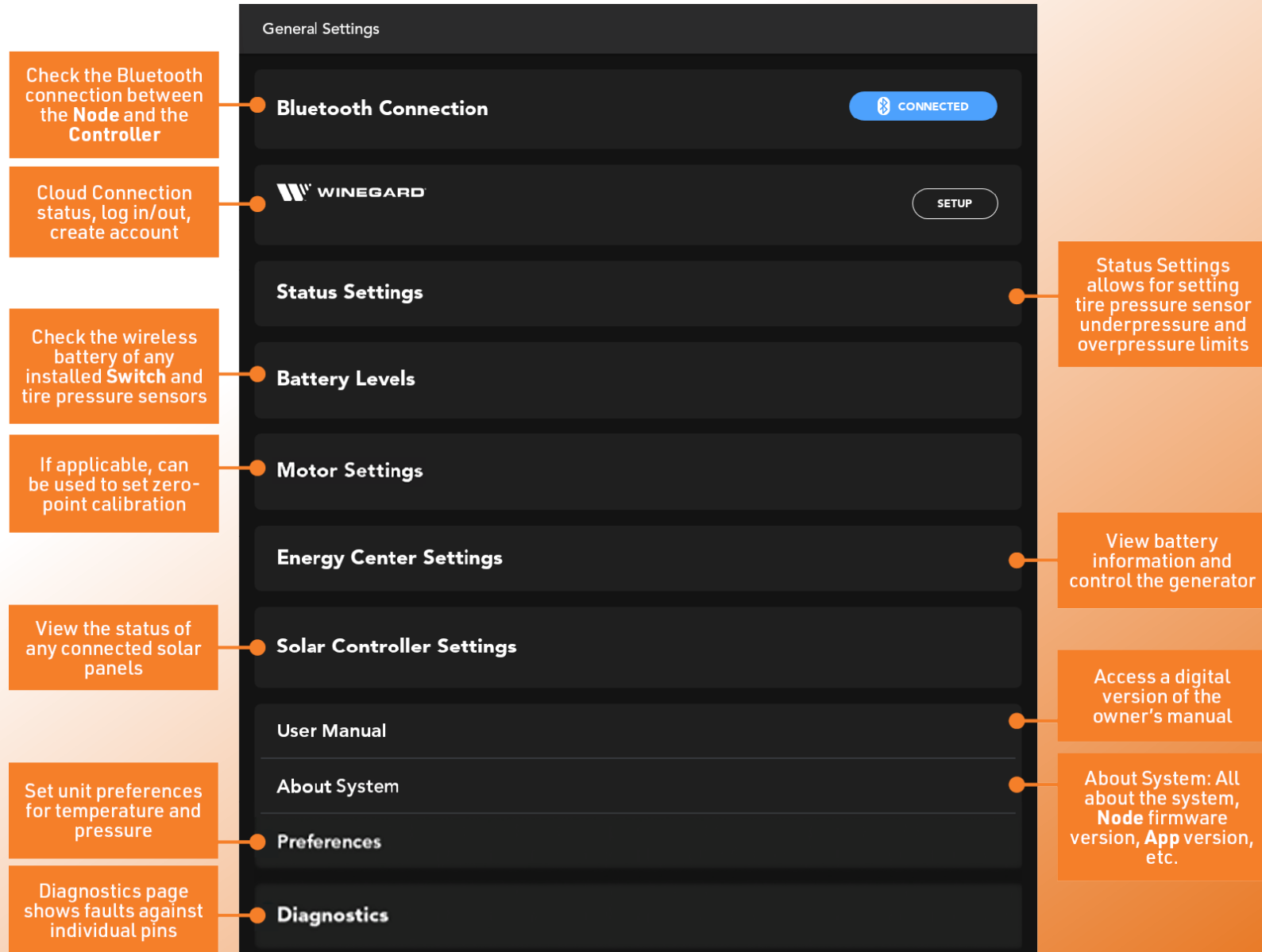
SETTINGS PAGE

Check connection status of:

- Bluetooth
- Cloud
- Units selection temp and pressure

Battery levels

- About page



General Settings


- Bluetooth Connection** (CONNECTED) - Check the Bluetooth connection between the **Node** and the **Controller**
- WINEGARD** (SETUP) - Cloud Connection status, log in/out, create account
- Status Settings** - Status Settings allows for setting tire pressure sensor underpressure and overpressure limits
- Battery Levels** - Check the wireless battery of any installed **Switch** and tire pressure sensors
- Motor Settings** - If applicable, can be used to set zero-point calibration
- Energy Center Settings** - View battery information and control the generator
- Solar Controller Settings** - View the status of any connected solar panels
- User Manual** - Access a digital version of the owner's manual
- About System** - About System: All about the system, **Node** firmware version, **App** version, etc.
- Preferences** - Set unit preferences for temperature and pressure
- Diagnostics** - Diagnostics page shows faults against individual pins

SETTINGS PAGE

General Settings

Bluetooth Connection

CONNECTED

 WINEGARD

SETUP

Status Settings

Battery Levels

Motor Settings

Energy Center Settings

Solar Controller Settings

SETTINGS PAGE CONT...

User Manual

About JAYCOMMAND

Privacy Policy

Preferences

Diagnostics

DIAGNOSTICS PAGE

Diagnostics

CH 7 --	CH 8 --
CH 6 --	CH 1 --
CH 2 --	CH 3 --
CH 4 --	CH 5 --
Motor Power + Unable to Report	Motor Ground Unable to Report
1 --	2 --
3 --	4 --
5 Unable to Report	6 --
7 --	8 --
9 --	10 Unable to Report
11 --	12 --
13 --	14 --

ABOUT JAYCOMMAND

powered by  BM PRO

This should be the first page you check out to make sure everything is current.

About SYSTEM

RV

Serial Number: 1

Model: EAGLE 5TH WHEEL L/M/N

Floorplan: 1WD

NODE

Serial: A0000AA0000

Master-uC: 2.5.3

Slave-uC: 2.5

Product-Rev.: XXX

Hardware-Rev.: XXX

Floorplan IO Version: 11.07.02

BLE Protocol Version: 2.5.0

APP

Build Number: 15139

Version Number: v2.5.1

IO Version: 12.0.01

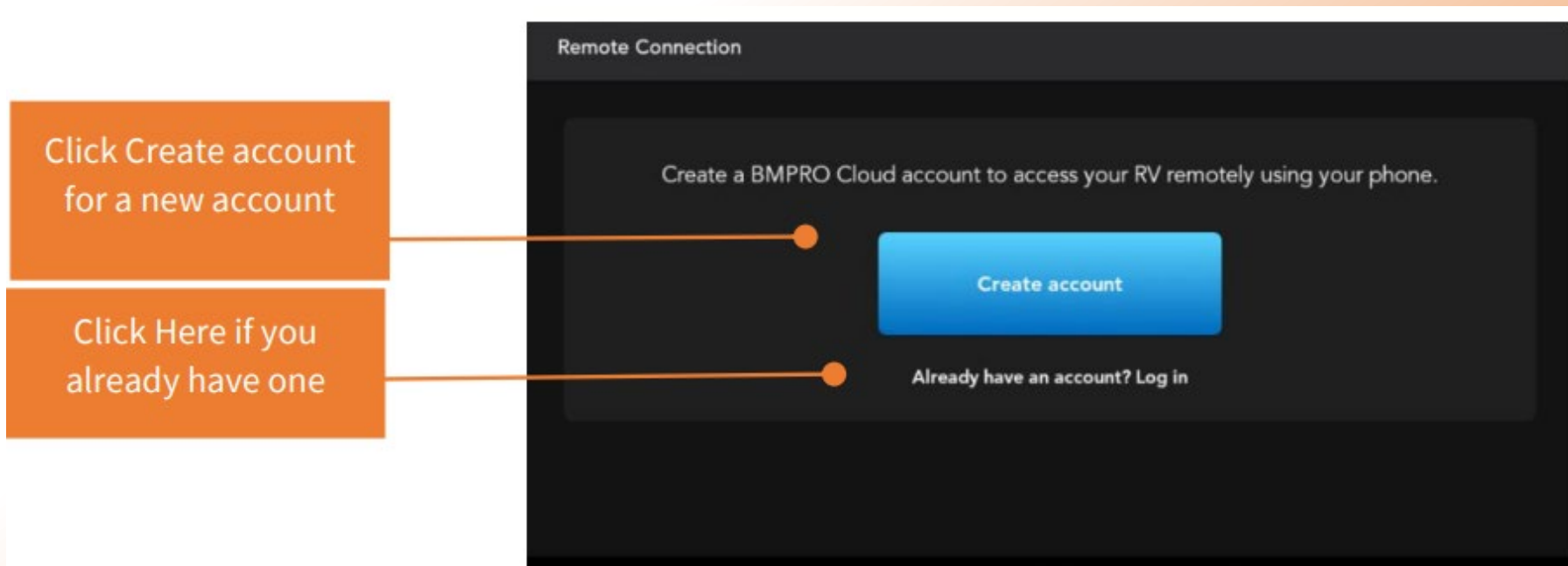
CONTROLLER

SW: 0.4

CLOUD CONNECT

In order to use the BM PRO cloud feature your wall mounter controller **MUST** be connected to the internet via WiFi.

You may connect the controller to a WiFi source directly or connect it to the Winegard system (if equipped).



CLOUD CONNECT

You can only CREATE a cloud account from the controller mounted inside the RV.

Remote Connection

Create a BM PRO Cloud account

Full Name

teambmpo ✓

Email address

adventure@teambmpo.com ✓

Password

***** ✓

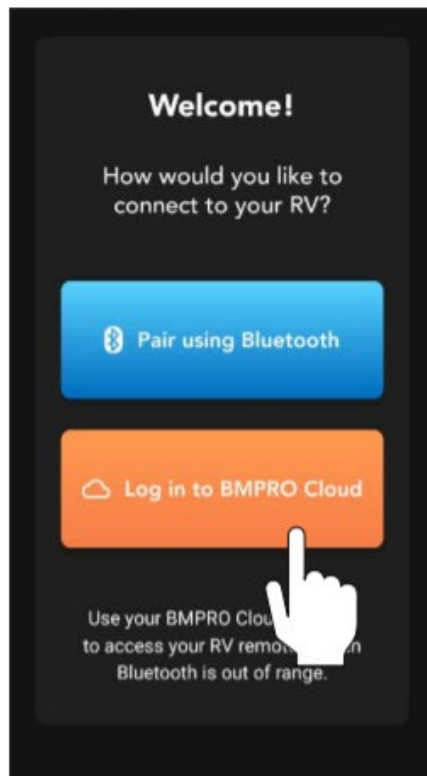
Re-enter password

***** ✓

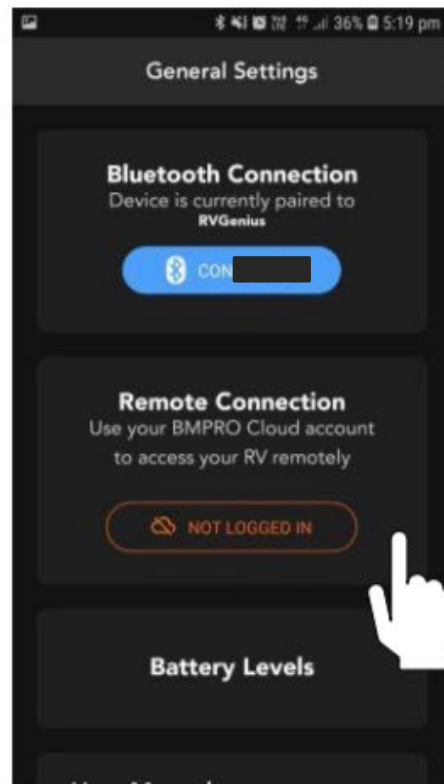
☒ Tick to confirm that you have read and agree to our [Terms and Conditions](#) and [Privacy Policy](#).

Create account

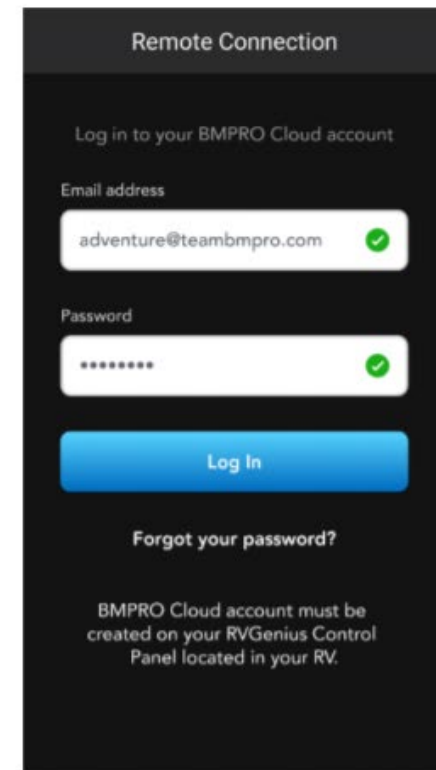
CLOUD CONNECT ON SMART PHONE



OR

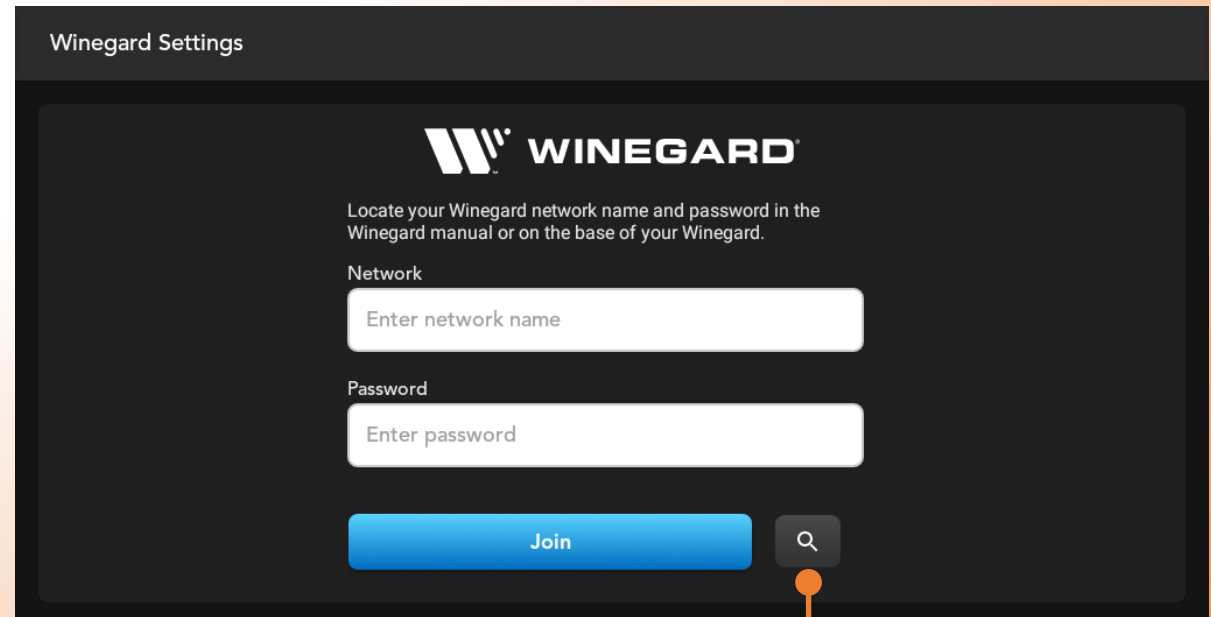


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WINEGARD

Enter SSID and Password of the Winegard system. Jayco SHOULD be putting a sticker near the controller with this information on it. If not, you can access it by pulling down the ceiling mounted router and finding the info on a sticker inside.

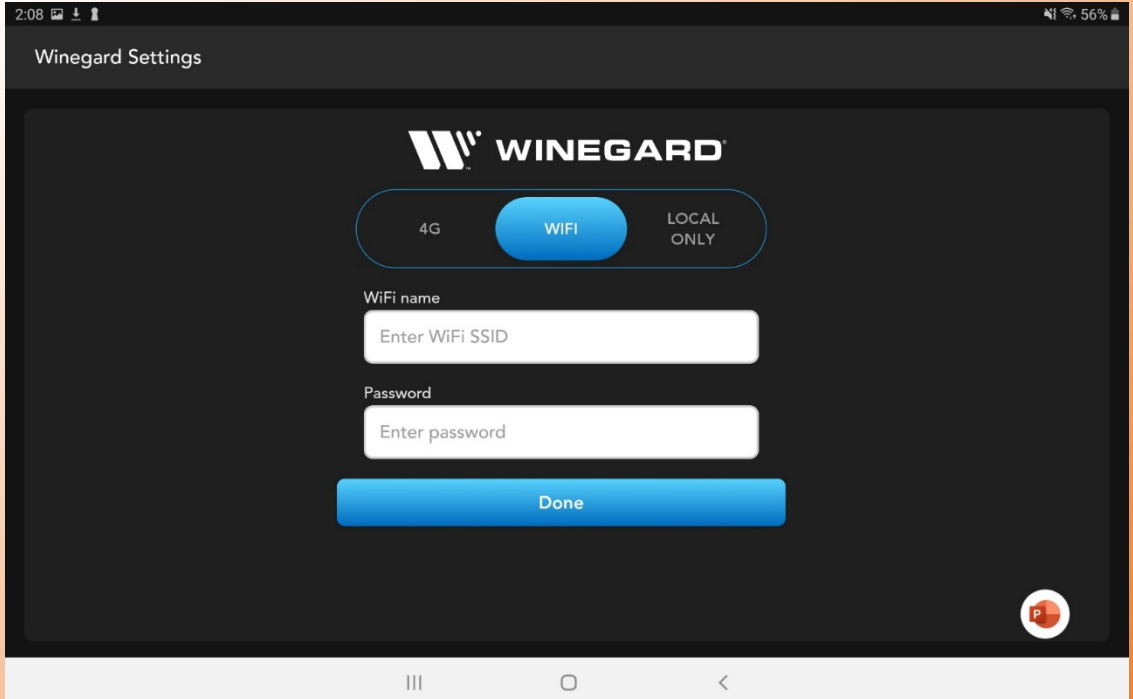


Use the magnifying glass to search for a Winegard network.

WINEGARD CONT...

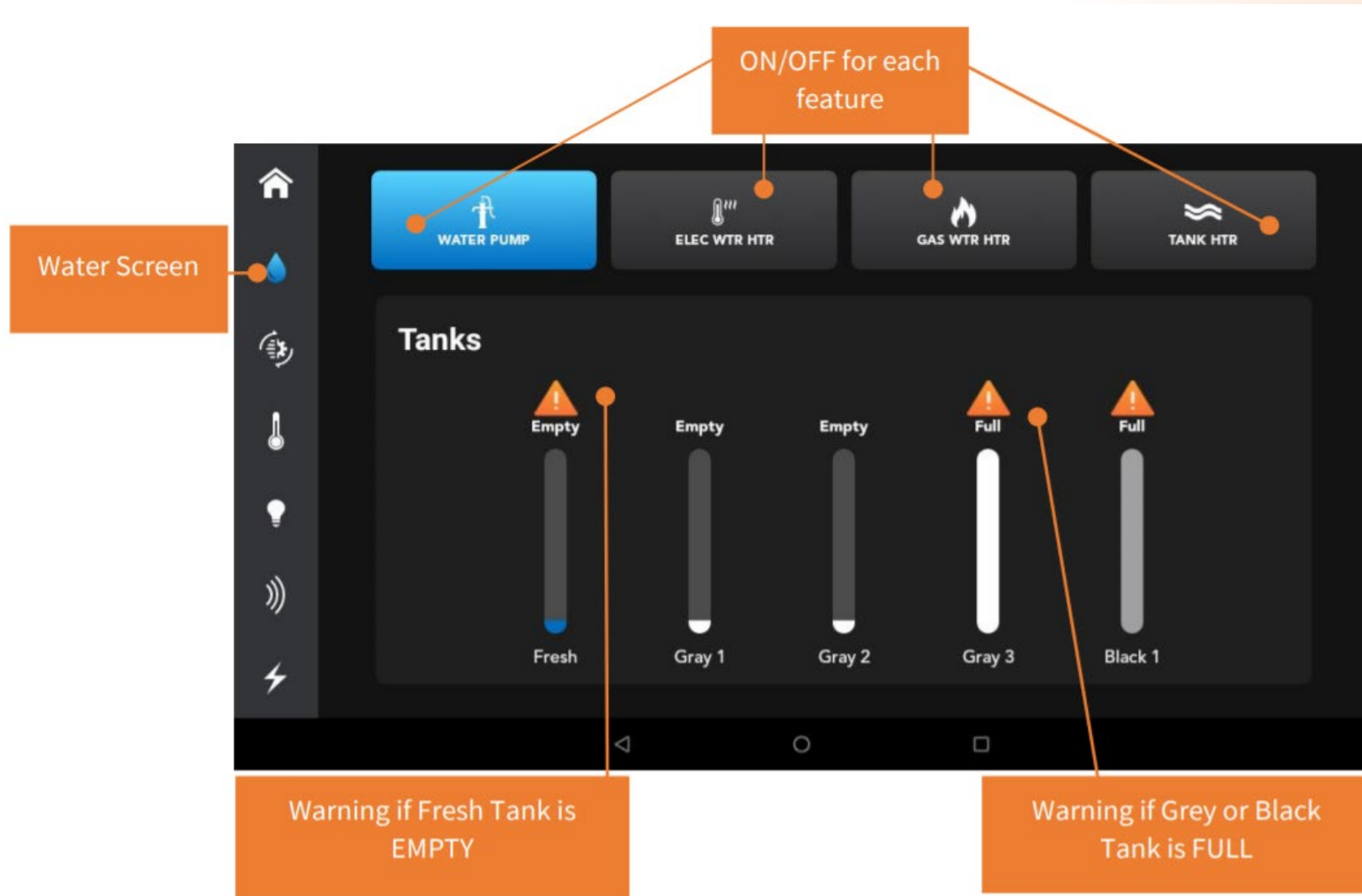
After entering the Winegard SSID and password this screen will appear. It gives you three options. 4G, WIFI, and Local Only. 4G selects the optional 4G simcard allowing data connection over cellular networks.

Selecting WIFI allows you to enter an OUTSIDE wifi name and password so that you can use your Winegard system as a wifi booster. Local only gives you a local wifi network, no internet access.

A screenshot of the Winegard Settings application on a mobile device. The screen has a dark background with white text. At the top, it says "Winegard Settings". Below that is the Winegard logo. There are three buttons: "4G", "WIFI" (which is highlighted with a blue border and a blue shadow), and "LOCAL ONLY". Below these buttons are two input fields: "WiFi name" with the placeholder text "Enter WiFi SSID" and "Password" with the placeholder text "Enter password". At the bottom is a large blue button labeled "Done". The status bar at the very top shows the time as 2:08 and the battery level as 56%.

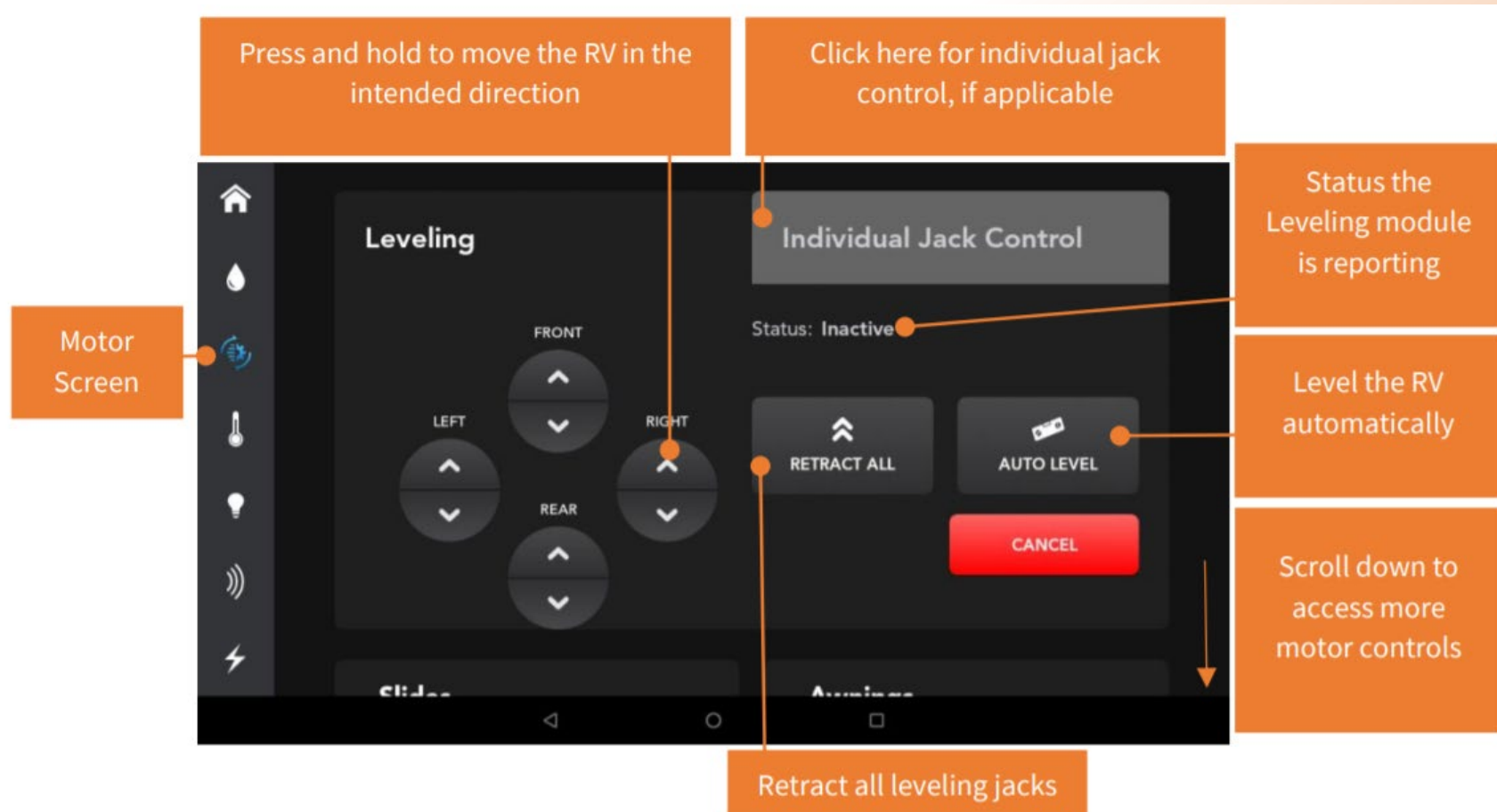
QUESTIONS ABOUT SETTINGS
OR CLOUD??

WATER PAGE



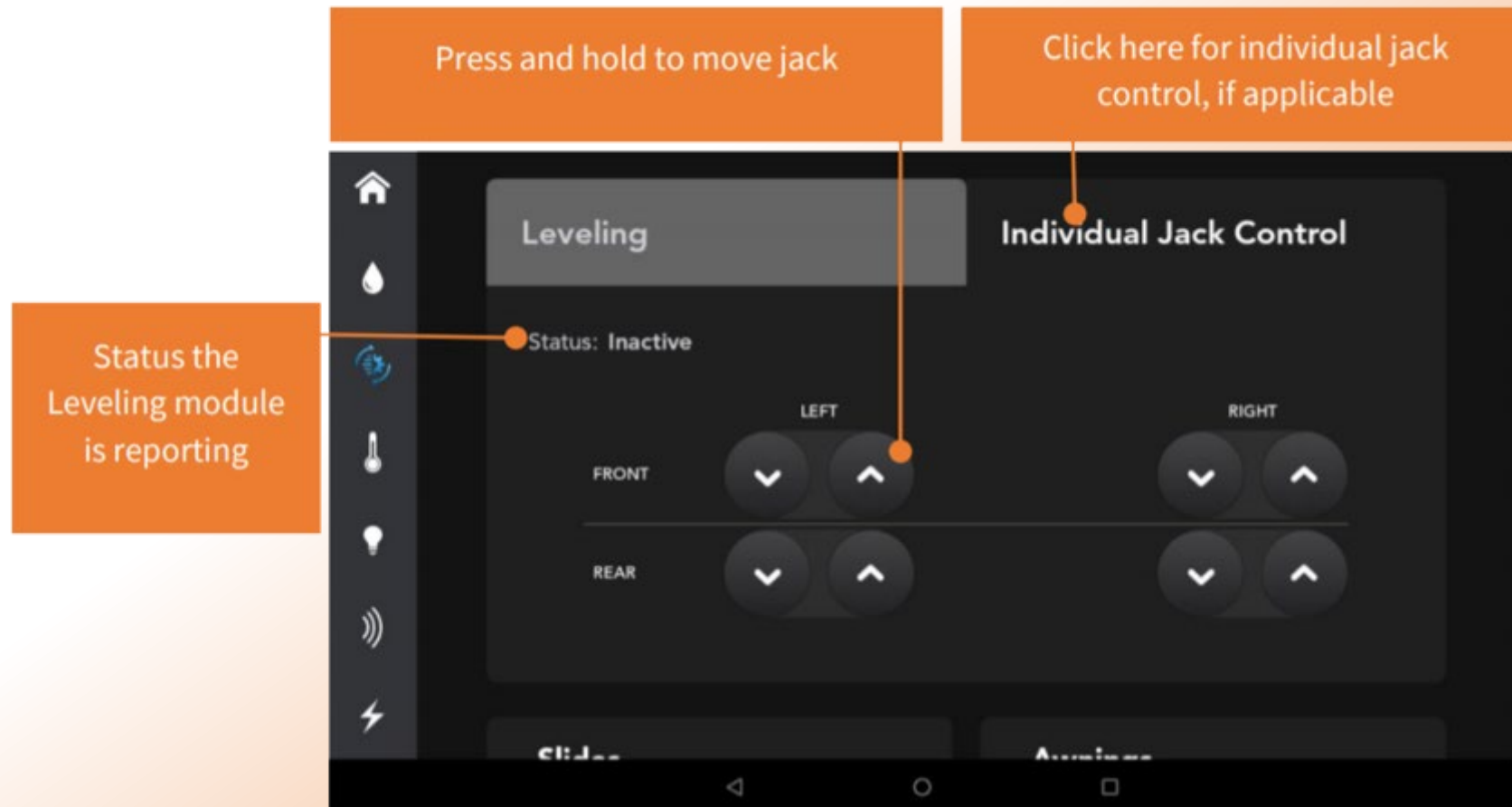
MOTORS/LEVELING PAGE

LCI Electric Leveling System Shown



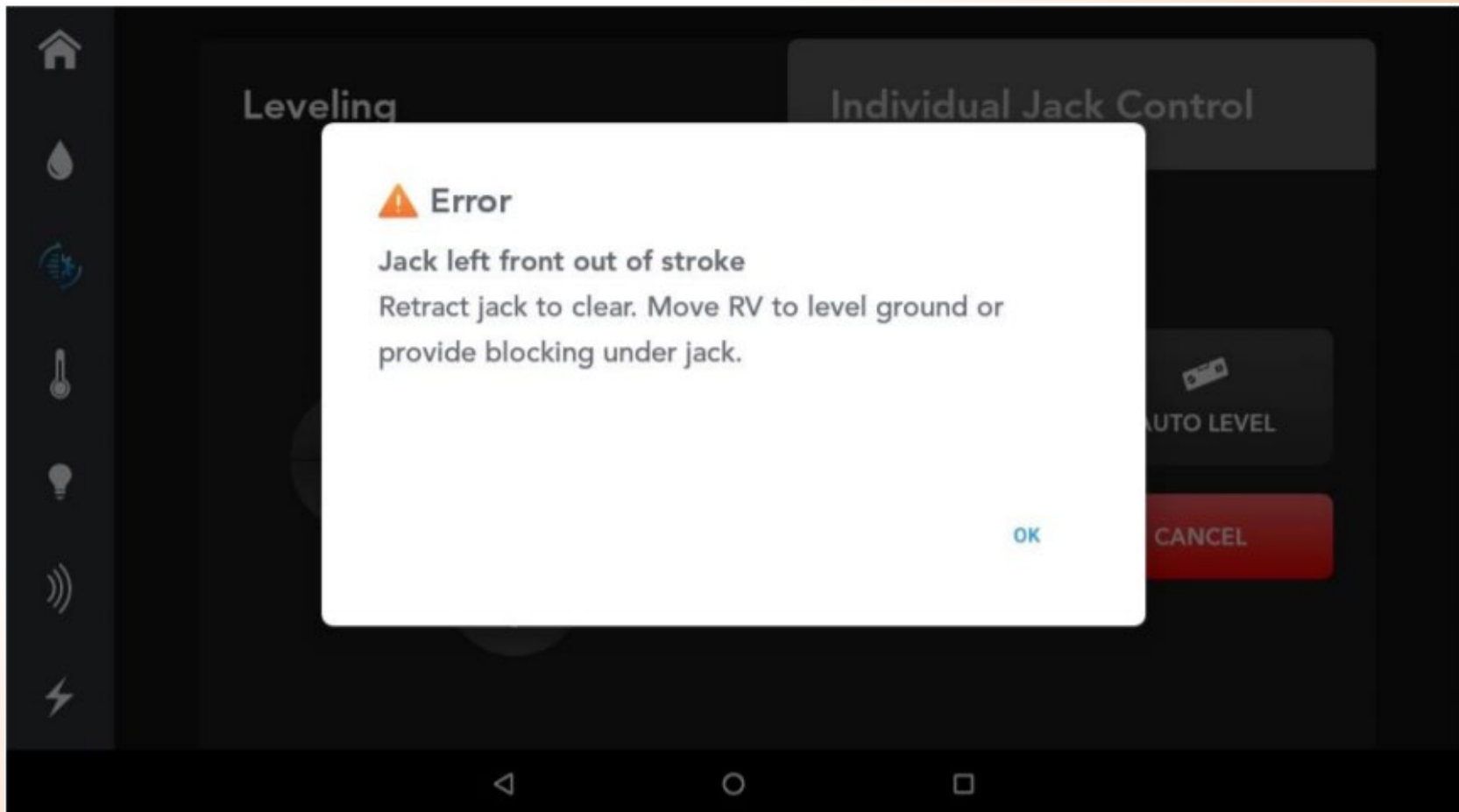
MOTORS/LEVELING CONT...

LCI Electric Leveling System Shown



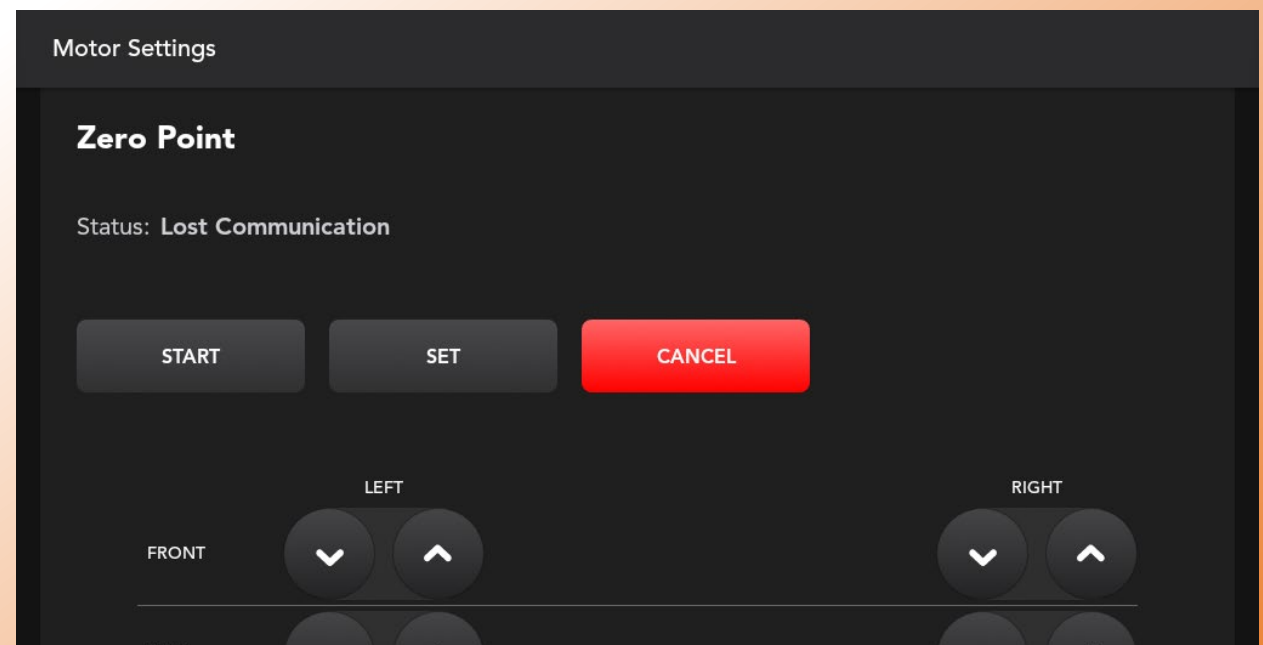
MOTORS/LEVELING CONT...

On an LCI electric leveling system, when in doubt always retract all jacks.



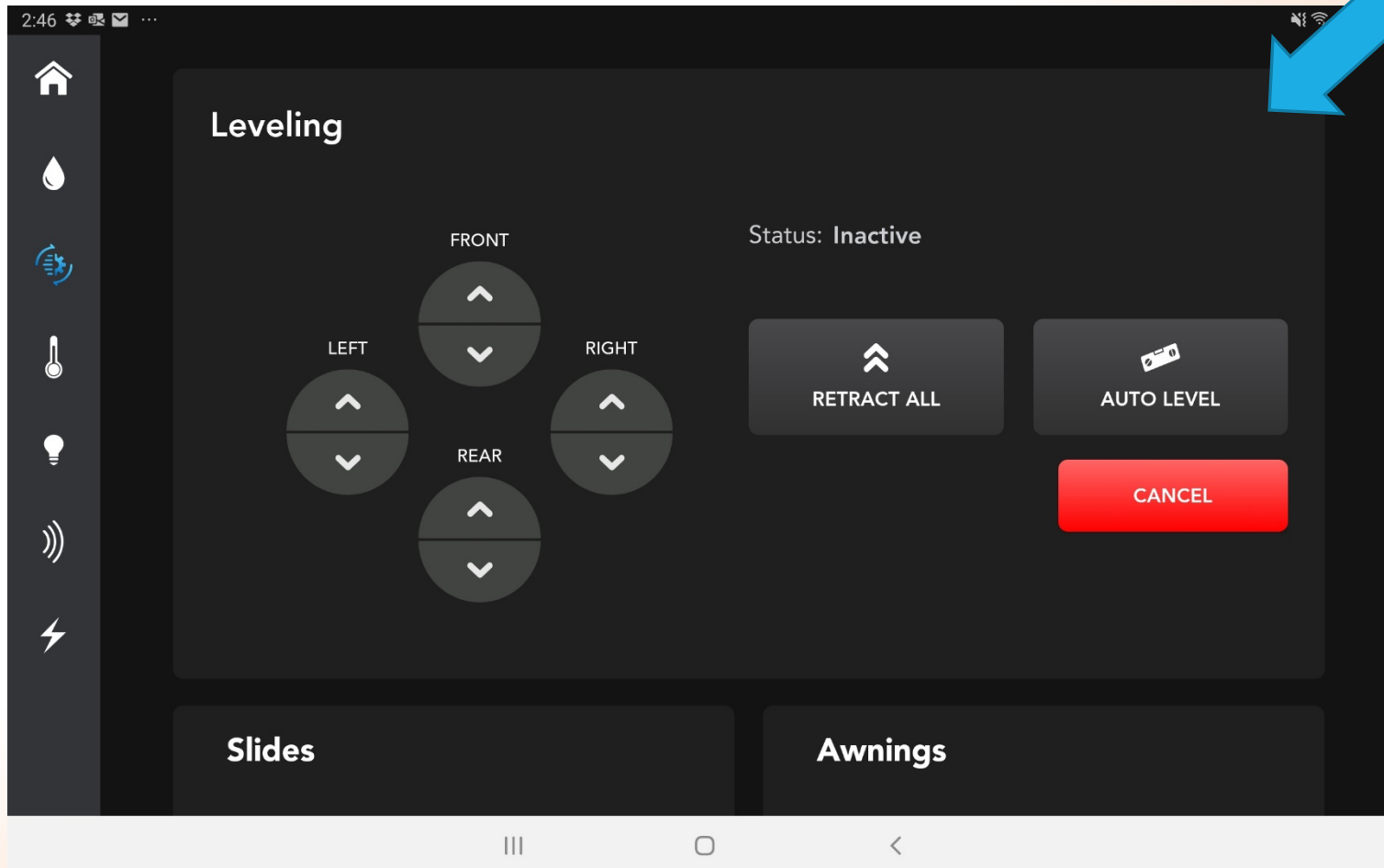
LEVELING ZERO CALIBRATION

- Settings Menu
- Motor Settings
- Click on Start
- Using the buttons below to move the leveling jacks until the RV is leveled
- Press Set to finalize the zero point



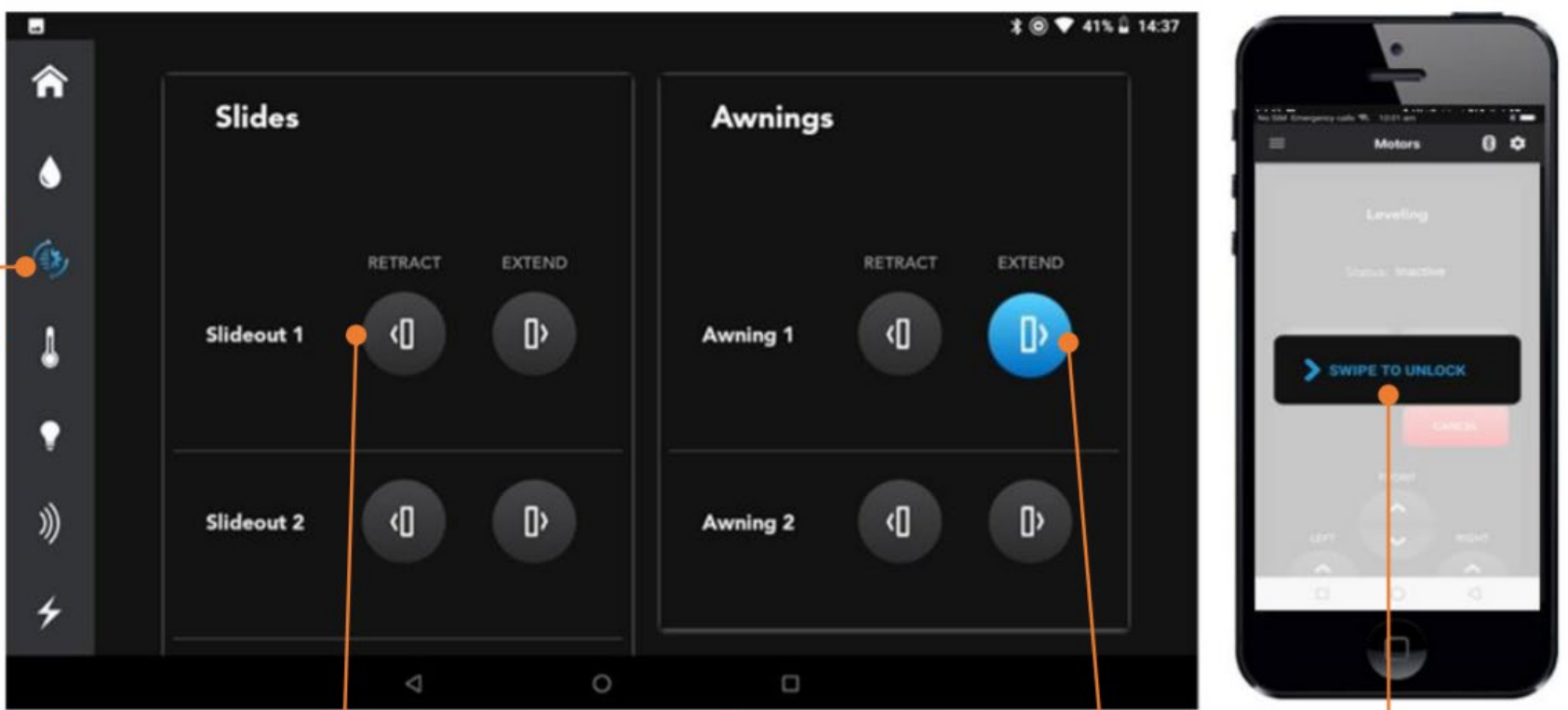
MOTORS/LEVELING CONT...

Notice
missing
individual
jack control
tab on
Equalizer
leveling
systems



MOTORS/LEVELING CONT...

Motor Screen

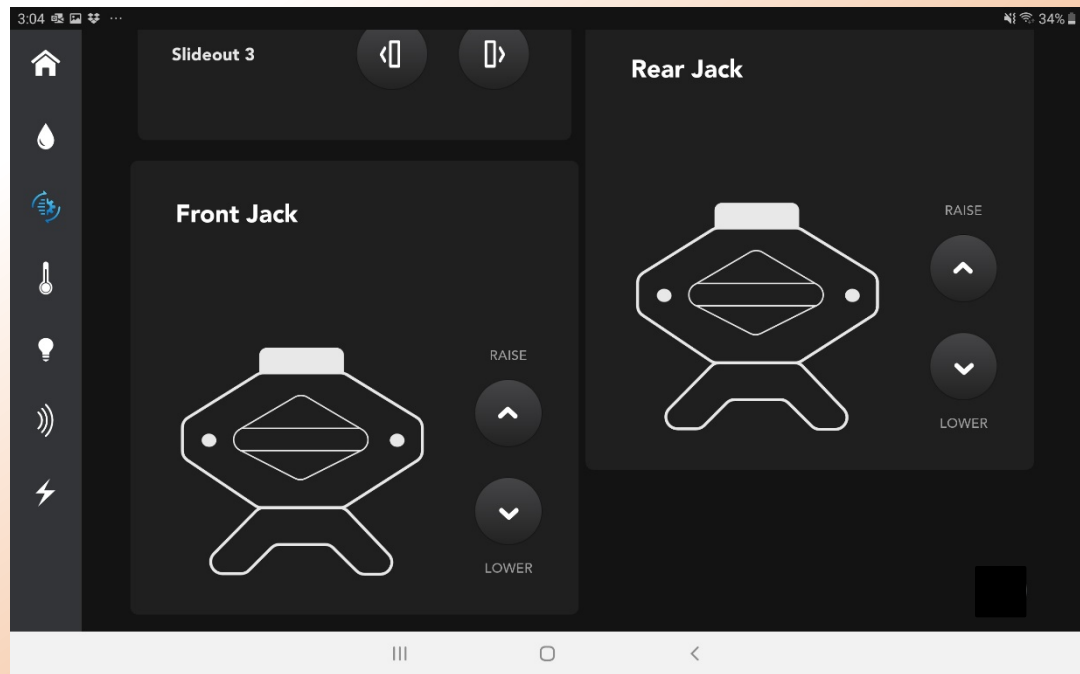
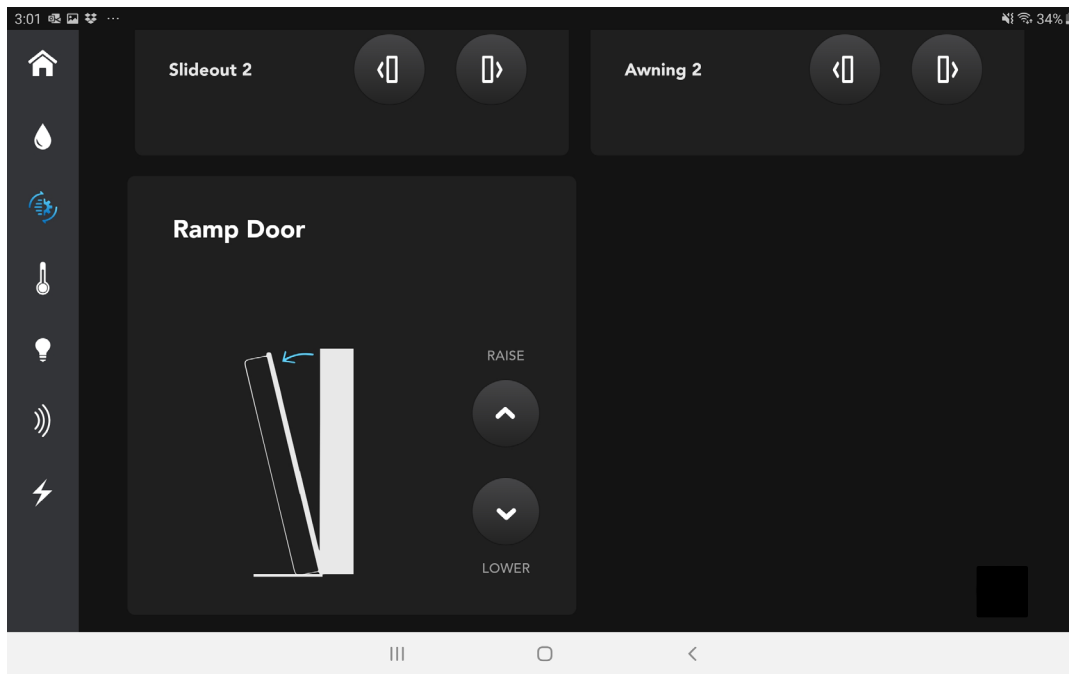


Slide-out 1, will not retract if the safety lockout mechanism is engaged. Only if applicable to your RV model.

Press and hold to operate motors

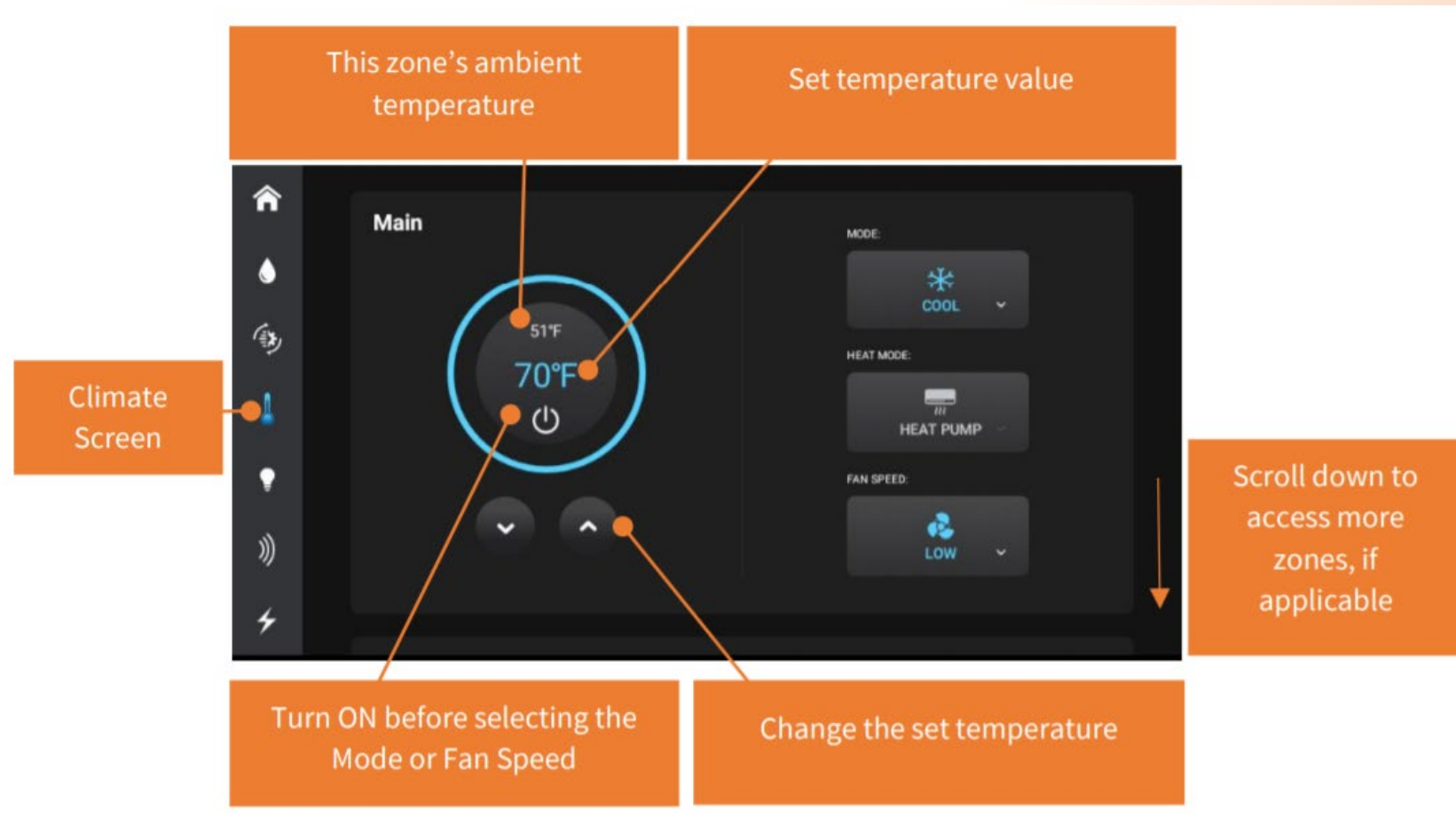
Mobile Device, Swipe to unlock

MOTOR/LEVELING CONT...



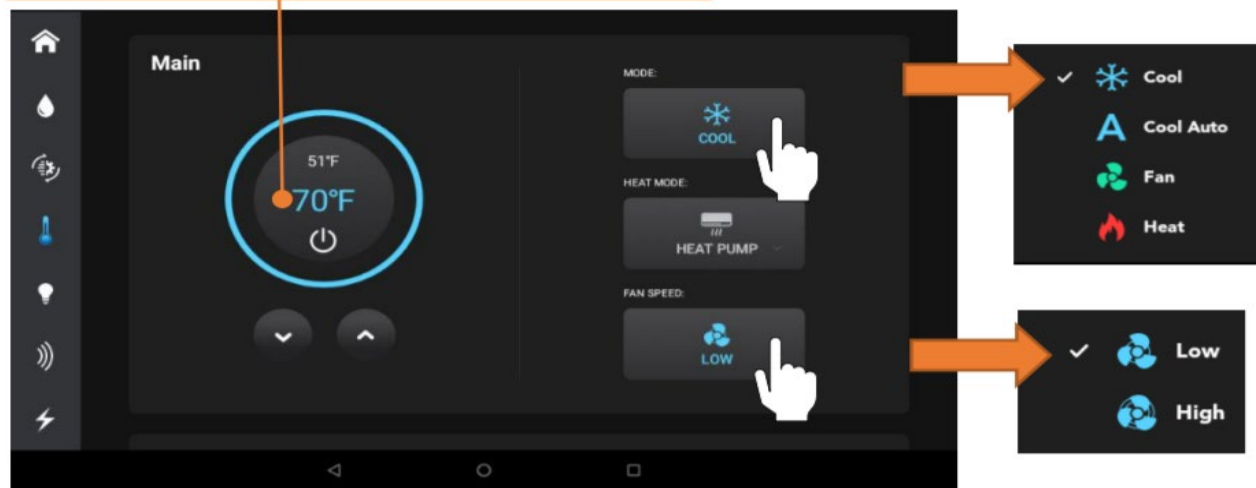
QUESTIONS ABOUT MOTORS
OR LEVELING??

CLIMATE PAGE



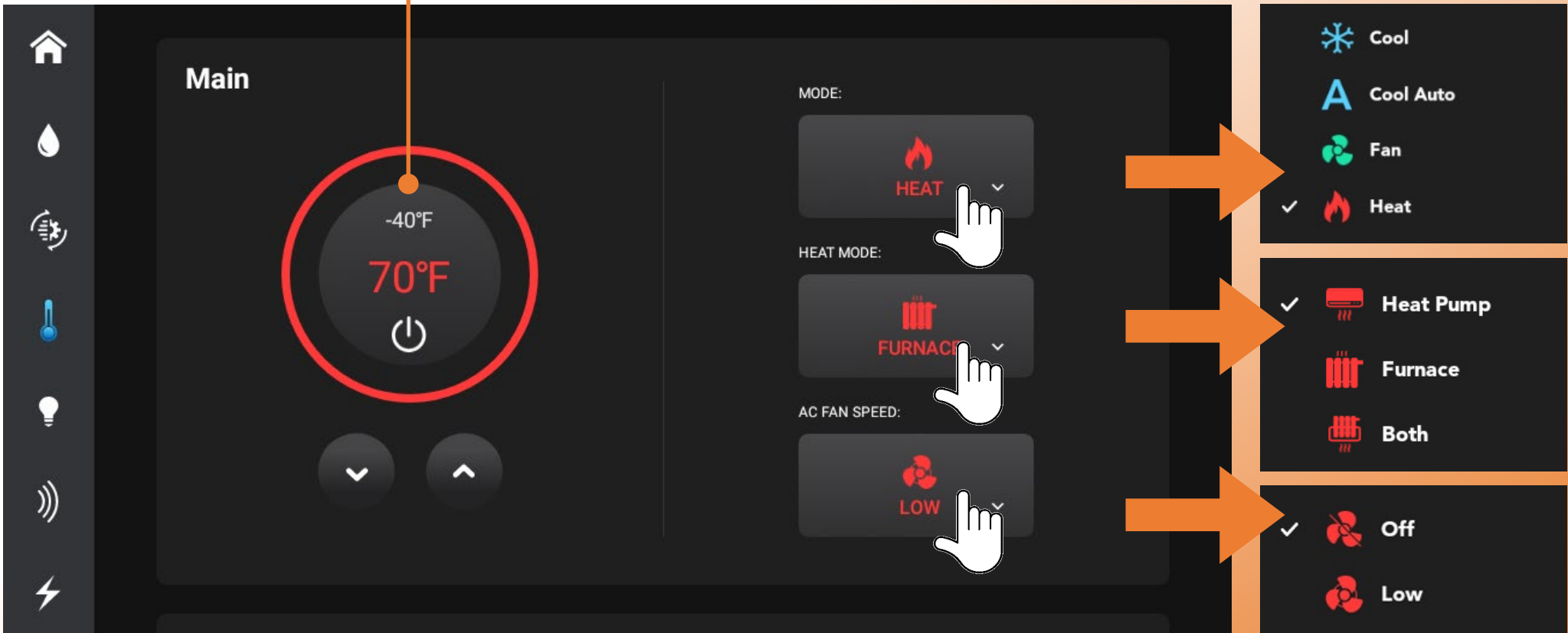
A/C AND FAN

Set temperature must be less than the ambient temperature, for the compressor to turn ON



HEATING

Set temperature must be higher than ambient temperature for the compressor to turn ON



The interface shows a 'Main' screen with a central temperature display. The ambient temperature is -40°F and the set temperature is 70°F. To the right, there are three settings: MODE (HEAT), HEAT MODE (FURNACE), and AC FAN SPEED (LOW). Arrows point from these settings to a detailed list of options on the right.

Main

-40°F
70°F

MODE: HEAT

HEAT MODE: FURNACE

AC FAN SPEED: LOW

Mode Options:

- Cool
- Cool Auto
- Fan
- Heat (checked)

Heat Mode Options:

- Heat Pump (checked)
- Furnace
- Both

AC Fan Speed Options:

- Off (checked)
- Low

LIGHTING PAGE



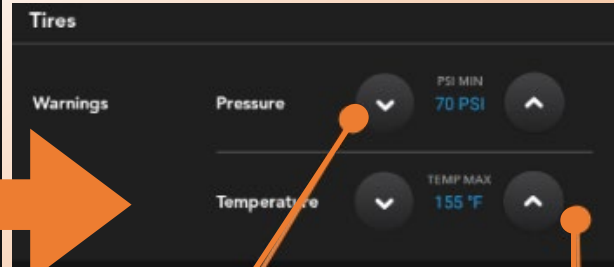
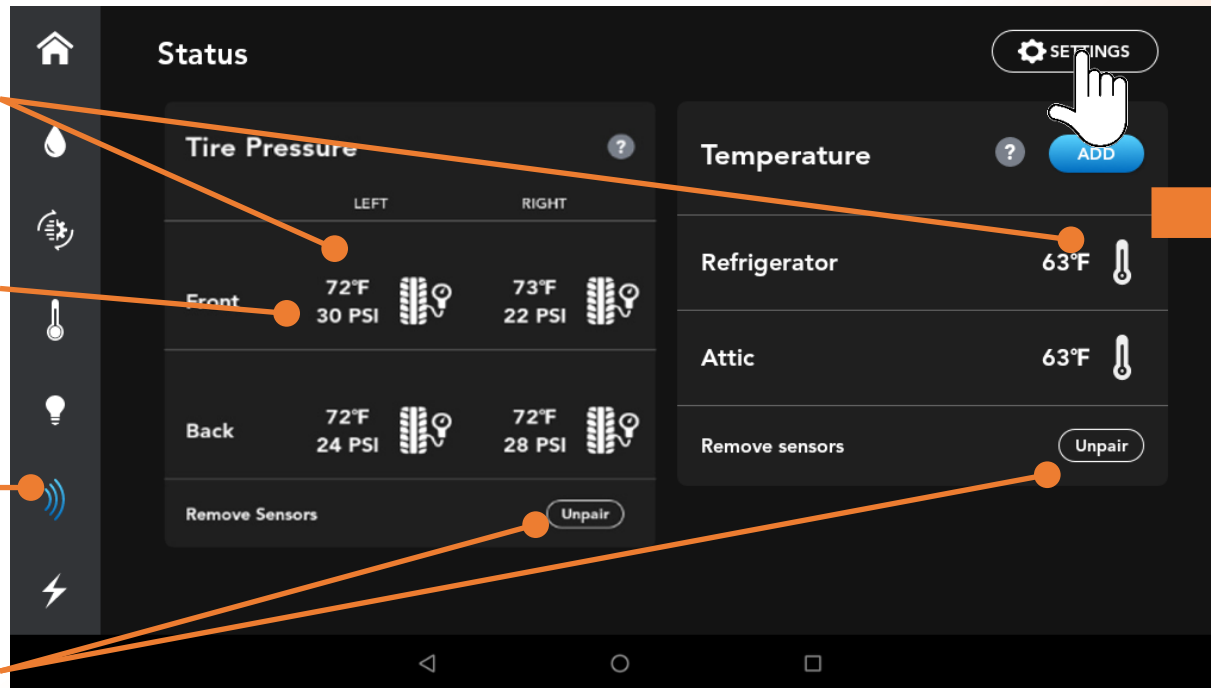
STATUS PAGE

Sensor
Temperature

Tire Pressure

Status Screen

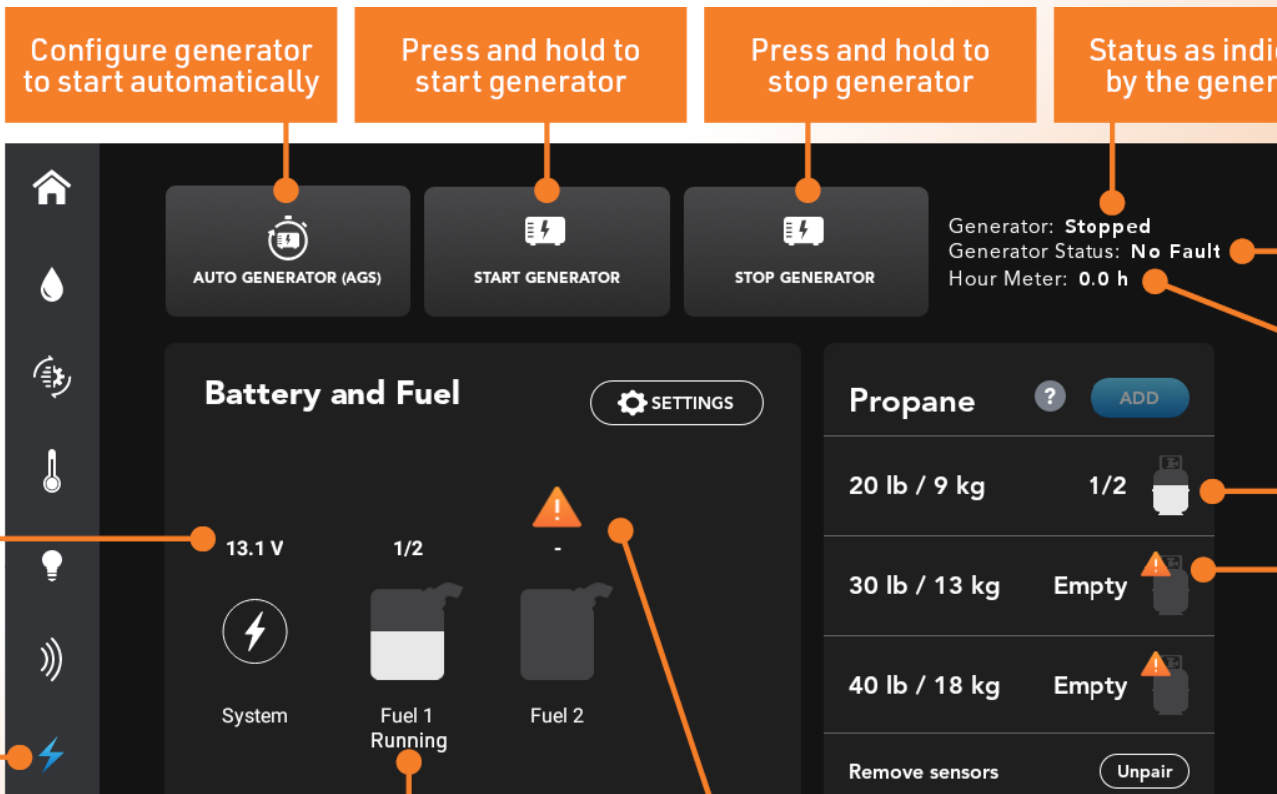
Press Unpair to
remove sensor



Change
under
pressure
limit

Change over
temperature
limit

ENERGY PAGE



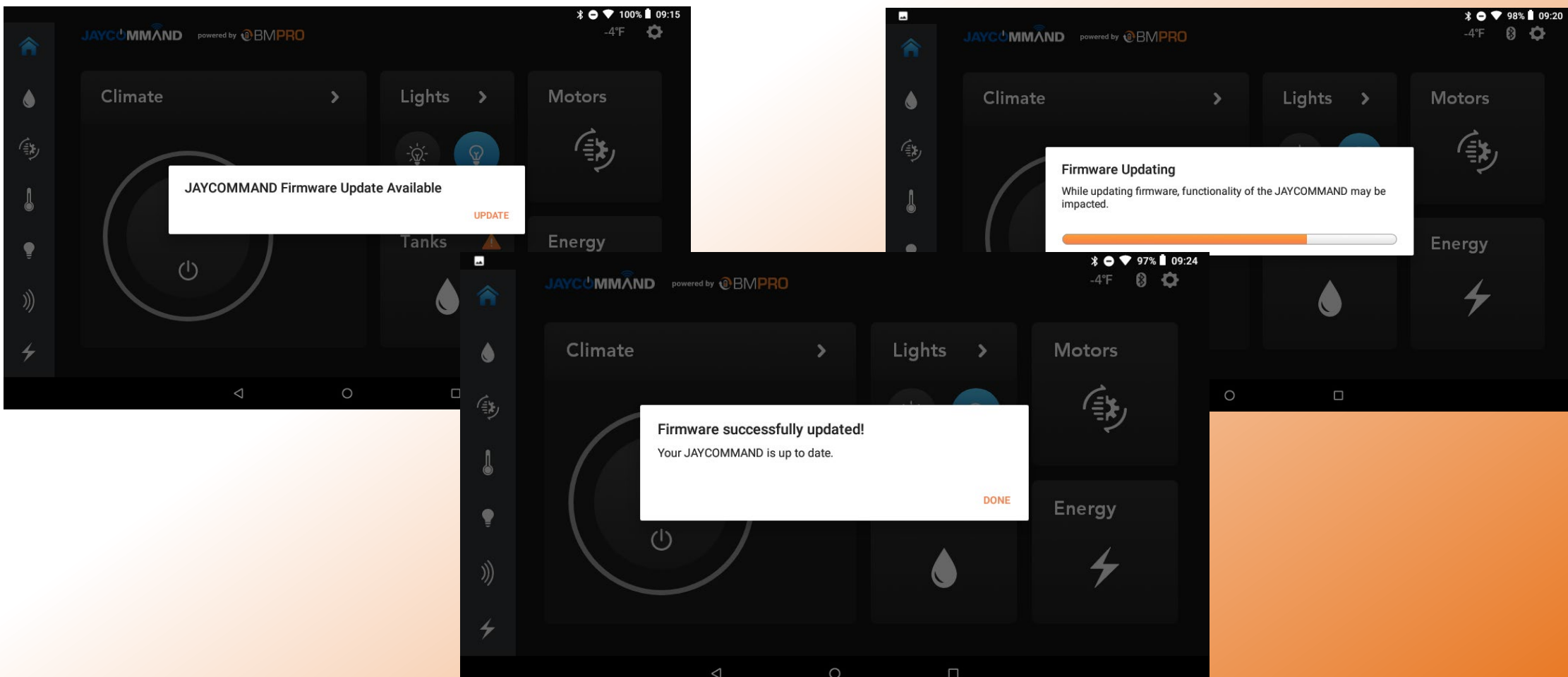
The Energy Page interface includes the following components and callouts:

- Configuration and Control Buttons:**
 - AUTO GENERATOR (AGS):** Configure generator to start automatically.
 - START GENERATOR:** Press and hold to start generator.
 - STOP GENERATOR:** Press and hold to stop generator.
- Generator Status:**
 - Generator: **Stopped**
 - Generator Status: **No Fault**
 - Hour Meter: **0.0 h**
 - 0.1 hour increments:** The hour meter displays time in 0.1 hour increments.
 - Fault indicated by the generator. See the generator manual:** A warning icon indicates a fault.
- Battery and Fuel Section:**
 - System Voltage:** 13.1 V. **Warning displays if the system voltage is less than 12V.**
 - Fuel 1 Running:** Fuel pump running status.
 - Fuel 2:** Fuel tank status. **Warning if the fuel tank is empty.**
- Propane Section:**
 - Propane Tank Levels:**
 - 20 lb / 9 kg: 1/2 (Current propane tank level)
 - 30 lb / 13 kg: Empty
 - 40 lb / 18 kg: Empty
 - Warning if the propane tank is empty:** A warning icon indicates an empty tank.
 - Buttons:** ADD, Remove sensors, Unpair.
- Energy Screen:** The main interface for monitoring energy systems.

QUESTIONS??

UPDATE APP/FIRMWARE

On occasion BM PRO will release app and or firmware updates to improve user experience. The firmware will be imbedded in the JAYCOMMAND app update. To update app and firmware: connect to wifi, log in to the Google Play store, and update the app. From now on the app will update automatically and automatically push firmware updates.

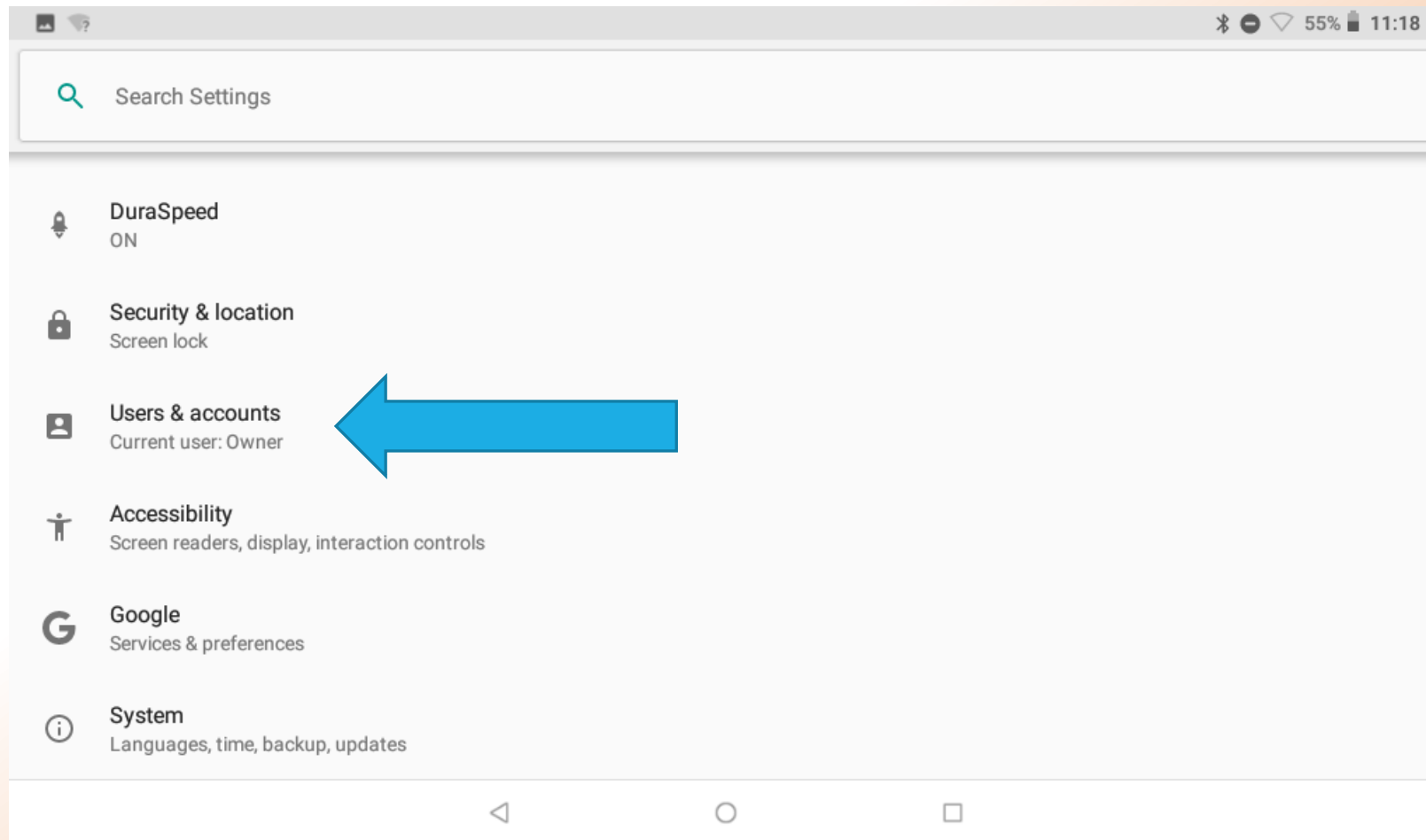


UPDATE APP/FIRMWARE

- It is recommended that the service shop create a generic Google Account that all techs can use and log into to update the app.
- Google accounts are free
- See BMPRO Help Guide Updating the JAYCOMMAND APP and Firmware to learn how to create an account
- When done updating the app log out of the account using the following steps.

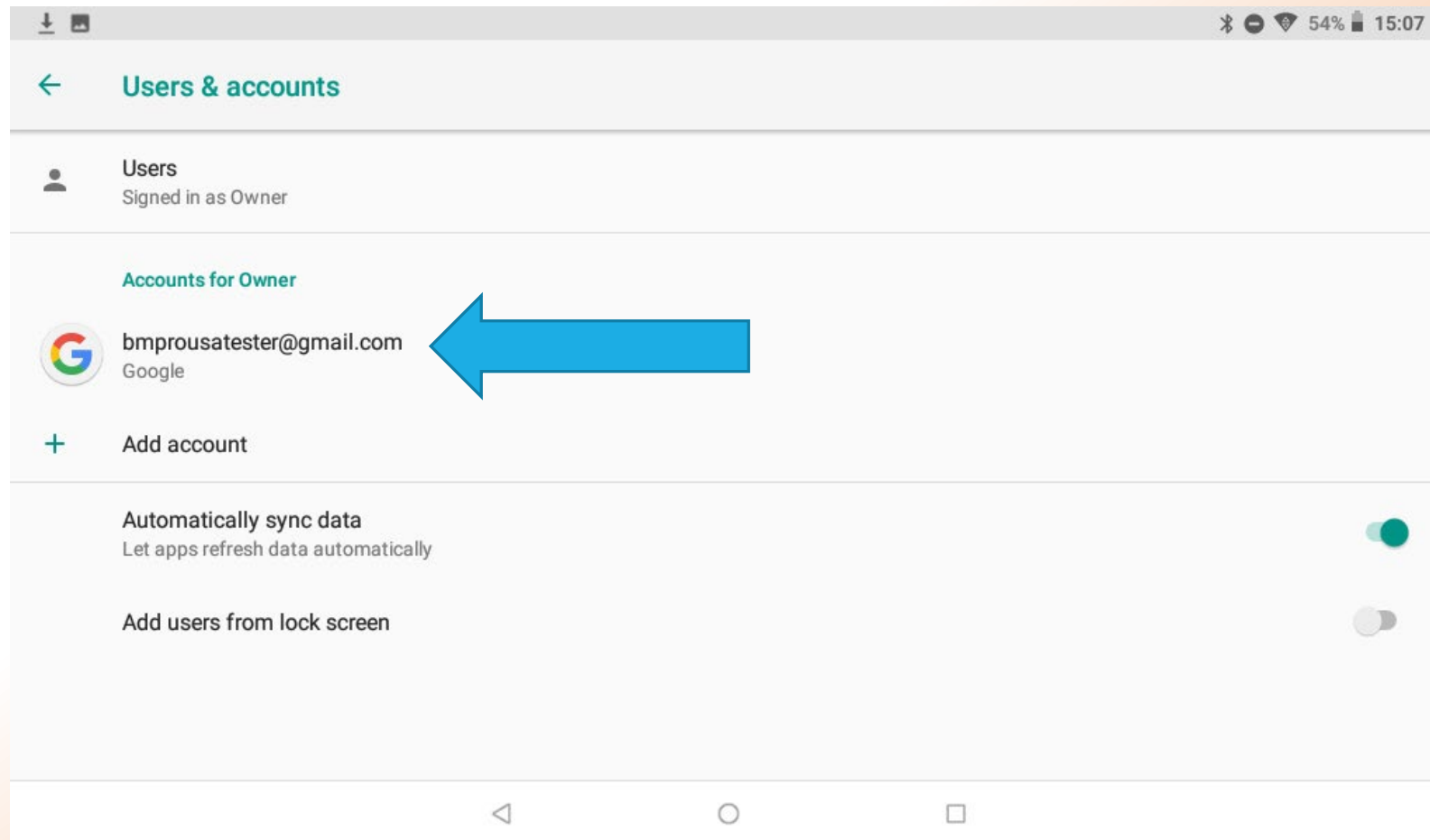
REMOVE GENERIC ACCOUNT

- Go to settings and find Users and Accounts



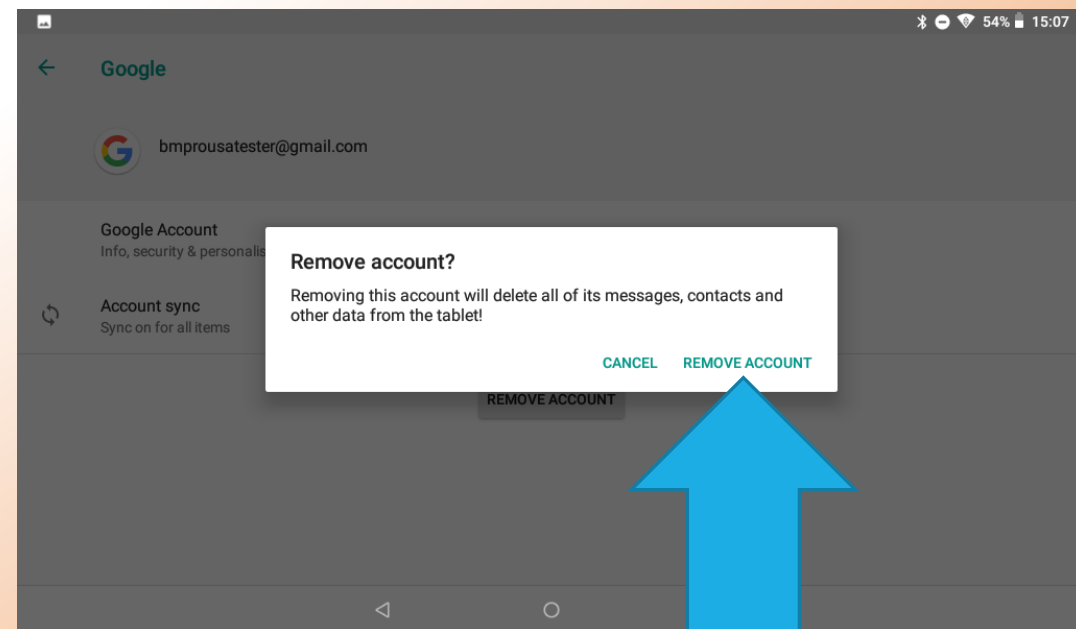
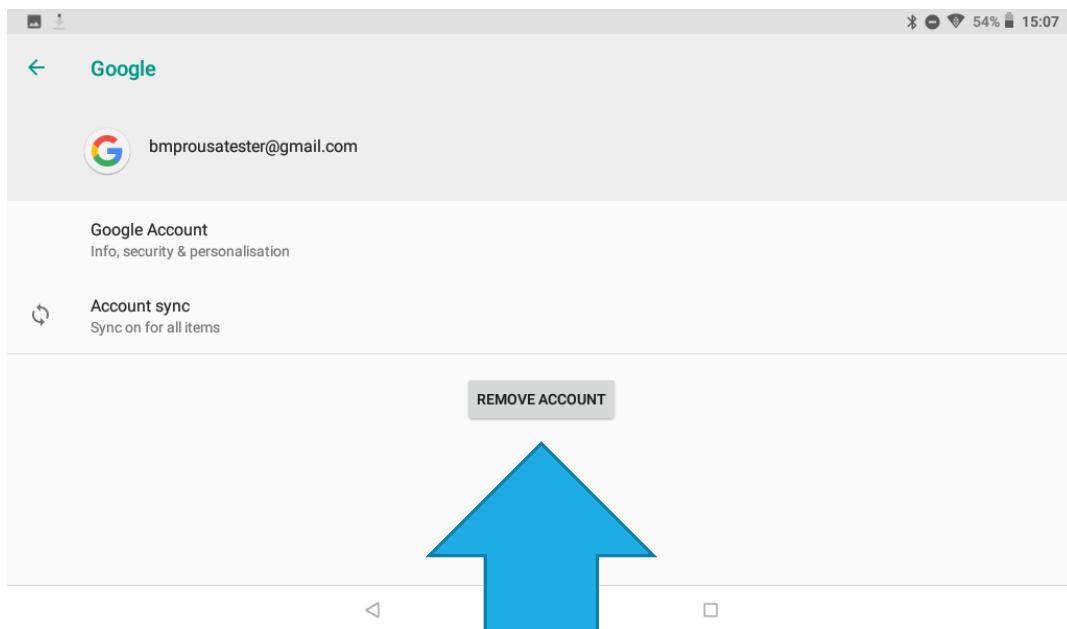
REMOVE GENERIC ACCOUNT

- Click on the account you used to sign in



REMOVE GENERIC ACCOUNT

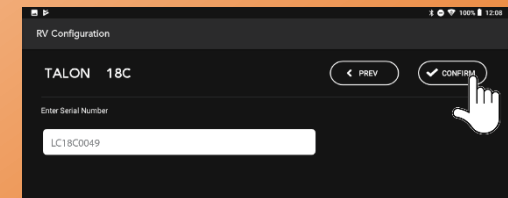
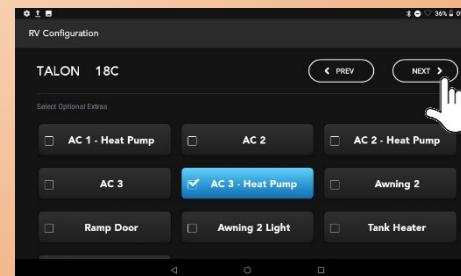
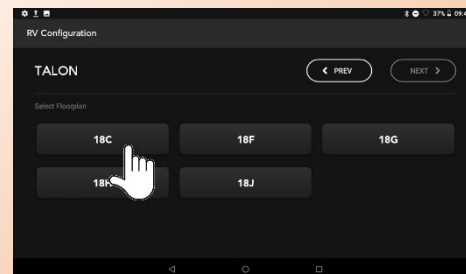
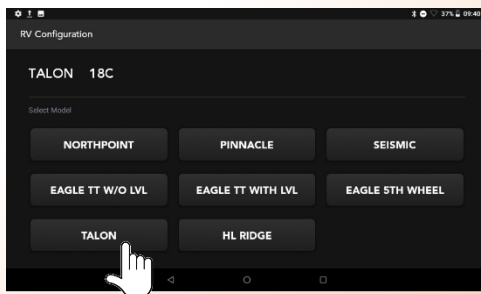
- Click REMOVE ACCOUNT TWICE



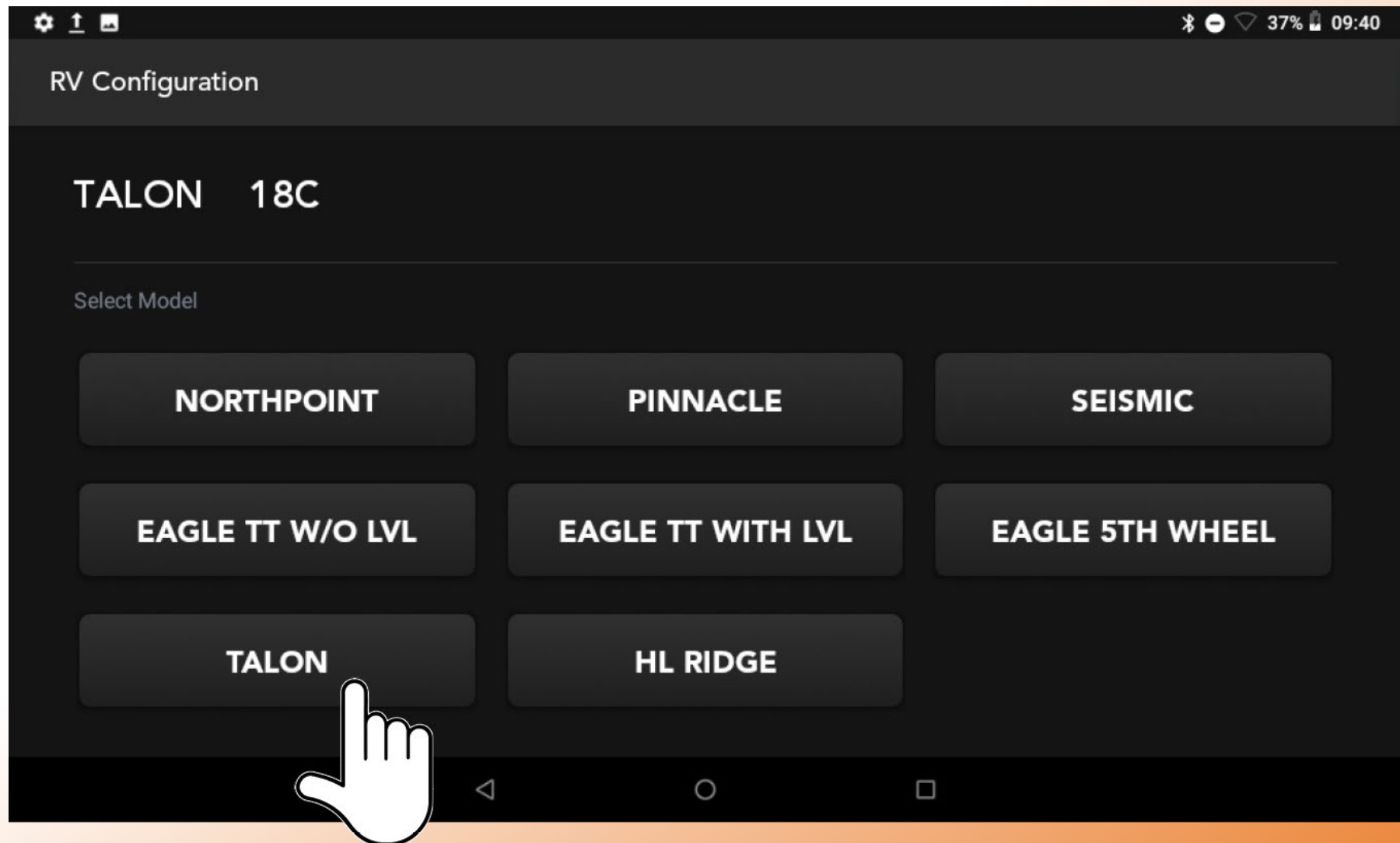
QUESTIONS ON APP OR FIRMWARE UPDATES??

CONFIGURATON OF MODEL

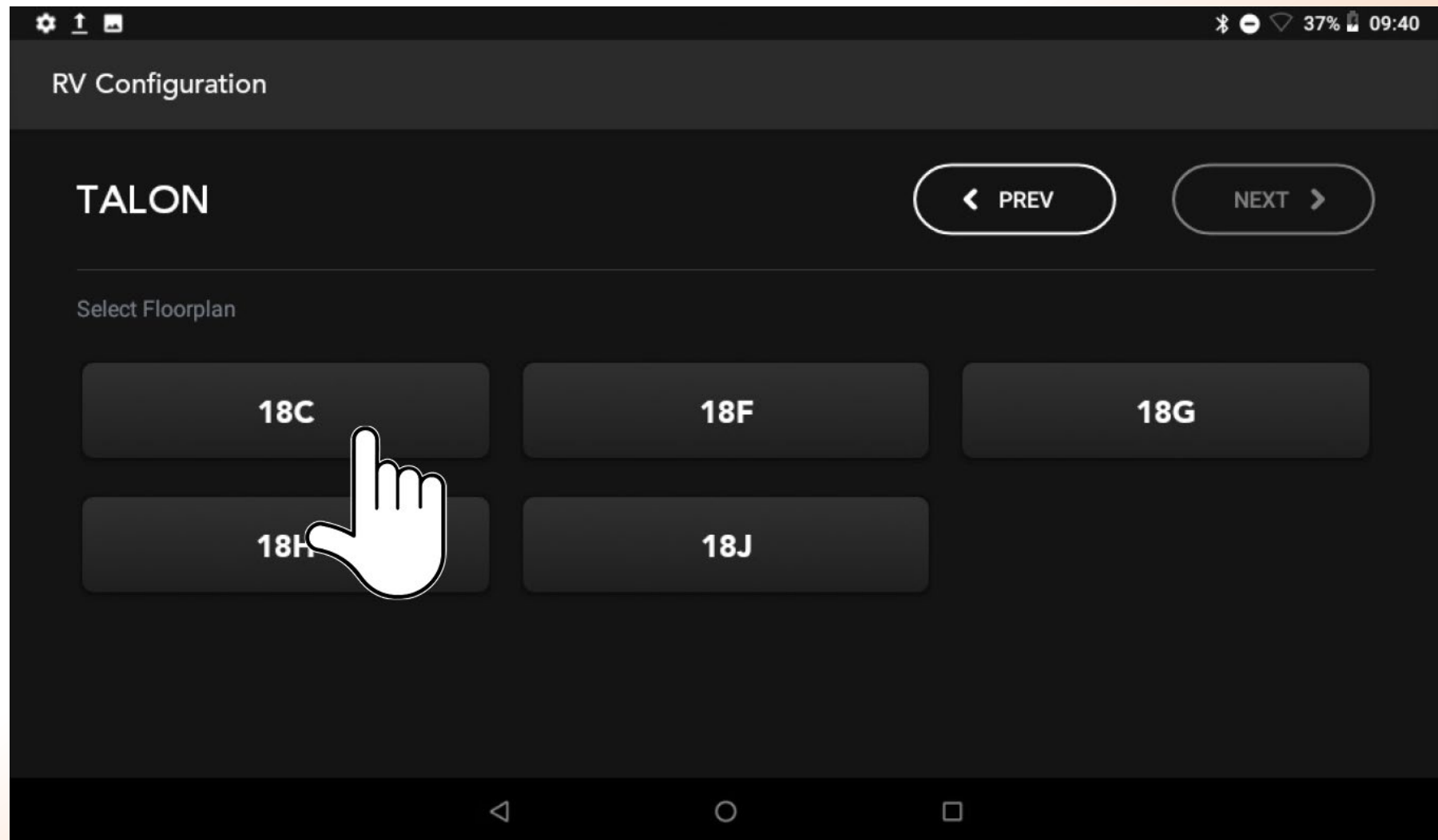
- Settings screen
- Tap 5 times
- Select model
- Select floorplan
- Choose options
- Enter serial number
- Press confirm



SELECT MODEL



SELECT FLOORPLAN



CHOOSE OPTIONS

RV Configuration

TALON 18C

◀ PREV

NEXT ▶

Select Optional Extras

<input type="checkbox"/> AC 1 - Heat Pump	<input type="checkbox"/> AC 2	<input type="checkbox"/> AC 2 - Heat Pump
<input type="checkbox"/> AC 3	<input checked="" type="checkbox"/> AC 3 - Heat Pump	<input type="checkbox"/> Awning 2
<input type="checkbox"/> Ramp Door	<input type="checkbox"/> Awning 2 Light	<input type="checkbox"/> Tank Heater

ENTER UNIT SERIAL NUMBER AND PRESS CONFIRM



RV Configuration

TALON 18C

Enter Serial Number

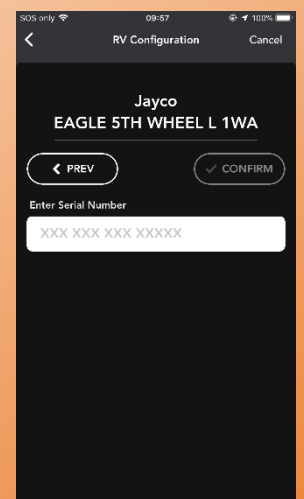
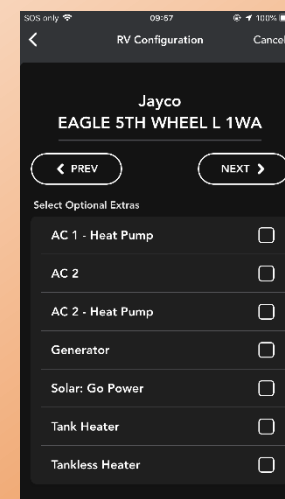
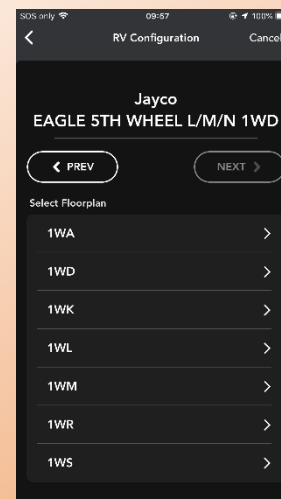
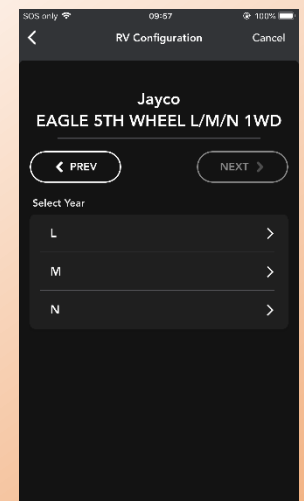
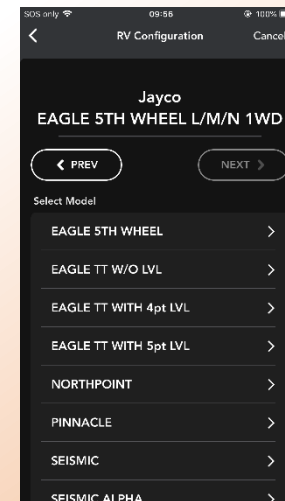
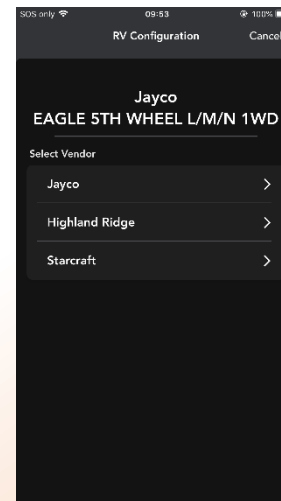
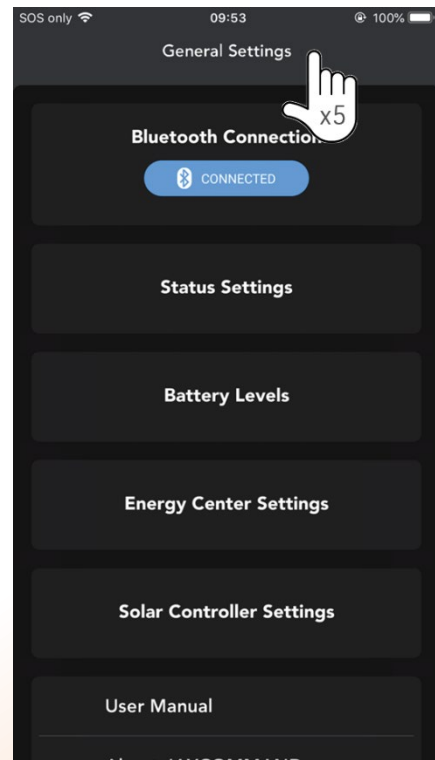
LC18C0049

PREV CONFIRM

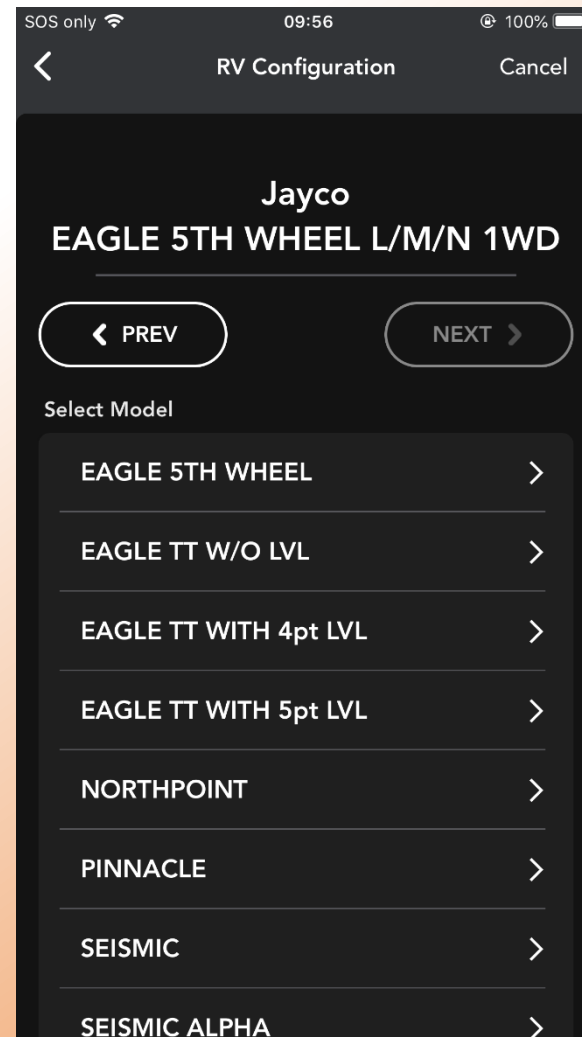
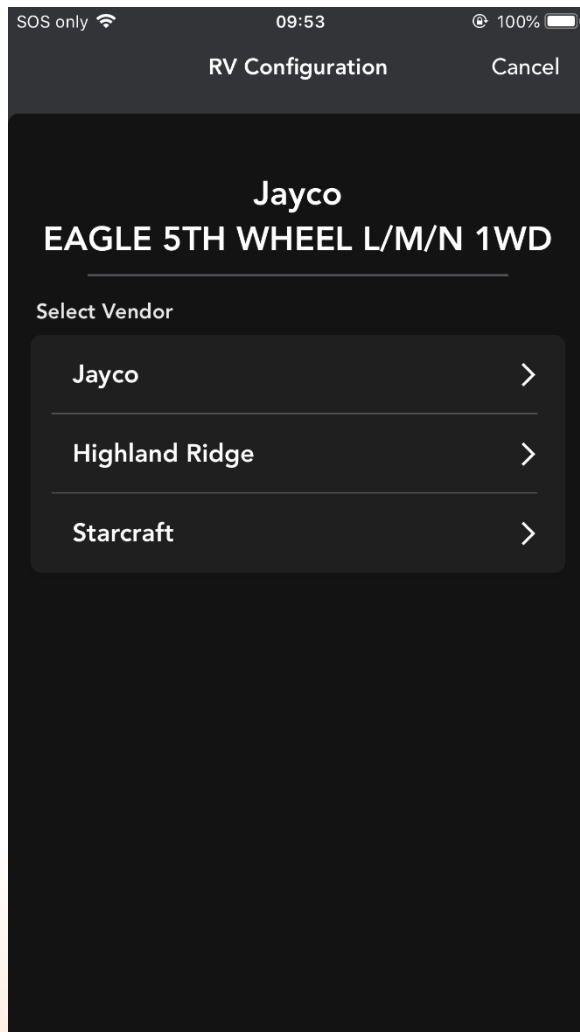
A white hand cursor icon with a black outline is pointing towards the CONFIRM button, indicating that the user should press this button to confirm the serial number entry.

CONFIGURATON OF MODEL

- Settings screen
- Tap 5 times
- Select Jayco
- Select model
- Select year
- Select floorplan
- Choose options
- Enter serial number
- Press confirm



SELECT JAYCO AND MODEL



SELECT YEAR AND FLOORPLAN

SOS only 09:57 100%

< RV Configuration Cancel

Jayco
EAGLE 5TH WHEEL L/M/N 1WD

< PREV NEXT >

Select Year

L	>
M	>
N	>

SOS only 09:57 100%

< RV Configuration Cancel

Jayco
EAGLE 5TH WHEEL L/M/N 1WD

< PREV NEXT >

Select Floorplan

1WA	>
1WD	>
1WK	>
1WL	>
1WM	>
1WR	>
1WS	>

CHOOSE OPTIONS, ADD SERIAL NUMBER, CONFIRM

SOS only 09:57 100%

< RV Configuration Cancel

Jayco
EAGLE 5TH WHEEL L 1WA

< PREV NEXT >

Select Optional Extras

AC 1 - Heat Pump	<input type="checkbox"/>
AC 2	<input type="checkbox"/>
AC 2 - Heat Pump	<input type="checkbox"/>
Generator	<input type="checkbox"/>
Solar: Go Power	<input type="checkbox"/>
Tank Heater	<input type="checkbox"/>
Tankless Heater	<input type="checkbox"/>

SOS only 09:57 100%

< RV Configuration Cancel

Jayco
EAGLE 5TH WHEEL L 1WA

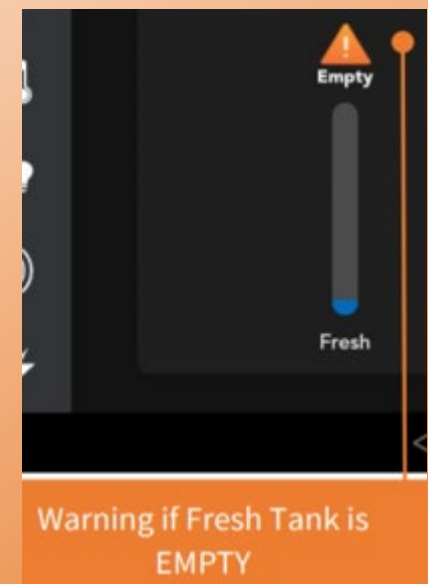
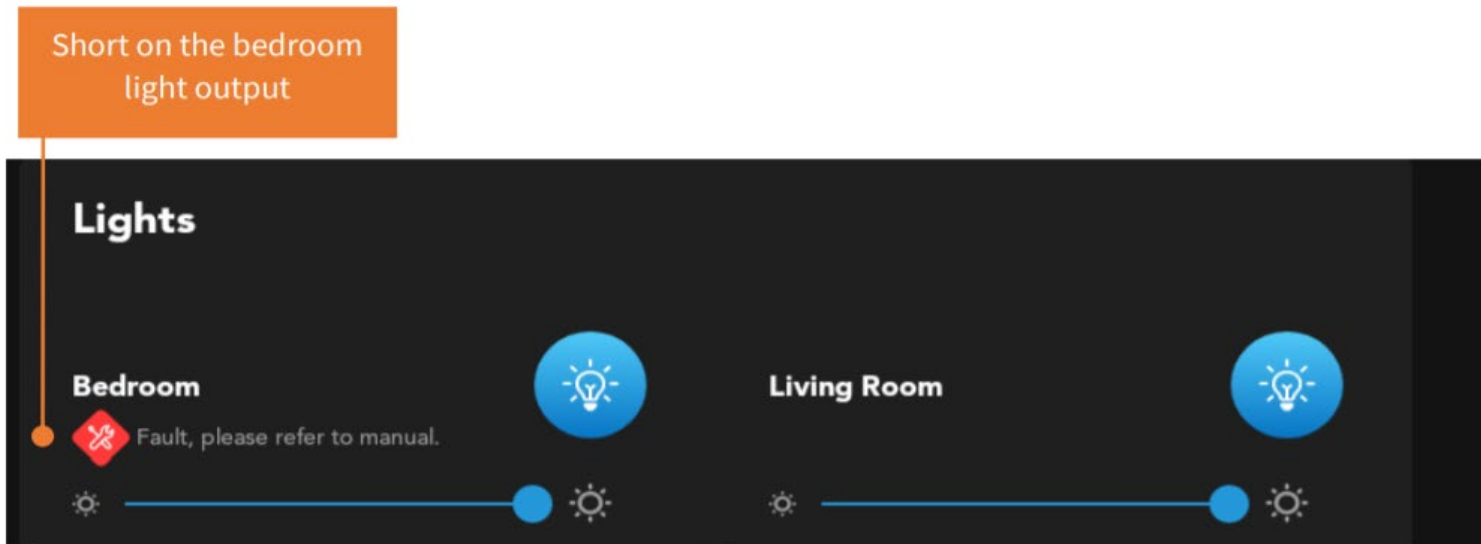
< PREV ✓ CONFIRM

Enter Serial Number

XXX XXX XXX XXXXX

QUESTIONS ABOUT
CONFIGURING??

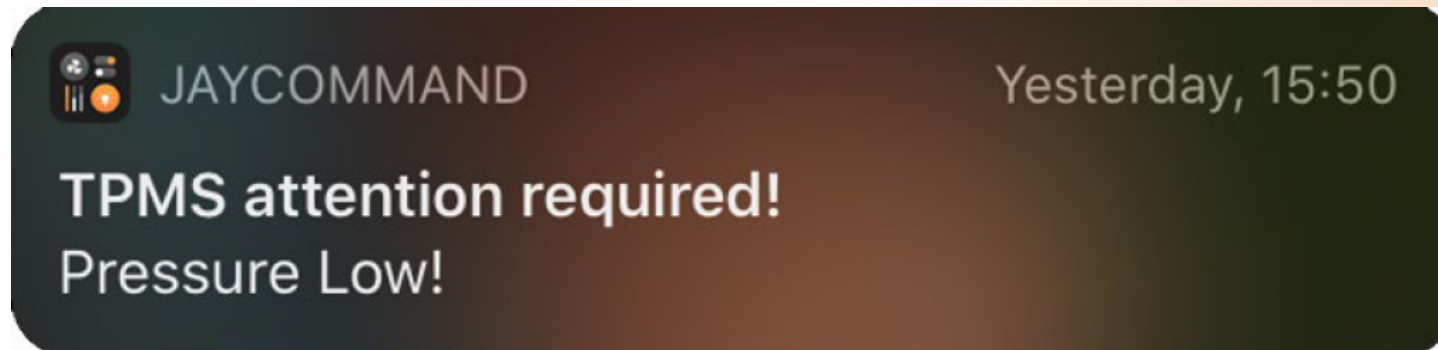
FAULTS VS. WARNINGS



FAULTS VS. WARNINGS

- Faults show up when there is a SHORT on the output.
 - Clear the short and toggle the output off and on.
- Warnings show up on the following occasions:
 - Fresh water tank is EMPTY
 - Grey or Black holding tanks are FULL
 - When fuel tank(s) are EMPTY
 - Gas water heater fails to ignite after 3 attempts.
 - TPMS pressure is LOWER than set point OR TPMS temp is HIGHER than set point
 - Battery voltage is LOWER than 12vDC

PHONE NOTIFICATIONS





UNPAIRING CONTROLLER AND MOBILE PHONES

- Scroll to PA
- Push and hold EXT for 10 secs
- You will see ones scroll across the 7-segment display
- You will need to re-pair the controller



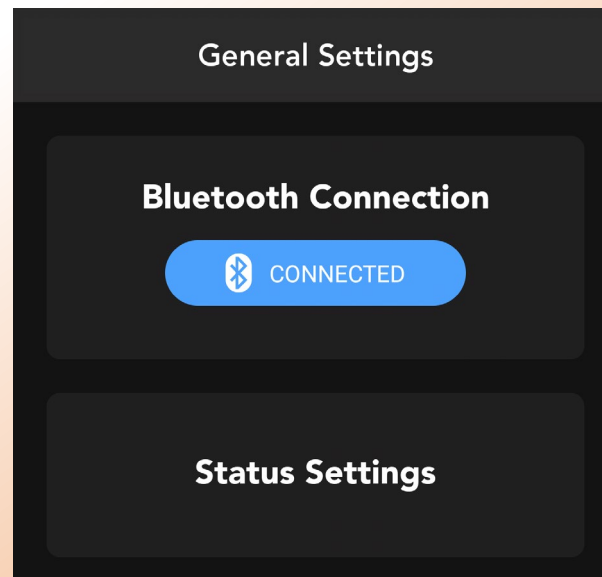
UNPAIRING SWITCHES

- Scroll to PA
- Press and hold RET for 10 Seconds
- You will see ones scroll across the 7-segment display
- You will need to re-pair any and all switches



UNPAIRING THE NODE

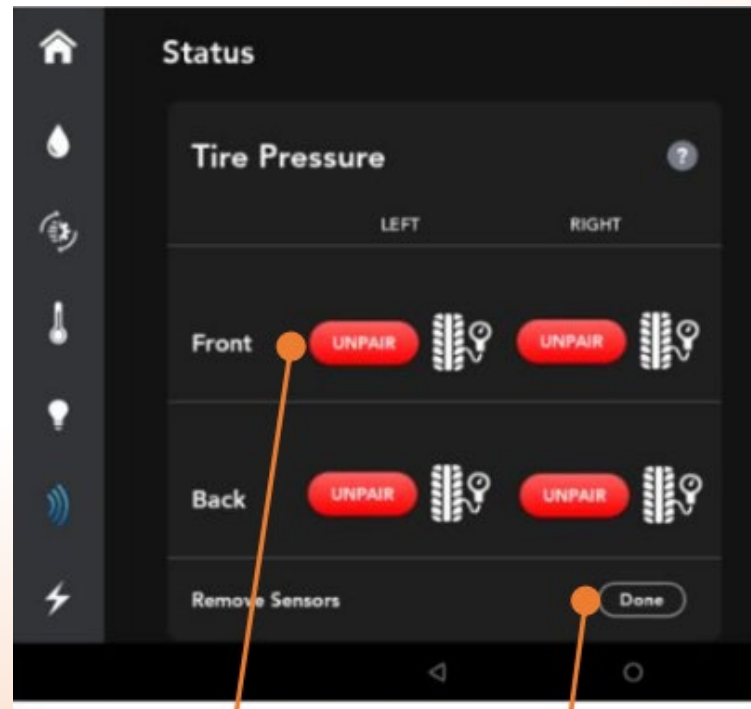
- In the App, press the Settings button
- Press Bluetooth Connection
- Press Unpair RV



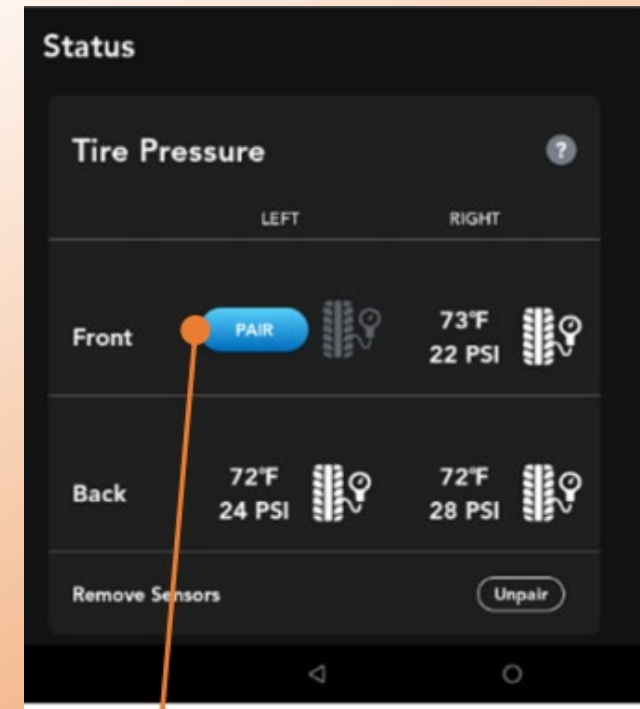
UNPAIRING TPMS



To unpair a tire pressure sensor, select "Unpair,"



To unpair a tire pressure sensor, select "Unpair," then press "Done"



Now you are ready to pair to another sensor

FAQS

- My touch screen will not wake up when I touch it
- My Controller is asking me for a password
- My display is in portrait mode and I can't see all the functions
- My auto hitch height will not work
- How do I connect to WiFi
- My auto level will not work
- My flush floor slideout doesn't run all the way in or out without stopping
- My leveling status says "inactive"
- My controller powered up in a weird "drawing" screen with little squares around the edges.
- My temp is reading -4 or 140 degrees

CONTROLLER FAQS

- My controller will not wake up when I touch it.
 - See BMPRO Help Guide “Prevent Controller Sleep Mode”
- My Controller is asking me for a password
 - This is rare occurrence that MAY happen if the customer backs up or syncs their controller to their existing Google Account.
 - If the controller asks for a Pin, password, or pattern it generally is what the customer is using for their cell phone password.
 - If they cannot remember or do not know it, there is no way to recover it. They will need a replacement controller.

AUTO LEVEL FAQ

- My auto level will not work
 - Reminder BM PRO is just a UI for the leveling
 - There are several reasons for the auto level not to work
 - If it is an Equalizer system make sure you are hooked up to a battery
 - Make sure a nylon block is installed between the Equalizer control panel and the metal enclosure its screwed to
 - Verify everything works from the outside panel. If it doesn't its likely not a BM PRO issue.
 - Retract all jacks to home them after every error.
 - Verify wiring and polarity of jacks
 - Reset zero point

AUTO LEVEL FAQ

- LCI touch pad will not work but does work from BM PRO
 - Check for updates on the BM PRO system
- There are new LCI error codes that have better explanations
 - Please scroll through all the errors that display to figure out what's going on.
- If you see "Lost Communication" status:
 - Check the can cables and power to levelers and LCI gateway

SLIDEOUT/AWNING FAQ

- My flush floor slideout doesn't run all the way in or out without stopping
 - Update to newest firmware and app
 - Newest firmware introduces extended amperage timeouts
 - Check 40 amp inline fuse and 20 amp resettable fuse in fusebox
- If any slides or awning are going one direction and not the other
 - Please reset power to the system.
 - Please make sure its up to date.
 - Replace node.

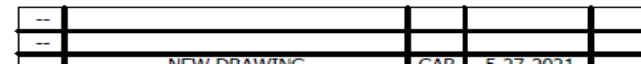
“BOOT LOOP” FAQ

- My controller keeps flashing the BM PRO slash page
 - Replace the screen. When it gets into that condition, it cannot be recovered.



THERMISTOR FAQ

- My temp is dashed out (–F°)
 - If temp on any climate zone including the outside is reading -4 it means that there is an open on that input.
 - Check board make sure both temp input and return have wires on them.
 - Go to thermistor and pull it out to see if a wire is broke
 - Replace thermistor
 - If temp on any climate zone including the outside is reading 140 it means that the thermistor wires are shorted together
 - Go to thermistor and pull it out to see if there a screw through the wires
 - Replace thermistor



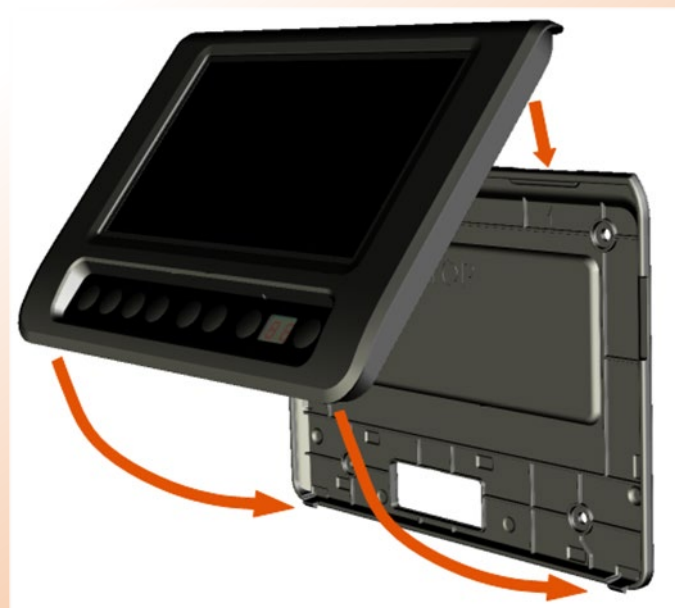


REMOVAL/REPLACEMENT CONTROLLER

Controller back plate is secured to wall by four screws.

Use small screwdriver to push locking tabs up and remove controller from back plate.

Disconnect can cable.



REMOVAL/REPLACEMENT WALL SWITCH

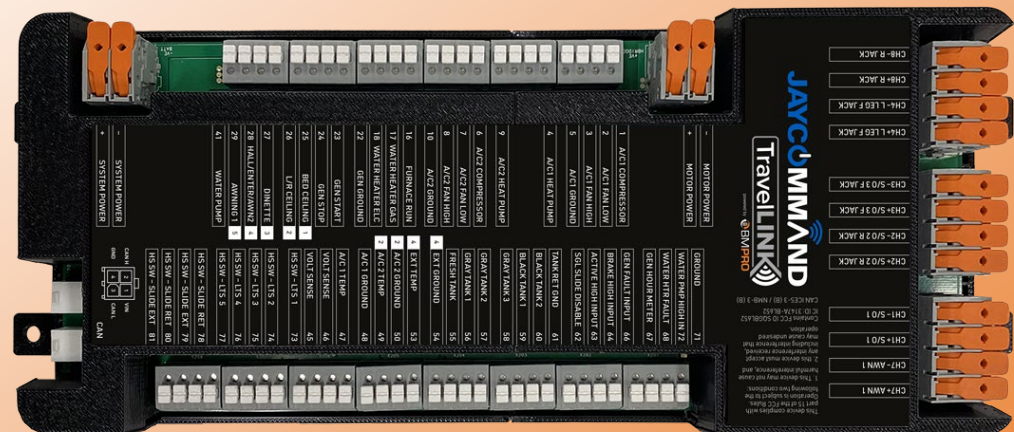
Switch back plate is secured to wall by two screws.

Use small screwdriver to push locking tab up and remove switch from backplate.

Battery is user replaceable (CR2032)



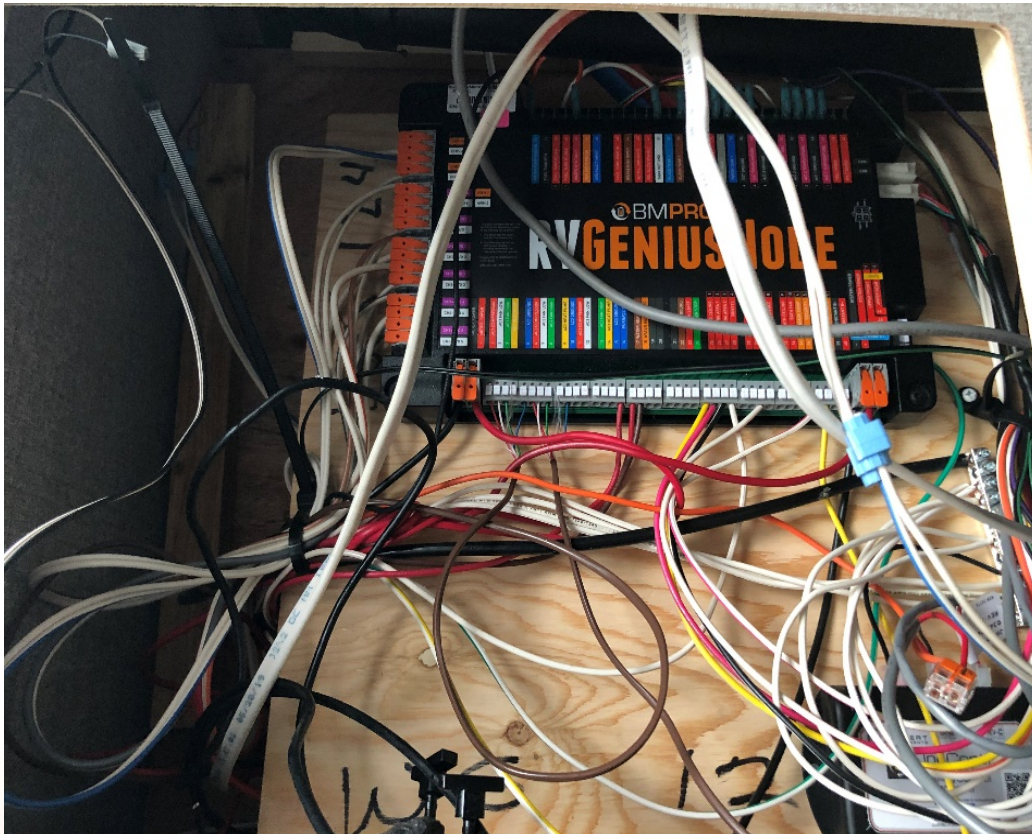
Up next I will show
you examples of
installations...



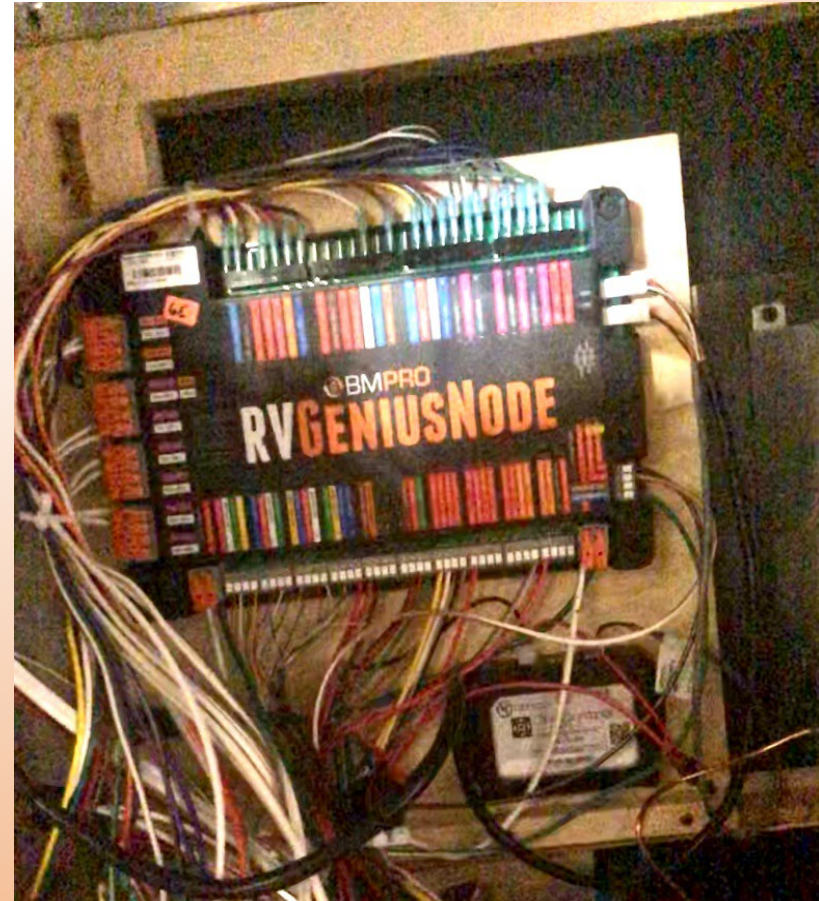
WHEN REPLACING A NODE

- Update the controller to the latest app
- Pair the controller to the node
- Configure the system
- Wait for firmware updates
- Pair switches, TPMS, TEMP, LP

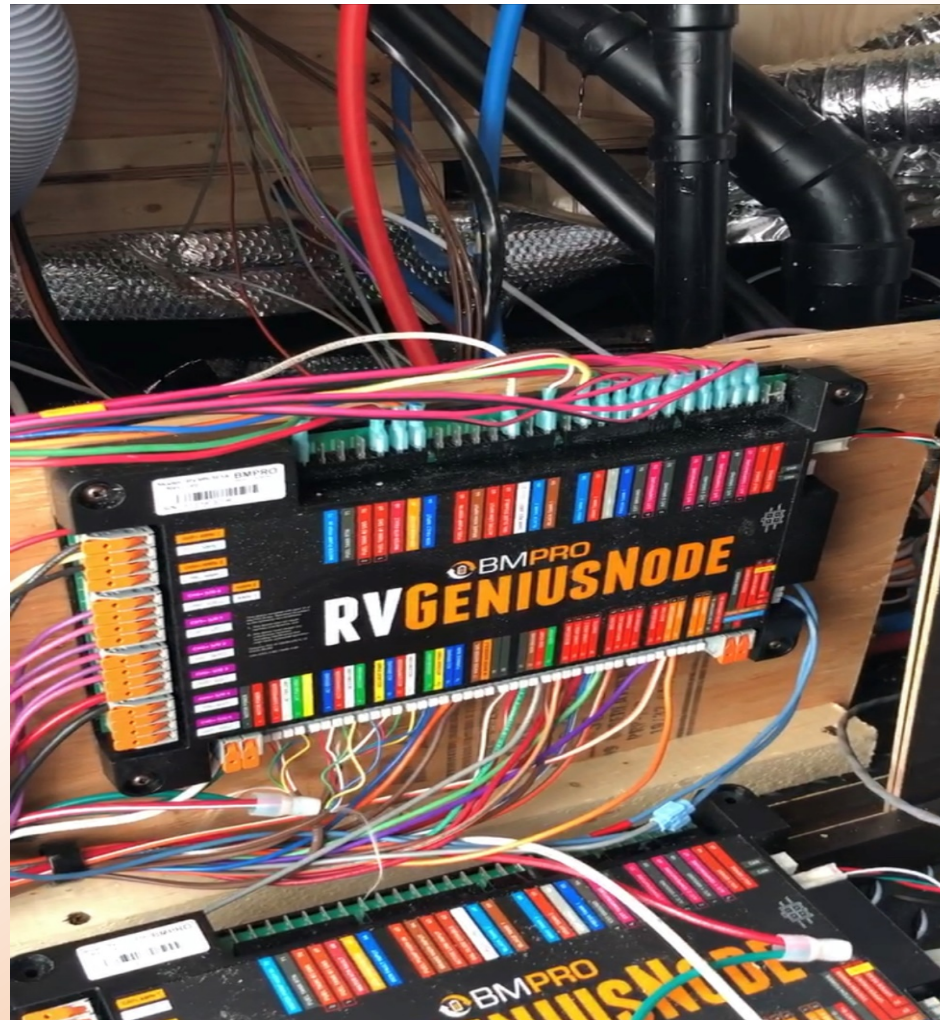
EAGLE TT



EAGLE/TALON 5TH WHEEL



LUXURY 5TH WHEELS



QUESTIONS ON REMOVAL / REPLACEMENT??

THANK YOU!



BMPRO

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