



Owner Guide

AEONrv 2024 Model Year

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Introduction

You will find typical owner's manual content in this Owner Guide for the 2024 model year AEONrv recreational vehicle ("RV"). However, we supplement this content with additional information, including "How-To" videos, component manual PDFs, troubleshooting tips, and pictures of various components.

This guide is not intended for use as a technical service manual, nor does it provide complete operational instructions. It is a guide to help you become familiar with the safe operation and use of your AEONrv. The illustrations and descriptions provided depend on the options installed in your AEONrv.

Component Manuals

Manufacturer's literature is supplied for individual components installed in the AEONrv. This information is part of the owner's literature packet you received with your RV.

Videos

AEONrv has created a series of videos detailing the features and functions of your RV. The videos are available on our website, aeonrv.com.

FAQs

If you have any questions, please contact our customer service team at support@aeonrv.com. Our website also has an FAQ section.

Checklists

Whether you're a first-time user or an experienced veteran of the road, AEONrv believes the included checklists will benefit you and help prepare you for your next travel adventure.

Troubleshooting

There are many things to remember when using an RV, and common user oversights can prevent you from thoroughly enjoying your AEONrv's many features. Occasionally, a minor adjustment or quick maintenance step will help solve a problem. Some sections of the Owner Guide include troubleshooting tips to alleviate minor technical issues.

Resources

[AEONrv Website](https://aeonrv.com)

The Facebook group [AEONrv Owners and Explorers](https://www.facebook.com/AEONrvOwnersandExplorers) is not sponsored by AEONrv but is a forum where enthusiasts can share information and ideas about AEONrv.

[Victron Energy](https://www.victronenergy.com) and [Battle Born Batteries](https://www.battlebornbatteries.com) websites.

Limited Warranty

You may find a link to the printable version of this Limited Warranty [here](#).

AEON plans to provide extended warranties soon. Please contact AEON for more details.

Section 1: Getting Started

Welcome

Thank you for choosing the AEONrv as your RV to explore the world, experience nature, and, most importantly, create memories with friends and loved ones.

We design and build the AEONrv to comply with the requirements of the Recreational Vehicle Institute Association and various other federal and state agencies.

Quality items respond best to considerate treatment and care. Therefore, we suggest you review the contents of this guide before using it. The material within has been prepared in detail to be of assistance. The illustrations will be of considerable help as you become familiar with your new AEONrv.

Review this manual together with an AEONrv delivery representative. They should be able to answer any questions you may have. Read all the literature supplied with your new RV, including all warranty and warranty registration information. Remember to validate the warranties by completing and mailing the individual warranty cards for each manufacturer.

Keep this Owner's Guide with the RV for easy reference, and follow all instructions and warnings associated with its use. Remember that accidents are usually caused by failure to follow simple and fundamental safety rules or precautions. Accidents can be prevented by recognizing the cause and avoiding the action or inaction that may lead to an accident. A careful owner is the best insurance against an accident.

Your AEONrv underwent a thorough inspection before it left our facilities. Review an inspection with your delivery expert and complete the AEONrv Customer Walkthrough Checklist in Appendix B. A walk-around with your delivery expert will help you familiarize yourself with the new RV and its components while ensuring everything is in proper working order.

We wish you many exciting and adventurous days with your new AEONrv.

About this Manual

This Owner Guide was prepared to help you properly care for and operate the vehicle and equipment. Please read it to understand how everything in your AEONrv works before taking it on its "maiden voyage."

This guide describes the features of your AEONrv and includes instructions for its safe use.

This guide was current at the time of printing; however, products are continually being upgraded and improved; therefore, some differences may occur between the description in this manual and the product(s) in your RV. If differences arise, follow the component manufacturer's instructions in your AEONrv owner's literature packet.

Consult the Ford Transit manual for operating, safety, and maintenance instructions about the engine, drivetrain, and chassis section of your AEONrv.

We update this manual regularly. We don't publish the manual on our website. If you need an updated version, please contact us, and we will send you a link to download the latest version of the guide.

Safety Messages Used in this Guide.

Certain items are labeled Danger, Warning, or Note throughout this guide. These terms alert you to situations involving damage to your RV or a risk to your safety, so read and follow them carefully.



DANGER indicates a hazardous situation that, if not avoided, could result in death or serious personal injury.



WARNING indicates a hazardous situation that, if not avoided, could result in minor or moderate personal injury.



NOTE: This is not explicitly safety-related but indicates a recommendation or information that could assist you in understanding the use or care of a particular item.

Getting Support

Should you need assistance with a problem, contact the AEONrv support team at support@aeonrv.com.

If you are experiencing an appliance issue, refer to the appliance manufacturer's information for details regarding warranty work and the location of an authorized appliance service center.

If you experience an issue with your RV while traveling and it is under warranty, contact AEONrv BEFORE having repairs performed at an independent service center. AEONrv can advise you about what is covered under your warranty terms. If a warranty part requires replacement, return the part, along with your invoice, to AEONrv. Doing so allows us to note what has occurred and ensures you are appropriately reimbursed for your expenditures.

We designed the AEONrv, believing that many customers would want to make modifications and changes. Please read the section that explains how the house is built and how to repair it or attach new items to the RV.

The house is constructed with insulated composite fiberglass-reinforced panels featuring a polyurethane foam core. As a result, the body is much better insulated and lighter than "traditional" RV products. The insulation value and low maintenance of the body make it more efficient, causing less wear and tear on the RV over time.

Significant modifications made to the RV that do not follow our recommendations will require written authorization from the AEONrv Warranty or Service Department. They may result in a reduction or loss of warranty coverage. Please ensure that you contact AEONrv before making such changes.

Some products described or displayed in this manual may be optional equipment not included with your RV. This manual does not cover any special equipment, modifications, or additions made by, or at the request of, the customer or any subsequent owner, whether made at the factory or in the field. We reserve the right to change the construction or material of any part at any time without incurring the obligation to install such changes on previously manufactured recreational vehicles (RVs).




Software



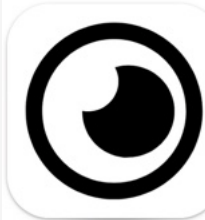
AEONrv uses several software applications to control and operate systems in the RV from your smart device. Most apps, if not all, are available for iOS and Android operating systems.

We recommend that new owners download and install the software applications on their devices and create new user accounts.

We will invite new owners to access the Victron Remote Management (VRM) portal. AEONrv has registered the RV in VRM, so both owners and AEONrv can view the vehicle's status when it is online (connected to the internet).

AEONrv also plans to offer an AEONrv app in the future.

Software	Description	Link
VictronConnect 	Configure, monitor, update, and diagnose your Victron product. Available for Android, iOS, Windows, and macOS X. It can connect to Victron products via Bluetooth, USB, and WiFi/LAN/Internet.	https://nocache.victronenergy.com/panel-systems-remote-monitoring/victronconnect
VRM App 	Monitor and manage your AEONrv Victron Energy system—log in with your VRM account. You will receive an invitation to register on VRM before picking up your AEONrv.	It is accessible for iOS and Android in the Apple Store and the Google Play Store. It is also possible for Android to download the APK files on the Victron software and downloads page .
Victron Toolkit 	Victron Toolkit enables you to optimize your system's performance with precise diagnostics and user-friendly tools. Easily check device status by selecting LED combinations for detailed information without going through lengthy lists.	Victron Toolkit on the App store: https://apps.apple.com/gb/app/victron-toolkit/id791585341 Victron Toolkit on Google Play: https://play.google.com/store/apps/details?id=nl.victronenergy.victronledapp&hl=en-US

<p>Pioneer AirLink</p> 	<p>The Pioneer AirLink app gives complete wireless control over your mini-split heat pump system. Toggle between different modes, change the temperature, turn the machine on/off, and set your custom programming and schedules. Access all special features and configure every part of the system's functions. Synchronize with smart home assistants like Alexa and Google Home. Available for Android, iOS, and macOS X.</p>	<p>Pioneer Airlink on the App Store: https://apps.apple.com/app/pioneer-airlink</p> <p>Pioneer Airlink on Google Play: https://play.google.com/store/apps/details?id=com.pioneer.airlink</p> <p>Pioneer WiFi manual: https://www.pdhvac.com/site/downloads/manuals/WYT-WIFI-UM.pdf</p>
<p>FordPass</p> 	<p>Access complimentary remote features, such as start/stop, lock/unlock, schedule a start, locate your vehicle, and check vehicle status, on the FordPass App when your vehicle is equipped with FordPass Connect. Plus, check your fuel level and oil life. https://www.ford.com/support/category/fordpass/</p>	<p>FordPass on the App Store: https://apps.apple.com/us/app/fordpass-vehicle-controls/id1095418609</p> <p>FordPass on Google Play: https://play.google.com/store/apps/details?id=com.ford.fordpass&pli=1</p>
<p>Ruuvi Station</p> 	<p>Ruuvi Station is a user-friendly application that enables you to monitor the measurement data from Ruuvi's sensors.</p>	<p>Ruuvi Station on the App Store: https://apps.apple.com/us/app/ruuvi-station/id1384475885</p> <p>Ruuvi Station on Google Play: https://play.google.com/store/apps/details?id=com.ruuvi.station</p>

Manufacturer's Warranty

A third-party component manufacturer is a company that produces a product used in the production of the AEONrv, but is not built or warranted by AEONrv directly.

The following list of components has been compiled to help you know which products installed in your AEONrv may have their warranties. See Appendix A - Manufacturer's Warranty and User Manual List for the current and complete list.

Inspect the manufacturer's literature supplied with your owner's packet to confirm whether you must register your purchase with them to validate their warranty. These warranties usually apply only to the first owner of the RV. We recommend sending the various warranty registration cards immediately and before any time constraints on registration expire.

Your AEONrv includes the following types of 3rd party manufactured components:

APPLIANCES

- Induction Cooktop
- Marine Water Heater
- Microwave (optional)
- Refrigerator
- Mini-Split Air Conditioner and Heat Pump
- Gas Air Heater
- Backup/Security Cameras (optional)

PLUMBING

- Water Pump
- Water Filter/Purifier
- Faucets
- Toilet

ELECTRICAL

- 24V DC/120V AC Inverter/Charger
- 12V DC/120V AC Alternator Charging Inverter
- Batteries
- Solar Panels

MISCELLANEOUS

- Fire Extinguisher
- Smoke Alarm and CO Detector
- Storage box (optional)
- Awning (optional)

FORD TRANSIT CUTAWAY CHASSIS

Taking Delivery

We will contact you well in advance of your delivery and let you know when your AEONrv is ready for pickup.

We prefer that you visit our Reno facility to sign all the necessary paperwork and participate in a detailed walkthrough with our delivery expert. During the handoff, we will inspect the vehicle with you, explain how to use all the major systems, and review the AEONrv Customer Walkthrough Checklist, which is located in Appendix B. The walkthrough will take approximately 3 to 4 hours.

We encourage you to stay in the Reno area for a day or two before heading out on your first camping experience. This will give you time to try all the features and ensure everything works satisfactorily.

How To Contact Us

Thank you for expressing your confidence in our company. We understand your expectations of a trouble-free and rewarding ownership experience, and we are committed to standing behind our product while providing you with the service you expect and deserve.

AEONrv Industries LLC
4946 Aircenter Circle, Unit #101
Reno, NV 89502
Phone: 775.477.4775
Email: support@aeonrv.com

Labels and Vehicle Identification

Motorhome Occupant and Cargo Carrying Capacity Label

This label is in the driver's area next to the *Vehicle Certification Label*. It contains vehicle occupant and cargo carrying capacity, and the number of seat belt positions in the vehicle. The label indicates the weight of a full load of water and advises that this weight, along with the tongue weight, constitutes cargo. It also describes the overall length of the vehicle.

MOTORHOME OCCUPANT & CARGO CARRYING CAPACITY

VIN: 1FDBW7PG6MKA71110

THE COMBINED WEIGHT OF OCCUPANTS AND CARGO SHOULD NEVER EXCEED: 476 kg or 1050 lbs

SAFETY BELT EQUIPPED SEATING CAPACITY: 4

CAUTION: a full load of water equals 252 kg or 556 lbs of cargo @ 1kg/L (8.3 lb/gal) and the tongue weight of a towed trailer counts as cargo.

RECREATIONAL VEHICLE OVERALL LENGTH 6.7 M (22 FT) EXCLUDING RV APPURTENANCES AS DEFINED BY THE RV MANUFACTURER.


Vehicle Certification Label

This label is attached to the left front door panel. It contains vehicle identification numbers, manufacturing date, type of vehicle (MPV - Multi-Purpose Vehicle),

GVWR - Gross Vehicle Weight Rating: Total permissible weight of the vehicle, including the driver, passengers, total cargo carried (including all liquids), and equipped with all options (listed in pounds and kilograms).

GAWR- Gross Axle Weight Rating: Total permissible weight allowed for the front and rear axles (listed in pounds and kilograms).

Vehicle Identification Number (VIN): This number identifies the chassis on which the vehicle is built. The 10th digit of the VIN designates the chassis model year (M = 2021, N = 2022, O = 2023, etc.). This information is useful when ordering chassis repair parts.

MANUFACTURED BY AEON INDUSTRIES LLC.			DATE: 12/29
GVWR	8450 lbs	3833 kg	
GAVR FRONT	3770 lbs	1710 kg	
GAVR REAR	4680 lbs	2123 kg	
THIS VEHICLE HAS BEEN COMPLETED IN ACCORDANCE WITH THE PRIOR MANUFACTURER'S IVD, WHERE APPLICABLE. THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.			
VIN: 1FDBW7PG6MKA7		TYPE: MPV	MADE IN: USA
			

Tire and Loading Information Label

This label is attached to the left front door panel. It contains seating capacity, maximum cargo weight plus occupants, tire sizes, and cold tire pressure.

Tire pressures at Gross Axle Weight Ratings are recommended (while cold) for the tires initially equipped on your vehicle. These pressure levels must be maintained to ensure proper handling, safety, and fuel economy.



TIRE AND LOADING INFORMATION

SEATING CAPACITY | TOTAL 4 | FRONT 2 | REAR 2

The combined weight of occupants and cargo should never exceed 476 kg or 1050 lbs.

TIRE	SIZE	COLD TIRE PRESSURE	SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION
FRONT	245/75R16 120E	390KPA, 57 PSI	
REAR	245/75R16 120E	520KPA, 75 PSI	
SPARE	245/75R16 120E	450KPA, 65 PSI	

Tire Size and Speedometer Calibration

The AEONrv comes equipped with BFGoodrich All-Terrain T/A KO2 LT245/75R16 120/116S E (30.4") tires, replacing the original Ford tires. The vehicle retains its original Ford rims, now painted black.



Larger tires on your AEONrv mean your speedometer and odometer will read about 10% lower than your actual speed and distance. For example, if your speedometer shows 60 mph, you're traveling at 66 mph. You can confirm your actual speed with a mobile speedometer application.

This 10% discrepancy also applies to the Miles Per Gallon (MPG) indicator. If your vehicle displays 11.0 MPG, your actual fuel efficiency is 12.1 MPG.

We are actively collaborating with Ford to recalibrate the vehicle for the new tire size and will notify customers once a solution is found.

Reporting Safety Defects

Suppose you believe your vehicle has a defect that could cause a crash, injury, or death. In that case, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) and notify AEONrv Industries, LLC.

If NHTSA receives similar complaints, it may open an investigation. If it finds a safety defect in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you and AEONrv.

To contact NHTSA, you may either call the Vehicle Safety Hotline toll-free at

1-888-327-4236 (TTY: 1-800-424-9153) or go to <http://www.safercar.gov>

Or write to:

Administrator, NHTSA
1200 New Jersey Avenue S.E.
Washington, D.C. 20590

You can also obtain other information about motor vehicle safety at <http://www.safercar.gov>.

Section 2: Safety

Your AEONrv is equipped with several safety features, including:

- Seatbelts
- Ford Perimeter Plus Vehicle Security and Remote Start Systems
- Smoke Alarm
- CO Detector
- Fire Extinguisher
- Emergency Egress
- Lockable House/Cab Door

Seatbelts

Seats intended for occupancy while the vehicle is in motion are equipped with seatbelts to protect the driver and passengers.

Read the Ford Owner's Manual carefully regarding Child Safety and Seatbelt usage, maintenance, and safety warnings.

All seatbelts in your vehicle are three-point combination lap and shoulder seatbelts.

All child restraint systems are designed to be secured in vehicle seats by the lap belt portion of a lap-shoulder belt.



Always ensure your child is correctly secured in a device that is appropriate for their height, age, and weight.

Child safety restraints must be bought separately from your vehicle. Carefully follow the manufacturer's instructions and warnings. Failure to follow these instructions and guidelines may result in an increased risk of serious injury or death to your child.

Always drive and ride with your seatback upright and the lap belt snug and low across the hip. To ensure complete seatbelt protection, never let more than one person use the same seatbelt at a time, and avoid damaging seatbelts by pinching them in the doors or the seat mechanism.

After any serious accident, any seatbelts that were in use at the time must be inspected and replaced if necessary. Seatbelt assemblies not in use during a crash should also be checked and replaced if either damage or improper operation is noted.

Your AEON is equipped with two front-facing lap and shoulder seatbelts in the dinette area. Remove the back cushion to pull out the seatbelt from the wall. Put the cushion back after enough of the belt has been pulled out, and the belt is in front of the cushion.

Attach the shoulder belt to the lap buckle and snug up the lap belt across your hip.



Ford Perimeter Plus Vehicle Security and Remote Start System

Your AEONrv comes with a Ford aftermarket vehicle security and remote start system called Perimeter Plus. This system enables you to start and stop your vehicle remotely, as well as arm and disarm the security system, using your factory-supplied Remote Keyless Entry (RKE) key fob.

Arming / Disarming the Security System

The vehicle security system may be armed by either:

1. Pressing the Lock button on the factory RKE keyfob.

The front and rear lights will flash, and then, after 10 - 20 seconds, the security system will arm, protecting all closed entry points. If an entry point is left open, the security system will continue to ignore it until it is closed.

The vehicle security system will be disarmed if any of the following actions are taken:

1. Pressing the Unlock button on the factory RKE keyfob.
2. Turning the ignition "On" (must have a valid key read).

If any vehicle intrusion attempts were made while the security system was armed, the vehicle's horn would honk, and the exterior lights would flash two (2) times, indicating an intrusion attempt.

When the security system is armed:

- All interior entry points are monitored for unauthorized entry.
- The shock sensor monitors for impact on the vehicle's body or glass.

The system will activate an alarm cycle if any monitored entry point is opened or a hard impact is detected. During the alarm cycle:

- The horn sounds an on / off pattern.
- The front and rear lights flash.

The alarm cycle (horn honks) lasts 30 seconds (the front and rear lights may continue to flash longer). At the end of the alarm cycle, the system will pause for 10 seconds and then begin monitoring for any further alarm conditions. The system will enter another alarm cycle if another alarm condition is detected.

Shock / Impact Sensor

While the security system is armed, the shock sensor monitors for impact to the vehicle's body and glass. If a light, non-threatening impact is detected, the system will honk the horn and flash the exterior lights one (1) time to warn away would-be intruders. The system will trip an alarm cycle if a hard impact is detected. Increasing or decreasing sensitivity should be completed by a service professional. If an adjustment is necessary, please contact our support team.



By design, the shock/impact sensor will not respond to vehicle motion or rocking caused by wind or when the vehicle is rocked with hands or feet. The sensor responds to near-damaging or damaging impacts to vehicle surfaces.

Shock Sensor Disable:

The security system can ignore the optional shock sensor while armed. This feature is useful for events that may jar your vehicle but pose no threat, such as a thunderstorm or heavy construction traffic passing near your parked vehicle. This feature may be activated using the procedure listed below. The vehicle's doors can be opened or closed during this process.

To turn off the shock sensor:

1. Turn the ignition key off and remove the key.
2. Within 15 seconds, open the driver's door.
3. Within 15 seconds, press the Unlock Button on your RKE Key Fob 3 times.
4. Within 5 seconds, press the Lock Button on your RKE Key Fob 1 time.

The horn will honk two (2) times, after which the security system will arm with the shock sensor disabled. The shock sensor will remain disabled until the vehicle's ignition is cycled on and off.

Intrusion Attempt Alert:

If the horn honks two (2) times when you disarm your security system, this indicates that the alarm was tripped while you were away from your vehicle. Turning the ignition to the ON position or rearming the security system will clear the intrusion attempt alert.

Disarming the System if Your RKE Key Fob is Lost:

Enter the "Unlock" code into the keypad outside the driver's door (if equipped). Your vehicle will not start without using one of the original or replacement factory fobs or keys. See your vehicle owner's manual for recommended procedures to replace lost or damaged key fobs/keys.

Remotely Starting / Stopping the Vehicle

The remote start function is activated by pressing the Lock button, then pressing the Unlock button within 3 seconds, and then pressing the Lock button on the vehicle's RKE keyfob within 3 seconds. The vehicle will ensure that it is safe to start, and if all safety parameters are correct, the engine will start within 5 seconds.



The FordPass App can also be used to remotely start the engine (see the vehicle owner's manual for further details on remote start operation).

Pressing the Lock button, followed by the Unlock button within 3 seconds, and then the Lock button again within 3 seconds on the vehicle RKE keyfob will cause the vehicle to shut down within 10 seconds.

Pre-Heating or Pre-Cooling the Interior of the Vehicle:

The system will automatically heat/cool the vehicle without resetting the HVAC controls, and the vehicle's manual HVAC controls are disabled (see the vehicle owner's manual for further details).

Remote Start Safety Features

For safety and security reasons, the system will prevent remote start activation or shut down the engine during remote start operation if any of the following occur:

- The hood is open.
- The gear selector is moved or not in park (P).
- The vehicle security system is triggered.
- The remote start feature has been turned off in the instrument cluster menu.
- Low vehicle battery.
- An instrument cluster maintenance indicator light is illuminated.

As a safety precaution, the vehicle will shut off if left unattended for 15 minutes. The default remote start runtime can be changed. Refer to the Message Center in the Instrument Cluster chapter of your vehicle's owner manual for further details.

Power Window Disable:

Each time the remote start feature is activated, all power windows will be disabled while the vehicle runs via remote start. The windows will resume regular operation after the remote start is shut down or the vehicle is started with the vehicle key.

Automatic Door Locking:

Each time the remote start feature is activated, the power door locks will be activated before the vehicle starts. The doors can be unlocked at any time via the vehicle's key fob.



All other vehicle systems remain off when you remotely start the engine.

Additional User Notes:

The runtime of the remote start system can be doubled while the vehicle is running via remote start (adding 5, 10, or 15 minutes, depending on the vehicle settings) by pressing the remote control transmitter's button twice.

If your vehicle doesn't start remotely, verify that it starts with the ignition key. The vehicle can only be remotely started twice within a one-hour period for environmental reasons. This restriction will be reset by waiting 1 hour or turning the vehicle's ignition on and off.

Smoke Alarm and Carbon Monoxide Detector

AEONrv has a combination smoke alarm and CO detector in the bedroom ceiling. Please read the [User Guide](#) to become familiar with the unit.

The Combination of Smoke and Carbon Monoxide provides two necessary safety devices in a single unit. This alarm includes a voice warning system that announces fire, carbon monoxide, low battery, and intelligent hush activation. The alarm eliminates any confusion and warns you and your family of danger from smoke, carbon monoxide, or if your battery requires replacement.

A smoke alarm detects only smoke, not fire, and the alarm will sound if smoke reaches the sensor. Smoke alarms may not have time to alarm before the fire causes damage.

- The combination alarm is battery-operated.
- The alarm has a 7-year life and a 5-year limited warranty
- The alarm has peak-level memory and will alert if a carbon monoxide level of 100 PPM or higher has been previously detected
- Protects against both smoke and carbon monoxide
- Voice warning



This unit will not alert residents who are hard of hearing. (Special alarms with flashing strobe lights are needed for these people.)

Smoke alarms have a limited life and are not foolproof. Never attempt to repair a smoke alarm; replace it if it is faulty. Never disconnect the battery to silence the alarm.

Test the smoke alarm operation after the RV has been in storage, before each trip, and at least once per week during use.

A warning label is attached to the smoke alarm and CO detector.



General Maintenance

To keep your Smoke/CO Alarm in good working order, please follow these simple steps:

- Verify the unit's alarm and LED lights are operating correctly by pushing the test/reset button once a week.
- Remove the unit from the mounting bracket and vacuum the alarm cover and vents with a soft brush attachment once a month to remove dust and dirt. REINSTALL IMMEDIATELY AFTER CLEANING, AND THEN TEST USING THE TEST/RESET BUTTON!
- Never use detergents or other solvents to clean the unit.
- Avoid air fresheners, hair spray, or other aerosols near the Smoke/CO Alarm.

Fire Extinguisher:

A fire extinguisher is provided with your AEONrv. It is located near the main door, behind the toilet.



Please become thoroughly familiar with the location and operating instructions displayed on the side of the fire extinguisher.

When using a fire extinguisher, utilize the 'PASS' method. Familiarize yourself and all RV occupants with this procedure:

- Pull the pin (some extinguishers may have a cartridge that needs to be pushed).
- Aim the nozzle at the base of the fire.
- Squeeze the handle to release the extinguishing agent.
- Spray the base of the fire. (If you aim at the flames, you won't extinguish the fire.)

The National Fire Protection Association (NFPA) recommends inspecting the fire extinguisher for proper charge before each trip and at least once a month. If the extinguisher is past its expiration date, it must be replaced with the same type and size as the one originally supplied.

Emergency Egress:

The dinette window serves as your primary emergency egress point if the side entry or cab doors are inaccessible. Open the window entirely and then exit.

The bedroom skylight can also be used as a secondary emergency egress if the dinette window, main entry, or cab doors are inaccessible.

Learn and practice opening and operating the dinette window and skylight before an emergency occurs.

Lockable House/Cab Door

The sliding door between the house and the cab has locking mechanisms on both sides. When the door is locked inside the house, there's no way to enter from the outside. You can't enter the cab from the house when the door is locked from the cab. This door is also an additional emergency exit.

Fire Safety

Fire safety is a crucial aspect of owning an RV. The following fire prevention rules can help eliminate the possibility of a fire:

- NEVER store flammable liquids in the RV.
- NEVER leave cooking food unattended.
- NEVER smoke in bed, and always use an ashtray.
- NEVER allow children to play with electrical equipment.
- NEVER use an open flame as a flashlight.
- Have faulty or damaged wiring and electrical components repaired immediately.
- NEVER overload electrical circuits.
- Keep cooking surfaces clean and free from debris.
- NEVER allow trash to accumulate.
- NEVER clean with a flammable substance.
- Ensure everyone in your RV is familiar with the location of all exits, including exit windows.
- Ensure everyone is familiar with the location and proper operation of the fire extinguisher.



In case of fire:

- EVACUATE EVERYONE FROM THE RV IMMEDIATELY.
 - DO NOT ATTEMPT TO USE WATER TO PUT OUT A FIRE.
 - SWITCH OFF BATTERIES IF YOU CAN SAFELY ACCESS.
 - CALL LOCAL EMERGENCY SERVICES OR 911.
-

Section 3: Plumbing

General Information

The plumbing system provides fresh water to the kitchen, water heater, shower, bathroom sink, and toilet.

The plumbing system also features a highly efficient two-stage filtration system that filters the fresh water after it is pumped from the freshwater tanks, removing unwanted particles, odors, and tastes.

Wastewater, also known as gray water, is gravity-drained from the kitchen sink, bathroom sink, and shower pan directly to the insulated and heated 24-gallon gray water tank, located on the underside of the floor on the passenger side of the AEONrv.

Fresh water system

The following components are part of the freshwater plumbing system:

- Freshwater plumbing lines
- Fresh water tanks
- Fill system
- Water pump
- Water heater
- Filtration system
- Shower
- Faucets & Sinks

Plumbing Lines

AEONrv uses ½" diameter PEX-A for all the freshwater plumbing lines, which is higher quality than PEX-B. PEX-A offers superior flexibility for fewer joints and leak points, a full-flow design for maximum water output, and is more tolerant of freeze bursts in low-temperature climates.

Fresh Water Tanks

Two freshwater tanks are located in the garage. One is 40 gallons, and the other is 19, but they are connected to form a 59-gallon tank. One level sensor in the 40-gallon tank is adjusted to measure the entire 59-gallon capacity. Together with the 8-gallon water heater, you can carry a total of 67 gallons of fresh water.

There is a cleanout access located on the top of each tank. The 40-gallon tank features a drain valve located at the bottom of the tank. Both tanks have an overflow hose connected to the fill inlet.

AEONrv recommends regularly draining and sanitizing your freshwater system to ensure your tank provides safe water for drinking, showering, and washing dishes. The tank should be sanitized at least once per year. If you don't use the RV for four weeks or more, sanitize the tank before your next trip.

Refer to the [Care and Maintenance](#) section for instructions on sanitizing your freshwater tanks.

Filling with Fresh Water

A lockable fill access door is located on the driver's side near the garage door. Fill the tanks from a reliable water source using the supplied drinking water-safe hose and the flexible water tank filler with a shutoff valve. Do not overfill the tanks.

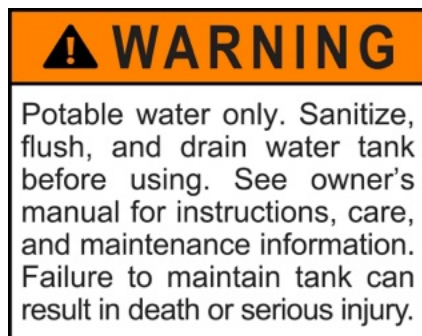
If you fill the freshwater tanks with water from an unreliable source or a source with sediment, use the provided inline RV water filter to pre-filter the water before filling the tanks.



The pre-filter does not replace the onboard water filtration system. It is used to filter out larger particles from the water source.



There is a warning label attached to the access fill door.



Water Pump

The water pump is a Shurflo Aqua King II Freshwater Pump, manufactured by Pentair. It is 24V and has a flow rate of 3 gallons per minute. It features a four-chamber design for smooth flow at all demand levels, eliminating rapid cycling. It is self-priming up to 6' and can run dry without damage.

<https://www.pentair.com/content/dam/extranet/web/nam/shurflo/manuals/911-1052-aqua-king-marine-fresh-water-pump-iom.pdf>

It is located behind the bottom drawer in the kitchen.

The on/off switch is on the pantry wall in the kitchen.

- The pump is designed for intermittent operation only
- Turn off the power to the pump when your RV is unattended
- Keep your strainer clean for ultimate performance.

Regular pump maintenance is all that is needed: Checking and cleaning the strainer, sanitizing and winterizing, and occasionally checking all plumbing hardware and fittings for tightness. A lack of sanitization is one reason for premature pump failure and poor performance over time. Poor sanitizing can cause scale buildup on the diaphragm and valves, leading to reduced flow and increased leakage.

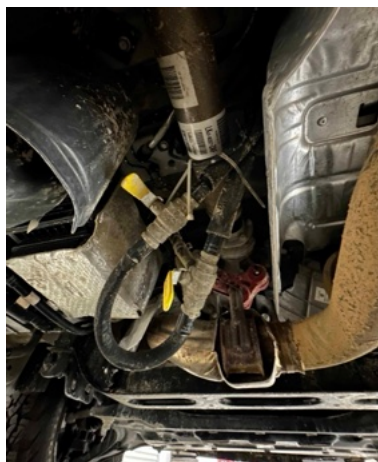
Water Heater

The water tank is an 8-gallon Isotemp Spa Marine water heater provided by Indel Webasto Marine USA.

(https://www.indelwebastomarine.com/fileadmin/webasto_media/indelwebastomarine.com/INT/Documents/Isotemp-Spa-Manual.pdf)

The insulated stainless steel tank is housed within an insulated box, which helps keep the water hot for longer and prevents unwanted heating of the inside of the AEONrv in warm temperatures while the air conditioning is running.

The heater is connected to the engine coolant system via two hoses, a feed line, and a return line, which also serve to passively heat the gray water tank. You can disconnect these two hoses from feeding coolant to the water heater by shutting off the two 3-way 3/4" ball valves under the vehicle. When the handles are pointing down, the coolant is flowing to the water heater.



When a new vehicle is delivered, the yellow handles are removed from the valves and stored in the glove compartment. This prevents them from being accidentally hit by objects while driving. If maintenance on the water heater is required, put the handles back and turn off the coolant lines.

The water inside the tank will heat up to about 200°F after running the engine for about 45–60 minutes. The mixing valve prevents scalding and can be set to a temperature between 110°F and 150°F. The initial setting is at the lowest setting. The water will remain hot for approximately 2–3 days, depending on the amount of water used, outside temperature, and the temperature you maintain inside.

Heating Element

As a backup, a 750W 120V AC electric heating element located inside the tank can heat the water to approximately 150°F.



This method of heating the hot water will consume a significant amount of battery power and is only recommended if you cannot drive or idle the vehicle. The water will heat up much quicker when the engine is used.

The switch is on the kitchen wall and marked as “Water Heater.”

You can verify that the heater is working by checking the AC usage on the Cerbo GX display. The heater will not turn on if the water temperature is above 150°F.



If the backup heating element is not heating the tank, ensure the Victron inverter generates 120V AC.

Check that the fuse breaker is not tripped. A hole has been drilled in the electrical cover in front of the mixing valve, providing access to the button that resets the breaker. To reset the breaker, press down on the red button until it clicks and is level with the surrounding surface.



Water Heater Access

Access the water heater by lifting the metal rail that secures the front panel under the kitchen sink. You may need to detach the cabinet door to remove the panel completely.

The mixing valve, located at the back of the heater, controls the temperature. Turn it left to decrease the temperature and right to increase it. The default setting is approximately 110°F.

The drainage valve is positioned in front of the heater. Open this valve to drain water directly to the ground through the drain hole located next to the gray water tank.



Please see the provided Isotemp user manual for maintenance and safety instructions.



The coolant lines and unmixed water from the hot water tank can cause scalding and danger. Be extremely cautious when working on the tank fittings if the water is hot.

Water Filtration System

AEONrv provides the Clearsource OnBoard water filtration system for RVs.

(<https://www.clearsourcerv.com/collections/clearsource-rv-water-filter-systems/products/clearsource-2-canister-onboard-rv-water-filter-system>)



The filter system is located in the garage and can be bypassed if maintenance is needed or when replacing the filters. You can bypass the filter with the ball valves.

For more details, see Section 5: [Water filtration system](#).

Shower

The multi-usage shower area is designed to provide the following key features:

- Shower.
- Bathroom.
- Mud room.
- Dry room.

For more details, see [Section 5: Shower](#).

The closable shower drain prevents odor and backflow from the gray water tank. Close the drain valve when the shower is not in use. There should be no need to use mechanical drain-cleaning devices, as the drain feeds directly into the gray water tank via gravity.

The shut-off valves to the shower water hoses are located behind the wall, under the kitchen sink.

Kitchen Faucet

The kitchen faucet is an AquaStella AS59CH chrome bar sink faucet.



Features include:

- SPX flexible hose system
- Connecting hose and motion hose are granted by all applicable certifications worldwide
- High-end finish
- Smooth, easy to clean, doesn't rust or discolor
- Arc spout swivels 360°

- Pull-down dual-function sprayer
- 18" motion hose reach

The corrosion & stain-resistant finish doesn't rust or discolor. Clean the faucet with a soft cloth or sponge.

The chrome soap dispenser is also from AguaStella (model ASF026CH).



Features include:

- High-end finish
- Smooth, easy to clean, doesn't rust or discolor
- Pump head swivels 360°
- Refill from the top

The soap dispenser holds dish soap, hand soap, hand lotion, and liquid detergent. To refill, pull out the pump head on the countertop and fill it.

To clean, wipe down with a rag using warm, soapy water.

Bathroom Faucet

Greenspring provides a single-handle chrome bathroom faucet.



It has an aerator spout that helps prevent splashing. The lever handle is designed for easy water flow and temperature adjustment.

To clean, wipe down with a rag using warm, soapy water.

Waste Water System

The wastewater lines are 1-½" flexible PVC with Schedule 40 PVC fittings that gravity drain directly into the gray water tank.

We highly recommend minimizing the amount of solid waste in your wastewater, primarily by excluding food particles and hair. The AEONrv provides screens for all drains to help with this process. We also recommend wiping all dirty dishes with a paper towel to remove food particles and grease before disposing of them, and then washing them in the sink. We also strongly recommend using only biodegradable soaps.

Following these processes will help minimize the growth of smells and bacteria in the gray water tank, and you'll have to clean and sanitize the tank less often.

Gray Water Tank

The gray water tank, located next to the entry stairs, can hold up to 24 gallons of gray water. A thick layer of rigid foam protects it. It is freeze-protected by two heating sources: coolant lines from the engine and a 12V DC tank heating pad with a built-in thermostat.

The tank has three inlet connections: a kitchen sink, a Shower drain, and a bathroom sink. All are gravity-fed. The two sink drains utilize a silicon backflow preventer, and the shower drain features a keeping-sealed stopper to prevent odors from entering the AEONrv's living space from the gray tank. No P-traps are needed since the inlets' hoses end at the bottom of the tank, and the gray tank water acts as a natural P-trap if the water level is above the hoses.

Dumping the Gray Water Tank

There are two ways to dispose of or empty the gray water.

1. The 1.5" larger red manual ball valve with an NPT threaded connector. Several options for connecting extension hoses to this fitting include using a PVC-style pool dump hose.
2. The smaller 3/4" diameter motorized ball valve. A regular garden hose can be attached to the hose bib connector. The switch to open and close the valve is located on the kitchen wall.



We recommend flushing 5 gallons of fresh water through your gray water tank after prolonged use to help clean out the tank. You may also use an RV gray tank sanitizing solution or distilled vinegar if needed.



Only dump your gray water tank in an approved and responsible location.

Gray Water Tank Heating

The gray water tank is the only water stored outside the AEONrv and is freeze-protected in two ways. Additionally, the tank is designed with a small overflow at the top to protect against damage in the event that it becomes full and freezes.

Engine Coolant Lines

The tank is insulated with high-density foam and is passively heated by the engine coolant lines, which in turn heat the water in the hot water tank.

Heating Pad

Additionally, a 12V DC heating pad located at the bottom of the tank can be used in freezing temperatures. It operates at approximately 78 Watts/5.8A and has a built-in thermostat that is set to turn itself on at 45°F (±5 degrees) and turn itself off at 68°F (±5 degrees) when switched ON. Keep the heating pad OFF using the switch in the electrical compartment when the outside temperature remains above freezing or the RV is not in use.

Toilet

The standard toilet is a [Thetford C223-CS RV Cassette Toilet](#) with an electric flush.

The functional design combines modern styling with ease of use, making it a seamless and integrated bathroom. It is manufactured from high-quality synthetic material, creating a durable, user-friendly, and maintenance-friendly toilet.



The cassette toilet consists of a permanently fixed part and a waste tank that is accessible from the outside. The removable waste tank is located under the toilet bowl and can be accessed via a lockable door outside the RV.

General features include:

- The space-saving bowl rotates 180 degrees on the base
- 4.75 gal. (18L) Waste tank capacity
- Waste tank level indicator
- Integrated no-splash pour spout
- The waste tank includes a handle and wheels to ease dumping
- Direct connection to the freshwater system
- Electric flush system
- The back cover hides the plumbing

The waste tank can be easily emptied into a standard bathroom toilet.

AEONrv is also offering other toilet options. Please refer to [Section 5](#) for more details.

Sanitization

Potable water systems require periodic maintenance to keep components working correctly and deliver a consistent flow of fresh water. Sanitizing is recommended before storing, after a storage period, or when the system is opened or contaminated. For details on sanitation, refer to the section "[Sanitize Fresh Water Tanks](#)."

Storage and Winterization:

Your AEONrv has been designed for cold climates. However, a few key considerations should be taken into account when storing your RV during the winter. Please refer to Section 6: [Storing the RV](#) for further details regarding storage for periods longer than 30 days.

Winterization

If you store your AEONrv for an extended period during the winter, it is crucial to drain all the water from the plumbing system. This includes

- Fresh water tanks
- Purification filtration canisters.
- Water pump
- Plumbing lines
- Water heater
- Gray water tank

Winterization Procedure

Use the steps outlined below to empty the water.

Step	Description	Details
1	Level the vehicle.	If your AEONrv is not level, there may be "low points" in the water lines that can trap water and prevent it from draining properly.
2	Turn on the water pump.	You can empty the water tanks by opening the faucets and directing the water into the gray water tank. The pump will operate more efficiently if you also bypass the water filters.
3	Open faucets.	After turning on the pump, fully open the faucets in the kitchen and bathroom, including the shower. All faucets should be left open to guard against any damage. Open the shut-off valve at the end of the shower hose. You may need to shake the wand to ensure all the water is emptied.

Step	Description	Details
4	Empty freshwater tanks.	<p>A drainage valve is located at the bottom of the 40-gallon tank, allowing you to attach a garden hose to drain the water. Open the valve after attaching the hose and extending it to a safe dumping area. It will take some time for all the water to drain, as it is being drained using gravity.</p> <p>We recommend emptying the tank using the water pump and pumping the water into the gray water tank. This way, you can also flush the gray water tank.</p> <p>The pump is designed to run dry. Keep the pump running for a few minutes after all the water has been emptied from the plumbing lines and water heater.</p>
5	Turn off the water pump.	There should be very little water left in the plumbing system at this point.
6	Empty the water heater.	Remove the front panel covering the heater. Open the drainage valve located in the front of the heater. Water will drain straight down next to the gray water tank.
7	Empty the water pump.	<p>Remove the bottom two kitchen drawers to access the pump. Remove the plumbing at the pump's inlet and outlet ports using a pan to catch the remaining water. Turn the pump "ON," allowing it to operate until the water is removed. Turn "OFF" the power to the pump once the plumbing is emptied. Do not reconnect the pump plumbing.</p> <p>Remove and clean the strainer that is attached to the pump.</p>
8	Empty the filtration system.	<p>Use the supplied plastic wrench to remove the canisters and empty the water inside.</p> <p>This is an excellent time to replace the filter elements. Replace with new ones, and reattach the canisters.</p>
9	Empty the gray water tank.	Make sure the gray-water tank has been emptied.
10	Toilet	<p>If you have a cassette toilet, run the flush pump until no water is coming out into the bowl.</p> <p>Ensure that the cassette is dry.</p>

Step	Description	Details
11	Batteries	<p>We recommend bringing your Battle Born batteries to full charge before long-term storage.</p> <p>Turn off the main disconnect switch.</p> <p>Turn off the solar switch and the battery heating switch.</p> <p>On average, the batteries lose approximately 2-3% of their monthly capacity. This loss rate increases if the material is stored in extreme environmental conditions.</p> <p>Battleborn has a blog regarding their batteries: How to Winterize and Store LiFePO4 Batteries</p>
12	Reminder note.	Make a note on the tank filler as a reminder: "Plumbing is disconnected."
13	Starting back up.	<p>Reconnect the water pump plumbing.</p> <p>Close all the faucets.</p> <p>Fill the filtration system canisters with water.</p> <p>Fill the water tank with a sanitation solution and sanitize the plumbing system before returning it to service.</p>

Section 4: Electrical

General Information

The main electrical power supply provided for the AEONrv is an efficient 24V DC system powered by a self-heating Battle Born LiFePO4 battery pack. Coupled with the Victron inverter/charger, our system also outputs 120V AC power, just like your home electrical system. This powers various appliances, including the air conditioner and heat pump, and provides multiple device outlets.

Some direct current equipment, such as the fridge and water pump, uses 24V DC directly. Other items, such as the LED lights and fans, run on 12V DC using a Victron step-down converter that converts 24V DC to 12V DC. A GFCI outlet protects all 120V AC circuits as the first outlet in that circuit.

The electrical equipment and associated circuitry are engineered into a dedicated system specifically designed for the AEONrv. All installations meet or exceed industry standards applicable on the date of manufacture.

Batteries

The heart of the AEONrv electrical power system is the standard 8.2 kWh self-heating Battle Born LiFePO₄ 24V battery pack. This system is upgradable to 10.9 kWh or 13.6 kWh of power storage. The batteries include a built-in battery management system (BMS) to protect against fault conditions. They are made from the safest and most stable type of lithium cells, lithium iron phosphate. The batteries can be discharged to 100% of their rated power and can be charged more quickly, weigh less, and last longer than traditional RV lead-acid batteries. The operating temperature range is -4°F to 140°F and is controlled by the Battery Management System (BMS). Battle Born Batteries are designed and assembled in Reno, NV, and are listed to UL2054 standards, IEC 62133, and UN38.3.

The batteries are primarily maintenance-free and located under the dinette floor. If you need to work on the electrical system or access the batteries, make sure the main battery switch is turned off. We also recommend disconnecting the solar system.



The Main battery switch is on the forward bench wall under the dinette table. The dinette floor cover is attached with screws that can be removed to access the batteries.

Self-Heating

There's no need to winterize the batteries since they are self-heating. If you expect the temperature to be below 40°F during usage or storage, turn on the battery heat switch in the main electrical compartment. This will prevent the batteries from getting colder than their rated operating temperature for both charging and discharging.

While discharging is possible at very low temperatures, charging requires temperatures above 32°F.



Avoid prolonged activation of battery heating, as this can lead to battery depletion within a few weeks in cold conditions. This feature should primarily be used to precondition batteries to an optimal temperature before charging.



December 2024 Update: We are no longer using the self-heated batteries. We also removed the switch located in the electrical compartment, pictured above.

Shore Power Cord

The AEONrv includes a 30-amp shore power cord and its corresponding connector, both of which are located in the garage. This cord connects the RV to a 120V grounded power source via the electrical hookup located on the driver's side, beneath the dinette window. A 15-amp male to 30-amp electrical "dogbone" adapter is supplied for use with standard 15A or 20A outlets.

Charging the Batteries

You can charge your batteries in several ways:

- Solar
- Inverter/Alternator
- External shore power

When the solar power breaker switch is on, the solar system charges the batteries when sunlight reaches the solar panels.

You can also charge your batteries using the Transit's 250A alternator via our charging inverter or from an external power source using the shore power cable.

120V AC Selector

The 120V AC selector switch is on the bench wall under the dinette table.



There are three switch options: **Shore**, **Off**, or **Inverter**. You can usually leave the switch set to “Inverter.”

Charge using the Charging Inverter

While the engine is running, you can charge the batteries from the Giandel Inverter.

The inverter converts the 12V from the vehicle’s alternator or batteries to 120V AC. The Victron inverter then converts this 120V to 24V, which charges the house batteries.

To use the inverter:

1. Start the engine.
2. Turn on the inverter switch located just below the steering wheel. Press the switch for at least 1 second to turn it on.



3. Turn the selector switch under the dinette table to “Inverter.” A green LED light should indicate that power is being supplied.
4. The Victron inverter/charger should turn on in about 10 seconds, and the house batteries will absorb the electrical charge.



If no green light is below the AC selector switch, the 150-amp fuse may have tripped. The fuse is located behind the driver’s seat. If the yellow tab is visible, push it back into the fuse holders to reset.



Remember to turn **off** the inverter switch when you are done running the vehicle engine. If left on, the inverter will continue to charge the house batteries from the car batteries. The Ford battery management system will shut off power to the inverter after about 45 minutes if left on or if the car battery reaches a low voltage level. Press the switch for at least 1 second to turn it off.



We suggest cycling intermittently if you plan to use the alternator charging for extended periods. Use it for 1 hour, then turn it off for 30 minutes to let the electrical compartment cool down.

Charging using an External Power Source

1. Extend the entire power cord length to the power source and connect it.
2. Plug the power cord into the RV receptacle and ensure it is securely locked in place.
3. Turn the AC selector switch to "Shore." A green light should indicate that power is being supplied.
1. Within approximately 10 seconds, the Victron MultiPlus should turn on, and the house batteries will begin charging.

24V DC Electrical System

The AEON electrical system operates on a 24-volt DC power source, offering significant advantages. This higher voltage reduces the amperage by half, allowing for the use of smaller-diameter wiring. The benefit of smaller wires is two-fold: it decreases the overall wiring thickness, saving space, and is particularly advantageous for long wire runs where a wire 2x smaller than an equivalent 12V circuit can be utilized. Ultimately, less current is required to produce the same power, enabling the use of more compact wiring.

Three pieces of equipment are operating at 24V:

- Fridge
- Freezer
- Water pump

The fuse panel for the 24V system is located next to the Lynx bus bar inside the electrical compartment.



12V DC Electrical System:

Much of the equipment inside the RV runs on 12V DC. To accomplish this, we use the Victron Orion 24V to 12V DC-DC converter

(<https://www.victronenergy.com/dc-dc-converters/orion-dc-dc-converters-12v-24v-48v-110v#manuals>).



The switch to turn the converter on or off is located in the electrical compartment. This switch is usually turned on at all times. Turn off the switch if maintenance is required for any 12V equipment or if a fuse must be replaced.



The converter provides a stable voltage to LED lighting, for example.

The following equipment is operating at 12V:

- Espar heater
- LED lights
- USB outlets
- MaxxFan
- Toilet
- Gray water dump valve
- Gray water heating pad
- Electric roof hatch/skylight
- Dash cams
- Fans in the electrical compartment

The 12V fuse panel is inside the electrical compartment.

Each fuse is labeled with its name and amperage. A red light indicates that the fuse has failed.

If a fuse needs to be replaced, replace it with the same amperage.



120V AC Electrical System

To generate 120V AC, we use the Victron MultiPlus 3K Inverter. A charge controller also charges the batteries from shore power or the Giandel inverter. Victron Energy MultiPlus

3000VA 24-Volt 120V AC Pure Sine Wave Inverter 70 amp Battery Charger, 50 amp Transfer Switch, UL-Certified

It is inside the electrical compartment.

([https://www.victronenergy.com/upload/documents/Manual-MultiPlus-3k-120V-\(firmware-xxxx4x\)-EN.pdf](https://www.victronenergy.com/upload/documents/Manual-MultiPlus-3k-120V-(firmware-xxxx4x)-EN.pdf))



There is a breaker panel for the 120V equipment and outlets, similar to those found in your home. See the picture above for the 12V fuses. The Main 50-amp breaker will turn on and off all 120V circuits.

The following equipment is operating at 120V:

- Pioneer Mini-Split AC/Heat Pump
- Water heater
- GFCI Power outlets

The Multiplus is configured with the Cerbo GX and connected to it via a direct-connect cable.

Solar Power System

A solar power system comprises one or more solar panels, cables, an on/off switch, and a charge controller. It successfully creates a safe and efficient electricity supply from the sun.

AEONrv provides a 700-watt solar panel array with a Victron SmartSolar Charge Controller MPPT 100/30 as a standard.



There are four flexible 175W solar panels located on the roof. Renology Flexible 175W Panel, RNG-DB-H-US Monocrystalline Well laminated with ETFE material. Features include:

- Provide thin but durable protection. Anti-scratch and durable ETFE film can protect the cell for outdoor use.

- High transparency ensures a higher conversion rate.
- Adopts IP68 Junction Box and IP67 Solar Connector.
- Ensure a longer lifespan for outdoor and marine use.
- Withstands high winds (2400 Pa) and snow loads (5400Pa).
- Reliable in harsh outdoor environments, ensuring a longer lifespan.



The panels require minimal maintenance and can operate all year round. The solar charger charges the batteries during the day. When the batteries have reached full capacity, the charger stops charging.

Don't walk on panels except very carefully.

Clean with a non-abrasive sponge or soft cloth using warm water, and gently wipe away dust, sand, and other dirt. Dirt or dust will reduce power output and strain the system.

When storing the RV for an extended period, we recommend turning the solar system off using the on/off breaker switch located in the electrical compartment.

June 2024 Update

A new panel product, from ALLPOWERS, will be installed starting in June 2024. It is a 200W flexible panel. The system has been upgraded to 800W.

These panels should not be walked on.

Features include:

- Single SF200 solar panel 9.03 lbs, 0.11 inch thin
- It uses advanced Monocrystalline material inside.
- Honeycomb ETFE is used on the surface, and the unevenness forms refraction to collect sunlight from different angles.
- The surface is made of IP68 waterproof ETFE material, which can withstand extreme weather conditions, including high temperatures, freezing, sandstorms, and rainstorms.

Charge Controller

Victron SmartSolar Charge Controller MPPT 100/30 gathers energy from your solar panels and stores it in your batteries. Using the latest, fastest technology, SmartSolar optimizes this energy harvest, intelligently driving it to achieve a full charge in the shortest possible time. SmartSolar maintains battery health, extending its life.

<https://www.victronenergy.com/solar-charge-controllers/smartsolar-100-30-100-50>

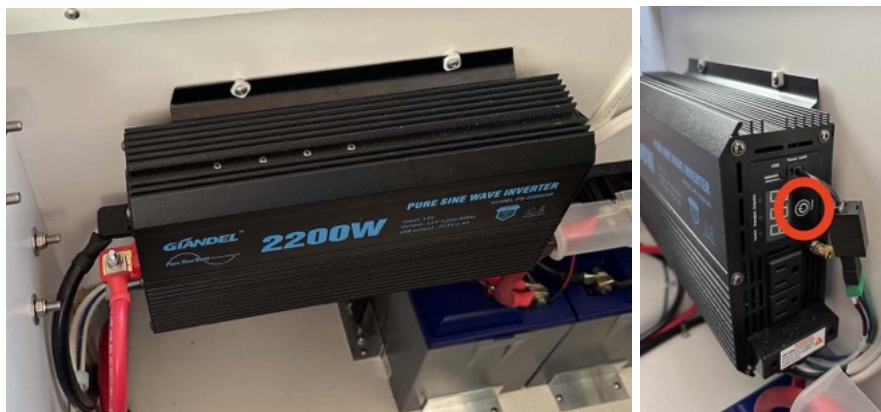
See the Electrical Monitoring section for details on configuring the Victron SmartSolar MPPT controller.

Giandel Inverter

The Giandel Pure Sine Wave Power Inverter provides 2200 watts of true pure sine wave continuous power from DC 12V to AC 120V. It has 2 AC outlets and one 2.4A USB port.

<https://www.giandel.com/collections/pure-sine-wave-inverter/products/ps-2200kar>

The unit features an ON/OFF switch and a remote control switch located below the steering wheel on the left-hand side. The LED displays the input voltage, output power, and protection modes.



Features include:

- Isolated Input/Output Design
- Soft start technology
- Over-voltage protection
- Low-voltage protection
- Overload protection
- Short circuit
- Overheat protection
- Polarity reverse protection (fuse)
- ETL is listed under the UL458 standard.

The inverter is located in the electrical compartment.

Please refer to the battery charging section above when operating the inverter.

Cerbo GX

This communication center enables you to maintain perfect control over your system from anywhere and maximize its performance. It is connected through the Victron Remote Management (VRM) portal or accessed directly using the GX Touch 50 screen or the VictronConnect app. The GX device combines all the best connectivity, redefining innovative power solutions in every way. See the [Cerbo GX online manual](#) for more information.

The Cerbo GX is inside the electrical compartment, and the GX Touch 50 display is on the wardrobe wall.



The GX Touch 50 display gives an instant overview of your system and allows you to adjust settings quickly. It is connected to the Cerbo GX with USB and HDMI cables.

Not only is most of the Victron equipment connected to the Cerbo GX, but it also monitors tank levels and battery temperatures.

Most configurations will be done using the display's menu pages. For detailed configuration settings, see [Section 6: Configuration and Monitoring](#).

Section 5: Equipment

General Information

The AEONrv base model has everything you need for camping adventures. However, we do offer a series of add-on options. Most of them you'd select when you ordered your RV, but many can be added after the fact. See the latest AEONrv options list and contact sales if you have any questions.

Exterior

Fold-up Steps

Torklift provides the GlowStep folding aluminum steps.

The steps fit snugly under the door for maximum ground clearance and do not block the door. The bottom height of the stairs is adjustable.

The stairs are held in place with two rubber bands when folded up. A lock with a key secures the stairs to the floor, preventing theft.

The glow-in-the-dark step lasts up to ten hours with only five minutes of light exposure - no batteries required.



AEONrv offers several options for the steps:

- [SafeStep](#) is a protective step riser guard that creates a vertical barrier, closing the gap between steps to help protect your pets and children from potentially falling. A quick and easy velcro-backed installation lets it stay attached to the GlowStep when stored.
- [DirtDestroyer](#) is a cleaning attachment for the GlowStep. It enables you to leave dirt outside your RV.



If the steps become too stiff to fold up/down, lubricate all the joints first. We recommend using [Blaster Dry Lube](#). If they are still stiff, loosen all the nyloc nuts (40 of them) with just a tiny turn.



Remember to fold the step back up before moving the RV. One way to do this is to use a velcro strip that attaches to the steps and put the strip on the steering wheel as a reminder.

Moon Shade Awning

AEONrv offers [MoonShade](#) as an option. It is a portable awning that provides reliable coverage for your outdoor site, day or night. With various anchoring systems, it sets up quickly and attaches to almost any sturdy structure.

MoonShade provides 9 ft by 7ft coverage but packs down tight and weighs only 8 lbs, making breakdown and storage a breeze.

MoonShade offers the XL version, a 12-foot by 9-foot shade without suction cups.

If you have this option, AEONrv will attach two anchors on the passenger side to cover the entry door and kitchen window. The shade can be attached to other locations around the RV by using the provided suction cups as anchors.

MooShade offers numerous [tips](#) and [videos](#) to help you set it up. They also provide additional accessories, like the MoonWall, that you may find helpful.

Tips for attaching the MoonShade to the fixed anchors:

- 1) Attach the first carabiner to the fixed anchor above the kitchen window. Use the Strut pole inserted into the outside pocket.



- 2) Attach the second carabiner to the fixed anchor above the entry door.
- 3) Slide the tension poles through the last clip and into the corner pocket. The clip can be hard to reach for a shorter person. Insert into the other corner and attach the other two clips.



- 4) You can leave guylines attached to the MoonShade for your subsequent usage.

Backup Cameras

AEONrv comes with the standard Ford backup camera installed at the top rear of the RV.

AEONrv offers two optional backup camera systems:

- BlackVue DR770X-2CH TRUCK Plus.
- Brandmotion Commercial FullVUE® Mirror Vision System.

AEONrv will continue to provide the best available backup camera options. We will give separate instructions on configuring each camera system for each option.



We offered the Garmin camera system and the Brandmotion 360 system as optional cameras on earlier models, but we no longer offer them.

Fold-down Table

The optional lockable fold-down aluminum table is installed next to the entry door. It comes in two colors: white or black. White is standard on white RVs, and black is standard on painted RVs.

The size is 800mm x 450mm x 25mm.



Ensure you lock the table while driving, since it can quickly unfold when unlocked.

Solar Panels

There are four flexible 200W solar panels from ALLPOWERS.

(<https://iallpowers.com/products/allpowers-sf200-flexible-solar-panel-200w>)

The panels are highly flexible, ultra-light, thin, and weather-resistant. They are designed to withstand extreme wind up to 2400 Pa and snow loads up to 5400 Pa. They are very reliable in harsh environments.

When maintaining the panels, such as removing snow, we suggest turning off the solar power switch in the electrical compartment.

You can walk on them, but we suggest you do not. Walking on the panels can exert excessive pressure on small areas, potentially causing cracks and damage to the panels.

When storing the RV for an extended period, we recommend turning the solar system off with the on/off switch in the electrical compartment.

You can clean the panels with a non-abrasive sponge and water. We suggest regular maintenance to remove dust, sand, and other dirt. Built-up dirt and stains will reduce the panels' power output. Avoid using sharp and/or hard cleaning tools.

It is recommended that you clean in the morning or evening when the sun is weak.

Inspect electrical and mechanical connections every six months to confirm that they are clean, secure, and undamaged.

Prevent leaves and other objects from covering the surface of the solar panels. Partial shading of the solar panel will not only affect the efficiency of power generation, but may also cause excessive current at some places and burn out the components.

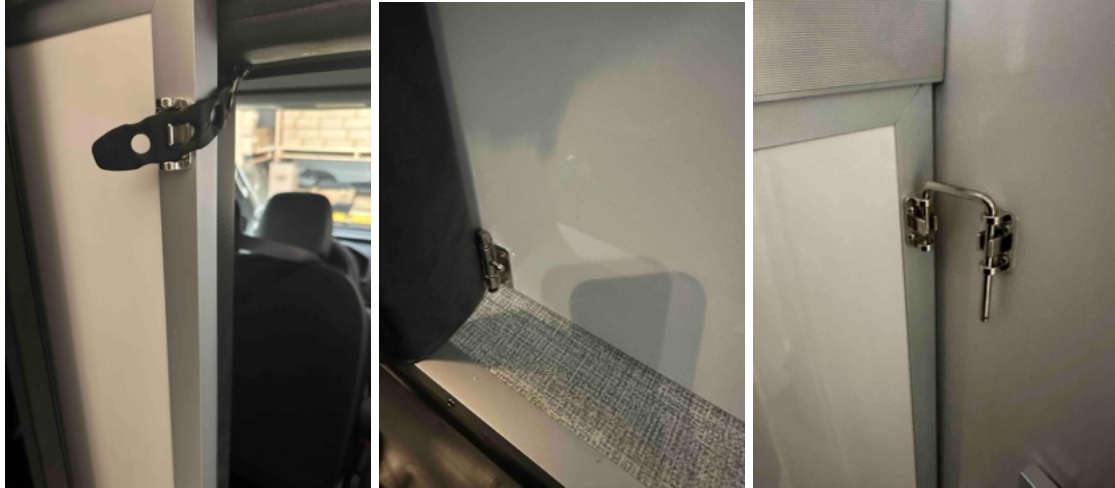
Interior

Sliding Door

The insulated sliding door between the cab and the house provides a way to close off the house from the cab. This is beneficial in both warm and cold weather conditions, as it is challenging to insulate the cab itself. If you leave the door open during the night, you may experience condensation inside the cab, but there will be none in the house.

The door includes the following features:

- Made out of foam and fiberglass, 30mm thick.
- Use the rubber strap to keep the door open while driving.
- Locking mechanism on the floor inside the cab.
- Locking mechanism at the top of the door inside the house.



Windows

The AEONrv Arctic Tern Double-Pane windows are made by TernOverland (<https://www.ternoverland.com/products>).



The awning-style windows allow maximum ventilation for AEONrv, and the double pane acrylic glazing meets strict European ECE standards and is DOT-certified.

AEONrv comes standard with three windows and an optional 4th window in the bedroom.

The bedroom windows open to 10 and 35 degrees, and the other open to 20, 40, and 60 degrees.

Semi-lock position that allows air in during windy conditions.

Each window includes a blind and screen: a fine mesh insect screen and a blackout blind with a reflective exterior.

These can be used separately or together for infinite combinations of privacy and air.

The blind also creates a second dead air space for maximum thermal efficiency in cold conditions.

Weigh 60% of a similarly sized glass window.

One-year warranty against defects in workmanship and materials.

Features include

- Heavy-duty powder-coated aluminum frame

- UV-resistant, double pane, gray acrylic glazing
- Telescopic strut supports that hold the window securely when open
- Push locking handles
- High-quality rubber seals
- Four choices of inner frame rings
- Full 1-year manufacturer's warranty
- All windows include Blinds and Screens

Opening a window

The windows feature prop rods on each side. These rods have notches to prop your windows open. Push the window open slowly and stop at the preferred notch setting. Safety latches at the sides and bottoms secure the windows. To open a window, release all window latches and push open.

1. Side Latches - Push the center tab and pull down toward the bottom of the window frame.
2. Bottom Latches - Push the center tab and pull toward the left-hand side of the window frame.
3. Push the window open.

Closing a Window

Extend out (past the last notch setting); the window will retract. Grab one of the window latches, pull the window toward you, and secure all latches into a locked position.

Lagun Table

The Lagun Table stand is sturdy and quickly locks in place by turning the handles. It is ready for use or travel. The Lagun adjusts vertically on the bracket so you can get the height right where you want it. It swivels 360 degrees on two points. The three rotating handles are quick and easy to use.



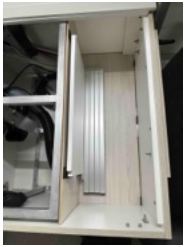



There is a second bracket to put the table at the end of the forward dinette bench. The tabletop is also used when making the dinette bed.

Dinette Bed

The dinette area is designed as a second bed. The bed is 44" x 68" (5 feet and 8" long). It uses the tabletop, seat cushions as the mattress, legs, and an extension support piece. The legs, extra cushion, and support extension are stored under the seat belt bench above the Espar heater.




Use the following steps to keep the bed parts in the storage area:


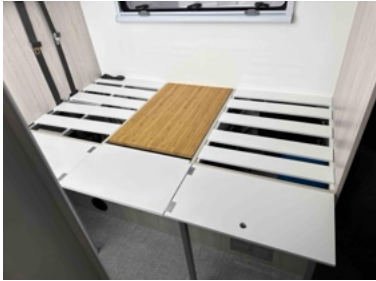

Step	Details	Image
1	Remove the slats to access the storage box	
2	Put the legs and extra support in the box. Position the support piece so that the screw heads are in contact with the foam strips on the box side.	
3	Move the legs together and store them against the support piece	
4	Use the extra cushion to pinch the support piece against the wall. Start by pushing the end against the support piece, then push down the other side to make a snug fit. This will prevent the cushion from catching on the aluminum brackets on the support piece.	

Note: on early AEONrv models, we still needed to design the storage area, and the legs plus support piece were stored next to the Espar heater. The legs and support piece are held in place with a bungee cord.



How to assemble the bed

Step	Details	Image
1	Remove all cushions and the large slat with the hole in it to access the legs and support extension stored under the seat belt bench.	
2	Attach two legs to the large slat. Laying the slat flat makes it easier to attach the legs.	
3	Put the slat with the legs into the clips at the end of the bench. They should fit snugly into the clips. Distribute the remaining slats evenly over the bench opening.	
4	You can turn this bench into a launching chair if you're not making the whole bed.	

Step	Details	Image
5	Remove the tabletop from the Lagun stand and place the stand on the floor underneath it. Put the tabletop between the two benches on the support rails.	
6	<p>Attach the second large slat to the clips on the other bench.</p> <p>Put the extra support piece between the two large slats with legs. The support piece has metal pegs on each side that will be inserted into the large slats to prevent it from moving.</p> <p>Distribute all the slats evenly on both sides.</p>	
7	<p>Arrange the seat cushions to form the “mattress.”</p> <p>Put the smaller cushions up against the wall.</p>	

Pantry

To pull out the pantry, press down on the yellow tab and grab the pantry door with your hand inside the cutout above the tab. Pull the pantry out to lock it in place. To close when locked, press down on the yellow tab and push the pantry drawer back in.



We updated the slides on newer models to match the pull-out steps. The tabs are blue. To pull out the pantry, press up on the tab instead of down with the yellow tabs.

Foldout Steps

At the base of the bed, two fold-out drawers are used to climb into the bed. Lift the lid of the step to access the drawer space. The steps feature anti-slip material on the surface and self-glowing strips on the top sides, making them ideal for low-light situations.



How to operate:

- Pull out the bottom drawer/step using the two blue release levers. Fully extend the step until it locks into place.

- Pull the upper drawer/step using the two blue release levers. Fully extend the step until it locks into place.
 - When closing the drawers, use the two blue release levers to unlock, and make sure the steps are pushed in until they are locked into place.
-



Only step on the upper step if the lower step has been pulled out to support it. The upper step will not support a person's weight by itself. A warning label is attached to the upper step.



Pet Tray



There is a pull-out pet tray at the bottom of the fridge stand. Its locking mechanism keeps the door open when the tray is pulled out and locks in place when pulled out entirely.



The Pet Tray is no longer installed on any models that have the NovaCool fridge installed. This fridge is taller, so the tray was removed.

LED Lights

The lights in the AEONrv are all LED.

Location	Details
Bathroom	The light is located above the medicine cabinet. The on/off switch is on the light bar's right side.
MaxxFan	The light is built into the fan. The black on/off switch is in the corner of the fan frame. The MaxFan remote control in the bedroom can also control the light.
Dinette	The dimmable light strip is located under the overhead cabinet. The on/off/dimmer switch is located on the fridge wall.
Kitchen	The dimmable light strip is under the overhead cabinet, and the on/off/dimmer switch is on the pantry wall.
Mode Light	<p>The color light strips are located above the overhead cabinets. They are controlled with a remote control. The controller unit is located in the overhead cabinet.</p> <p>The controller unit has a Match key to pair the remote. To pair, short-press the match key and immediately press the on/off key on the remote.</p> 
Bedroom Reading Lights	<p>The bedroom has two dimmable reading lights. Tap the lamp base touch switch to adjust brightness from bright lights for reading to low lights as ambient light. The touch switch has a brightness memory function.</p> <p>The light has a USB charger port and can charge smartphones, tablets, or other mobile devices. It will continue to charge even when the lamp is turned off.</p> 
Skylight	The bedroom Skylight has LED lights in the frame. An on/off switch is on the frame closer to the back wall.
Garage	There are 2 LED lights in the garage, one on each side of the doors. Use the slider switch on the light to turn it on or off.

Gear Garage

The gear garage offers many customization and storage possibilities. It includes two L-Tracks with six retention rings. The rings can be moved to a desired location to tie down various objects in the garage. To move them, pull out the ring while pushing down on the base to unlock it and move it to another location on the track. Many other retention products are available for further storage customization.

The L-Tracks are positioned so it is possible to install an additional shelf on top of them.



AEONrv is also designing an optional slide-out tray that can be installed on the floor.

Additional garage features include

- freshwater tanks and a water filtration system.
- Storage shelf
- Two LED lights, one on each side.
- Two 120V AC outlets, two on each side
- Two USB outlets on the driver's side
- One 12V DC outlet on the driver's side
- A closable air vent from the Espar heater.
- Removable bed support panels.

Shower

The multi-usage shower area is designed to provide the following key features:

- Shower
- Bathroom
- Mudroom
- Dry room

HammerHead Showers manufactures the all-metal shower. The shower head is made from 304 stainless steel and brass and reinforced with commercial-grade finishes that never flake or rust. A Limited lifetime warranty backs it.



Features include:

- One setting: High-flow shower sprayer. Customized silicone nozzles with 2.5 GPM flow rate.
- It has a 6-foot-long flexible metal hose. You can get your hand shower head where you need it most.
- The flexible stainless steel coil and silicone inner tubing do not collect biofilm-like PVC, making it one of the most hygienic shower heads.
- Set the spray angle with the solid brass shower head holder ball, adjustable up to 23 degrees.
- There is a shower shut-off and flow control valve at the base of the shower head. This can come in handy if you bring the shower outside and set the temperature on/off switch to your desired temperature. You don't have to reach into the shower to turn it on/off when using this valve.

There are many options to attach the shower to the outside using removable suction shower head holders. You can find them on Amazon starting at \$8.00. AEONrv does not offer these as options. If you use one of these, remember to remove it before you move your AEONrv, since it will eventually lose suction and fall off.

The shower curtain covers the sink/toilet area and the front door. You can tie it together and push it into the corner to keep it out of the way when unused.

The removable bamboo shower tray features slots that allow water to pass through. For care maintenance, please see [Section 7: Care and Maintenance](#).

The shower drain cover assembly kit features an easy-to-operate lift-and-turn mechanism. We recommend keeping it closed when not showering to prevent unwanted smells or potential water backflow from the gray tank. A mesh strainer above the drain cover prevents hair and larger dirt particles from entering the gray water tank.



There should be no need to use mechanical drain-cleaning devices, as the drain feeds directly into the gray water tank via gravity.

Nautilus provides a retractable shower door. To close and open the door, push the door into or out of the groove on the opposite frame.

Drying Room

When using the bathroom as a drying room, use the following steps:

- Start the Espar heater
- Ensure the hot air at the lower part of the wall close to the outside door is not blocked.
- Close the vents in the garage and dinette area to direct the airflow into the shower area.
- Attach the retractable clothesline to the attachment point above the medicine cabinet.
- Hang your clothes on the line.
- Start the MaxxFan to suck the wet air out from the shower with the fan air-flow direction set to the out direction.

Medicine cabinet

This cabinet has two sliding doors with acrylic mirrors, a movable shelf inside, and a 20A 120V AC outlet in the bottom right corner.

Use a soft cloth with mild detergent or Windex to clean the mirrors. Since the mirrors are not made of glass, avoid using abrasive materials to clean them, as they can easily scratch the surface.



Bathroom Sink

The bathroom sink folds up to make room for the toilet. Its magnetic locking mechanism keeps it upright.

Fold the sink down when using it.

It drains straight into the gray water tank, raising it upright.



Toilet

AEONrv offers two options for toilets.

1. Thetford Cas:ette Toilet (<https://www.thetford.com/product/c220-cassette-toilets/>)
2. Separett Tiny Toilet (<https://separett.com/en/urine-diverting-toilet-separett-tiny-with-urine-tube>)

The Thetford cassette toilet is standard, and the Separett Tiny is an optional upgrade.

Thetford Cassette Toilet

This toilet provides the following features:

- The space-saving bowl rotates 180 degrees on the base
- 4.75 gal. (18L) waste tank capacity
- Waste tank level indicator
- Integrated no-splash pour spout
- Lockable service door
- The waste tank includes a handle and wheels to ease dumping
- Direct connection to the RV freshwater tank
- Electric flush

Please refer to the provided user manual for instructions on using and maintaining the toilet.



Do not use stiff brushes or homemade products to clean or lubricate the valve and seal of the cassette toilet. These will damage the seals and surfaces, allowing odors to escape from holding tanks. Thetford recommends using [Aqua-Clean](#) and toilet seal lubricants.

Separett Tiny Toilet

The Separett Tiny, a urine-diverting toilet, is designed for compact spaces, such as RVs and tiny homes. It operates on a 12V electrical connection and features a 50mm ventilation pipe, accessible behind a lockable service door. This door should remain locked as it is not used for toilet servicing.

By separating urine, the toilet significantly reduces the volume of waste and odor. Air is drawn out of the toilet space via the venting pipe, and urine is discharged through a 32mm pipe connected to the gray water tank. For two people in a permanent residence, the waste container typically needs to be emptied once a week.

A quiet and efficient fan continuously circulates air, removing any minor odors and improving indoor air quality. It is recommended for continuous operation. The fan switch, located at the back of the toilet, illuminates a red light when active.

For detailed usage and maintenance instructions, please consult the provided user manual.

Appliances

Refrigerator/Freezer

The [Nova Kool RFU6406 D Refrigerator](#) is a 6.8 cu. ft. (193 liter), dual compressor/thermostat fridge with a pull-out freezer, providing better cooling and precise temperature control for both the fridge and freezer compartments.

Starting Up

There are two thermostats in the fridge. The freezer thermostat is at the bottom of the refrigerator.

The OFF position is reached by turning hard counterclockwise past the click. The reference point is indicated by a sticker beside the knob.

Turn the power on by setting each thermostat between 3 and 4. You can make further adjustments to suit your requirements after the box has cooled down. Allow the refrigerator to reach its target temperature before loading it. Setting the thermostat to a higher setting, i.e., 7, will not decrease the time required for the unit to cool down to its normal operating temperature.

General Tips

Here are some general guidelines on food storage:

Food	Preservation time	Method of preservation	Position in fridge
Clean meat and fish	2 or 3 days	Exclusively wrapped or closed in airtight containers and placed in the fridge after they have cooled down if previously heated	On the grille/shelf under the freezer area
Eggs	1 month		Use the door compartments
Butter or margarine	1 week		Use the door compartments
Cooked foods, cakes and soups	3 or 4 days		On the grille in the lowest part of the refrigerator
Cold cuts, fresh pasta, creams, puddings, chocolate, pastries, animal fats	3 or 4 days		On any grille/shelf
Water and beverages			Use the door compartments
Fruit and vegetables			In the vegetable drawer, in the lower part of the refrigerator

Refer to the [Defrosting and Cleaning](#) section for more information on maintenance.

The refrigerator temperature should be between 36°F and 39°F, and the freezer should be < 0°F.

For best operating results:

- Do not overfill and leave room for air circulation around your food
- Pre-chill the fridge before adding any food
- Add already chilled food to avoid reducing the temperature and using excessive energy
- Do not allow the house's interior temperature to rise excessively while running the fridge, as this will consume additional energy and generate excess waste heat.
- Do not store potential explosive items, such as aerosol cans with flammable fuel.
- Most efficient usage is at altitudes below 7,000 feet.

Induction Cooktop

A one-burner Duxtop portable induction cooktop comes standard with the AEONrv. The portable cooktop dimensions are 11.4"D x 14" W x 2.5" H. Features include

- 120V/60Hz 15 amps.
- Lightweight and compact for easy handling and storage.
- 20 preset power levels (100W to 1800W) and 20 preset temperature level settings (100°F to 460°F).
- With 83% energy efficiency, an induction burner is more efficient than traditional gas or electric stoves.
- Touch control panel: child safety lock keeps the cooking and timer settings from being accidentally changed once set; fast boil button; keep warm button (1-30 minutes at 140°F); up to 10-hour timer button.
- The auto-pan detection will shut the unit off automatically after 60 seconds if no cookware or incorrect cookware is detected.
- It is compatible with induction cookware with a diameter of at least 5 inches, ensuring a large and uniform heated area.
- 2-year manufacturer's warranty, as well as customer service.



There is an option to upgrade to a two-burner version. Features include

- two independent heating zones that allow you to set each separately using the LCD screen.
- 1800 Watts for the left burner, 20 power levels, from 100 to 1800 Watts; 20 temperature settings, from 100°F to 460°F. 1000 Watts for the right burner.



The cooktop is stored under the kitchen sink and is secured with a bungee cord.



Always store the induction cooktop with the glass side facing in to prevent damage.



Please read the provided user manual before starting to use the cooktop. It gives crucial cautions, warnings, and safeguards.

It is essential to select the proper cookware. The induction cooktop will only operate with compatible cookware. The rule for determining cookware is *“if a magnet sticks to the cookware bottom, it will work on your induction cooktop.”*



Do not use cookware made of glass, ceramic, copper, aluminum, or a non-magnetic stainless steel bottom.

Microwave

The optional Commercial Chef microwave (CHM660B) is in the cabinet above the kitchen sink. It is attached to the shelf bottom, so it can not move.



Please read the user manual for safety, use, cleaning, care, troubleshooting, and warranty details.

The mechanical dial controls are easy to use, especially for people with vision impairments or anyone who wants to keep it simple and is looking for an alternative to the electronic controls on many of today's small appliances.

Water filtration system

AEONrv provides the Clearsource OnBoard water filtration system for RVs.

(<https://www.clearsourcerv.com/products/clearsource-2-canister-onboard-rv-water-filter-system>)



The filter system is located in the garage and can be bypassed if maintenance is needed.

It is designed with new best-in-class 0.2-micron protection against contaminants – better than other in-line, single, or dual canister RV water filter systems on the market.

The hospital-grade, 0.2-micron filter captures contaminants other systems miss. And it carries an “absolute” rating – meaning every pore is the rated size or better. With this enhanced protection, the system removes or reduces bacteria like Legionella and E. Coli, as well as cysts like Giardia. Paired with a first-stage coconut shell carbon block filter, the system improves taste and smell and removes or reduces sediment, chlorine, chloramines, volatile organic compounds, and other contaminants.

The filter elements are designed for regular replacement. We recommend replacing them at least once a year, and more frequently if you travel for an extended period.

To replace a filter element, take the supplied plastic wrench and use it to remove the canister. Remove the filter element, replace it with a new one, fill the canister with water, and reattach the canister. Replace each filter element with the appropriate replacement part.

Replacement filters are available on [Clearsourcerv.com](https://www.clearsourcerv.com).

MaxxFan

The MaxxFan Deluxe features a built-in rain shield. Use the fan in ANY weather - even when it's raining. Vent, Fan, and Vent Cover all in a single unit.

The Maxxshade Plus blocks sunlight and UV rays. The shade material has a reflective backing to block light and reflect heat.



Features include:

- Built-in rain cover provides full-time protection while the fan is on or off
- Use the fan while it's raining or driving.
- Powerful 10-speed reversible fan with a thermostat to control room temperature
- Remote Control with programmable thermostat
- Easy to remove interior insect screen; no tools required
- Features a powerful, fuse-protected, long-life, sealed ball bearing, 12-volt fan motor, and a 12-inch, 10-blade fan
- 2-year limited warranty with a lifetime limited warranty on the lid
- Retractable, spring-loaded roller shade with secure "snap-lock" closure
- LED accent lighting

Arctic Tern electric roof hatch/skylight

The Arctic Tern Roof Hatch features a German-made Bosch drive motor and a removable emergency hand crank.

The Roof Hatch features a breathable seal that prevents dust from entering while allowing some breathability in the bedroom. The dome is smoked double-pane acrylic. Like all Arctic Tern window panels, these meet strict ECE/DOT UV resistance and impact standards. It features a pleated retractable screen and blind. The body is high-strength white ABS. Bright white LEDs can serve as the primary light in the bedroom.



If the hatch fails to open, there can be several things that may cause this:

- The cables that open the hatch are broken.
- The main 12V fuse failed.
- The internal 12V fuse failed.
- The motor failed.

If the hatch is failing, contact AEONrv support. We will work with Tern Overland to arrange for it to be repaired at one of their installers or support centers.

If the cables are broken, the hatch will not close. You can check this by hitting the power button and hearing the motor running, but the hatch is not opening. If you must drive the RV, use tape to keep the hatch securely closed.

If you have power to the hatch, check by turning on the light. The internal 12V, 5 amp fuse may have failed. The fuse is located inside the frame close to the motor.

On later models, we relocated the fuse to a position accessible behind the plastic cover next to the motor. If the fuse cable is not accessible, the inside frame has to be removed to reach the fuse.

Opening Manually

The Arctic Tern roof hatch may be opened manually if power fails. You should have received a 6mm Allen manual crank tool, as shown below:



Disconnect the unit's power supply before removing the roof hatch switch panel on the ceiling-mounted trim panel. This can be done by removing the fuse for the hatch in the fuse box.

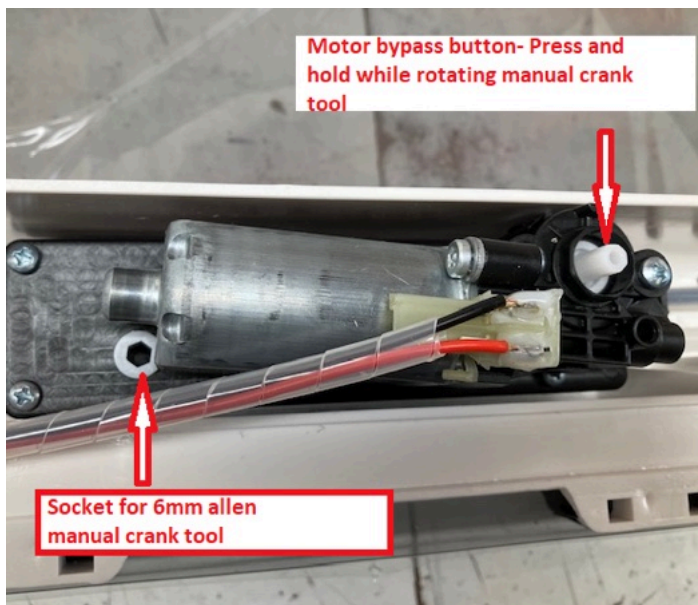
Using a pick or a small flat-blade screwdriver, remove the plastic hole plugs covering the switch panel mounting screws:



Using a #2 Phillips screwdriver, remove the two Phillips screws securing the switch panel:



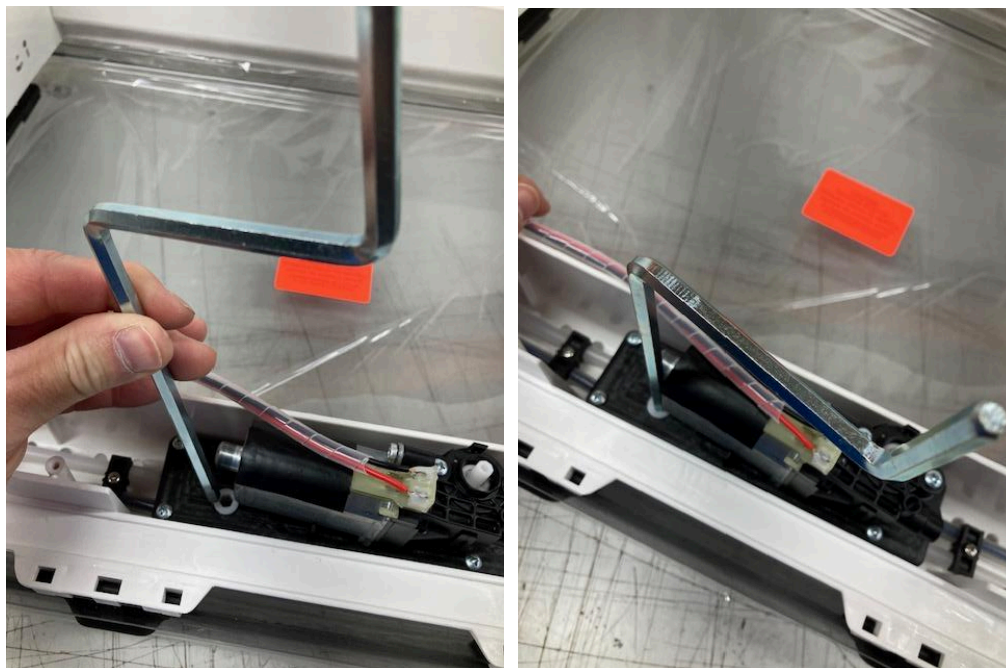
Lower the switch panel down to expose the motor and gearbox.





The motor bypass button in the photo above must be depressed and held while rotating the manual crank tool. Failure to press and hold the button will damage the drivetrain. If you feel resistance while attempting to open or close the hatch manually, please stop and contact Tern Overland for technical assistance.

Insert the manual crank tool into the white 6mm socket, as shown below.



Rotate the tool clockwise to open the hatch and counterclockwise to close the hatch. Remove the tool from its socket after completing the task that necessitated the manual crank tool.



Remove the Allen crank tool from the socket before reconnecting your power source to avoid injury.

Reinstall the switch panel, switch panel mounting screws, and mounting screw plastic hole plugs. Reconnect the roof hatch power supply and check for proper functionality.

Heating and Air Conditioning

Pioneer Mini-Split AC and Heat-Pump

AEONrv comes standard with a high-efficiency and quiet (25-37dB) 9K BTU mini-split air conditioning unit with a heat pump for heating outdoor temperatures down to -13°F and cooling outdoor temperatures up to 140°F.

The unit has a remote control and networking capabilities (WiFi and Bluetooth).

Pioneer also provides an Application for both iOS and Android devices - AirLink. Please download the application, create your account, and add the unit to the app.



We recommend downloading and configuring the AirLink app when you receive your AEONrv. The user manual may obscure a few steps for connecting to the unit using WiFi. For example, you must create a 'home' in the app before adding the unit.

Airlink allows you to gain complete control over your mini-split heat pump system wirelessly through the app. You can toggle between different modes, change the temperature, turn the system on/off, and set custom programming and schedules. You can also access all special features and configure every part of the system's functions. You can also sync with smart home assistants like Alexa and Google Home.

Features include:

- **Cooling Performance:** 9,000 BTUs of cooling power ensure you stay comfortable all summer.
- **Heating Power:** In the winter, turn to its 9,500 BTUs of supplemental warmth.
- **Automatic Operation:** Set your desired room temperature and let the unit choose the best operating mode and fan speed.
- **Dry Mode:** Perfect for rainy days, this setting removes excess moisture from your indoor air.
- **Fan Only Mode:** When cooling or heating isn't needed, its three-speed fan can circulate fresh air throughout the area.
- **Turbo Mode:** This fast-acting setting allows the unit to reach your set temperature more quickly.
- **Energy-Saving Mode:** Its eco-mode helps to reduce energy usage by running the mini-split in its most efficient settings.
- **Nighttime Use:** Turn the unit to night mode, allowing it to run at its lowest fan speed while gradually increasing the room temperature to keep you comfortable while you sleep.

How to add your unit to the Airlink App



Ensure your phone is connected to a 2.4 GHz Wi-Fi network with no VPNs active.

1. Turn off the unit using the remote control.
2. Turn the circuit breaker that is powering the outside unit off for 10 seconds, then turn it back on.
3. Open the Pioneer Airlink app
4. Turn on the unit using the remote control.
5. Press the "DISPLAY" button on the remote control 6 times in a row within 6 seconds.
6. The indoor unit will flash "AP" or "CF" on the LED display.
7. The unit is ready to pair.
8. Use the Airlink app to add a new device. Follow the instructions.

Links

The AC/Heat pump and Airlink provide user manuals that explain the products' usage in great detail.

- Pioneer User manual: [WYT Wall Mount Diamante Ultra \(20.0~23.0 SEER\)](#)

- AirLink/Wifi User manual):
<https://www.pdhvac.com/site/downloads/manuals/WYT-WIFI-UM.pdf>
- User manual (explain how to configure Bluetooth):
<https://fccid.io/2ANDL-TCWBRCU1/User-Manual/Users-Manual-4891373.pdf>



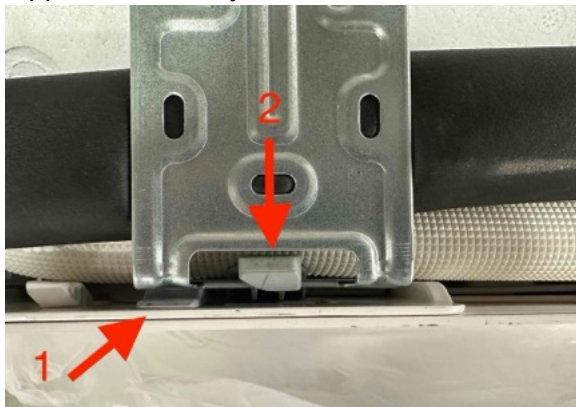
If the inside unit has been removed, ensure it has been clipped in completely to secure it to the mounting bracket when replacing it. Two clips on each side prevent the unit from moving up and away from the wall.

AEON also attaches a tie wrap around the clip and the bracket to prevent it from releasing by itself.

Clip #1 prevents the unit from moving up, and clip #2 prevents the unit from moving away from the wall.

To release the unit from the mounting bracket, press the plastic tab below clip #2. The tab is marked "Press". Move the unit away from the wall, then up, to remove it from the mounting bracket.

The following picture shows the mounting bracket from behind when the clips are clipped in correctly.



Espar Airtronic Heater

The Espar Airtronic M2 B4L Commercial 4kW gas-powered heater (12V) is located under the dinette seat, alongside the seat belts. It is ducted to three locations: the dinette/main cabin, gear garage, and the shower.



It combines high heating performance with a compact design, quiet operation, and automatic altitude adjustment up to 3,000 meters or 10,000 feet.

The heater uses the main gas tank as its fuel source, so additional gas containers are unnecessary. The fuel tank extractor is located above the bottom of the gas tank. When running the heater, you cannot use up all the fuel in the main gas tank. At least 5 gallons of gas will remain in the tank when the heater's fuel source stops supplying it.



There is a warning label on the floor next to the Espar heater. It is important not to store any flammable material close to the heater since it will get very hot during operation.



The control unit is on the wardrobe wall beside the Cerbo touch display. The user manual provides detailed information on operating the unit.



The one knob is used to start and program the unit. Features include:

- Long-press function for immediate heating
- The current operating mode can be seen at a glance
- Three programmable timer locations

- Integrated temperature sensor
- Diagnostic function for the user and the workshop


Espar provides a video of how to operate the unit on YouTube [here](#).

They also have a YouTube video on how to clear error codes if the unit starts after multiple error codes.

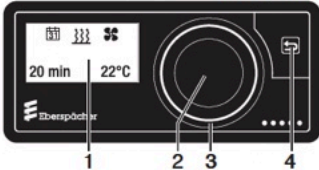
Easy Start Instructions

EasyStart Pro

INSTRUCTION CARD Quick Reference



1. DISPLAY
2. BUTTON AND ROTATING KNOB
3. LED RING
4. BACK BUTTON






LED Indicator Ring

- Red ring: Heating mode
- Blue ring: Ventilation mode
- Orange ring: Residual heat mode
- White ring: System configuration
- Red flashing ring: Fault in one of the connected heaters or in the EasyStart Pro




Menu Navigation and Selection

- Rotate knob to navigate the main menu or sub-menus as well as change values and selections.
- Press knob to confirm value/selection
- Long press (>2sec): Immediately start or stop all connected heaters.







Heating Mode – Select temperature and operating duration

1. Select  symbol.
2. Airtronic only: Temperature set point is displayed, rotate knob to adjust, press to accept.
3. Maximum heater runtime is displayed, rotate knob to adjust, press to accept.
4. To turn off or adjust temperature or run time select  then select OFF or .

Ventilation Mode¹ – Run fan without heat

1. Select  symbol.
2. Maximum runtime is displayed, rotate knob to adjust, press to accept.
3. To turn off or adjust run time select  symbol then select OFF or .


Timer Mode – Scheduled Operation


1. Select  symbol.
2. Select ,  or  to choose a timer program/schedule.
3. Choose ON or OFF to activate/deactivate schedule, or  to edit the selected schedule (steps 5 to 8).
4. An activated schedule will show a ☒ next to the schedule number on the Timer menu screen. A  symbol will be shown on the main status screen when a schedule is active.

Continued on reverse side Rev. 0



EasyStart Pro

INSTRUCTION CARD Quick Reference






Editing:









5. After selecting the edit option, first select the days on which to activate the heater by scrolling through the days of the week selecting those desired. A selected date will have a ☒ next to it. Scroll to, and select OK when finished.
6. Set the desired start/depart time³
7. Select the desired heater operation mode  (heating) or  (ventilation)
8. Select the operating temperature and/or duration.

Residual Heat Mode² – Heater OFF, Water pump and Fan ON

1. Select  symbol.
2. Choose ON or OFF to activate/deactivate Residual Heat Mode.

Settings Menu

The following options are available in the standard settings menu


-  Set current time
-  Change between 12 and 24 hour time formats
-  Select the current day of the week
-  Change temperature units
-  Turn on/off high altitude compensation²
-  Turn on/off Low temp. heating mode
-  Fault diagnosis menu
-  Reset to factory default settings

Refer to the user manual for more details.

¹ Feature only available on Airtronic heaters.
² Feature only available on Hydronic heaters.
³ "Start" or "Depart" is selected during initial set-up. See manual for more details.

Operate the heater at least once every month for a minimum of 15 minutes, throughout the year.
 Regularly take time to observe the Eberspächer heater, ducting and piping to ensure they are free of restriction or damage.

Eberspächer Climate Control Systems
 800-387-4800
www.eberspaecher-na.com



Maintenance

- Switch the heater on once a month for about 10 minutes, even outside the heating period.
- Before the heating period starts, the heater should undergo a trial run. If persistent extreme smoke develops, unusual burning noises or an evident fuel smell can be perceived, or if electric/electronic parts heat up, the heater must be switched off and put out of service by removing the fuse. In this case, the heater should not be started again until it has been checked by qualified staff trained in Eberspächer heaters.

- Check the combustion air supply and exhaust system openings after extended standstill periods. Clean if necessary.



Ensure the Espar heater is turned off and not running before filling the gas tank. A warning label inside the gas tank fill cover serves as a reminder.



Espar Airtronic S3 B2L

AEONrv introduced a new version of the Espar heater in 2024. This version is the third generation of the heater. It is more efficient and works at higher altitudes.

It is using the same control unit as the M2 B4L model.

Benefits of the new Airtronic S3 include:

- Heating at high altitudes
Altitude adjustment will be automatically handled by the Eberspacher Airtronic 3 up to 4000m (13123ft) above sea level; no additional altitude kit is required, the AS3 has an integrated altitude sensor.
- Less noise, more comfort
The new AS3 heater package also includes the new, almost silent, Eberspacher digital fuel dosing pump with mechanical damping ring and intelligent current control. The S3 also includes an exhaust muffler and a quiet blower motor.
- Seamless power output control
Automatic modulation of the Airtronic AS3 heat output enables the heater to maintain the required air temperature in the vehicle whilst delivering maximum fuel efficiency. Using the Easy Start Pro control, you can choose to set temperature sensing at the heater unit (recirculated air) or the Pro control.
- Take control of your fault codes with onboard diagnostics.
The Airtronic S3, coupled with an Easy Start Pro, will give a text-based fault description,

reducing confusion and saving time diagnosing any issue. In the unlikely event of a heater fault, the workshop menu can be used to find [P000 codes](#) (identified in the workshop manual) for further fault finding.

- Low maintenance

The Airtronic 3 has a new brushless motor and a potential service life of 5000 hours. Of course, this depends on installation and how the unit is used. It is advised you have your Eberspacher serviced annually to ensure your heater is working as efficiently as possible.

Section 6: Configuration and Monitoring

General

AEONrv's electrical system is a top-of-the-line power system that allows customers to expand and evolve their systems as needed. This system features a 100% Victron Energy-based power plant with Battle Born LiFePO4 batteries.

Victron's (<https://www.victronenergy.com>) and Battle Born's (<https://battlebornbatteries.com>) websites have much information.

Each component has detailed user manuals for all possible configurations. This section highlights our main configurations for each system that make AEONrv perform at its best. We may update the configurations over time if we find better ways to do things.

System management and monitoring of the system is done mainly through the Victron Connect app, Cerbo GX with Touchscreen, and Victron Remote Management (VRM).

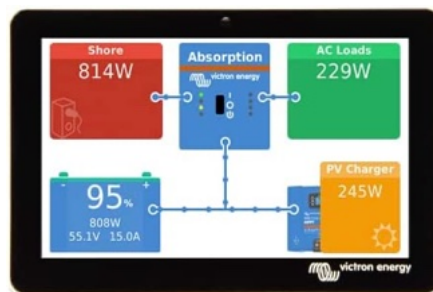
A list of manuals for the main components is detailed below:

Component	Manual
Cerbo GX	https://www.victronenergy.com/upload/documents/Cerbo_GX/GX_Device_Manual-en.pdf
MultiPlus 3K Inverter	https://www.victronenergy.com/upload/documents/Manual-MultiPlus-3k-120V-(firmware-xxxx4xx)-EN.pdf
SmartSolar MPPT 100V/30A	Manual SmartSolar MPPT 100-30 100-50 (HTML5)
SmartShunt	https://www.victronenergy.com/upload/documents/SmartShunt/Manual_BMV_and_SmartShunt-en.pdf

Cerbo GX

The Cerbo GX is connected through the Victron Remote Management (VRM) portal or accessed directly using the GX Touch 50 screen or the VictronConnect app.

GX Touch 50



Configuration

The GX has already been configured and optimized for your RV. There are many configuration parameters available.

It has been configured to use the VRM Management system, allowing you and AEONrv to perform remote diagnostics and configurations.

The configuration settings are detailed in the table below. It does not include all available menu items; instead, it shows only the values configured by AEONrv for your RV. For a complete description of all configuration options, please refer to the Cerbo GX manual.

Item	Setting	Description
General		
Access level	User	We set this to 'User' to prevent accidental and unwanted changes to the configuration. The installer has additional privileges and requires a password once changed from the default. The password is available from AEONrv if this is the case.
Remote support	Yes	This allows AEONrv engineers to access your system in case of a problem.
Firmware		
Online updates: Auto update	Check only	If this is enabled, the GX device will check with the server to see if a new version is available. It is possible to set it to disable or update automatically. We don't want to update automatically since it can disrupt the system.
Date & time		
Change time zone	Select the correct local time zone from a list	

Remote Console		
Disable password check	Password authentication is not required for remote console access.	
Enable on VRM	Yes	Enabling VRM will allow connection to the Cerbo GX from anywhere via the VRM portal.
Enable on LAN	Yes	Enabling will allow a direct connection to the Cerbo GX by typing its IP address or Venus.local into a web browser or VictronConnect when connected to the same network. Only enable this function on trusted networks. Disable the password check or set the password first.
System setup		
AC input 1	Shore power	Select Generator, Grid, or Shore power. Note that additional configuration is required to set up these options fully.
Battery Monitor	Automatic	Select the State Of Charge (SOC) source.
Display & language		
Show mobile overview	yes	Enable this to show the mobile overview page designed for Marine and Remote Vehicle applications. This overview gives direct access to the AC Current limit, On/Off/Charger-only settings, and pump control. It also shows up to four tank levels.
Language	English	Choose English, Dutch, Chinese, German, Spanish, French, Italian, Swedish, Turkish, and Arabic.
Units	°F	The available options are Celsius and Fahrenheit. Please note that this setting does not affect the temperature unit in the VRM portal.
VRM online portal		
VRM two-way	Yes	Enable remote configuration and firmware updates .

communication		
Bluetooth		
Enabled	Yes	
Pincode	000000	
Relay		
Relay 1	Temp	The relay controls the fan behind the fridge compartment. If you change the mode to Manual, the fans can be turned off and on with the selector switch.
Relay 2	Temp	The relay controls the fans in the electrical compartment. If you change the mode to Manual, the fans can be turned off and on with the selector switch.
Temperature control rules		The temperature has been set for both relays to turn on and off at specific temperatures. Relay 2 turns on at 84F and turns off at 82F.
I/O		
Analog inputs	On	Available tank level sensors On Available Temperature sensors On
Bluetooth sensors	On	Ruuvi sensors have been configured.

After the tank level sensors have been enabled, they will appear in the Device menu. From there, they will be configured for Fresh and Gray water.

The volume of the Fresh Water tank is 59 Gallons.

The volume of the Gray Water tank is 25 Gallons.

The sensors have been calibrated to indicate the correct percentage when full and empty. The Gray water sensor sits a few inches above the tank's bottom. It will not indicate the liquid's volume until a few gallons (4-5) have been deposited into the tank. After that, the sensor will indicate about 20%.

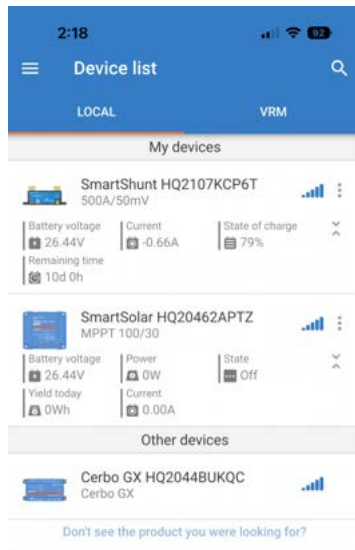
The sensor alarms have also been enabled. There are high- and low-level alarms for the freshwater sensor, but only a high-level alarm for the Gray water sensor.

Connecting via Bluetooth

You can connect to the Cerbo GX device by pairing it with your smartphone or via VictronConnect.

To connect to the VictronConnect app:

- Open the VictronConnect app.
- Ensure that the GX device is powered on
- Look for the GX device in the device list in the "Local" or the "VRM" tab.
- Click on the Cerbo GX.
- Enter the default PIN code: 000000. After entering the default PIN code, VictronConnect may ask you to change it.



You can't change any settings unless you can access the Remote Console. The remote console will control and mirror the GX Touch 50 screen's display.

If you're connected to the Internet, you can view your whole system on the VRM and access the remote console.

Connecting via WiFi

You can connect to the GX device using the local LAN WiFi. It will appear in your device's list of available networks.

The GX's Wi-Fi key is printed on the label under the GX. You may have to take a picture of it to read the numbers.

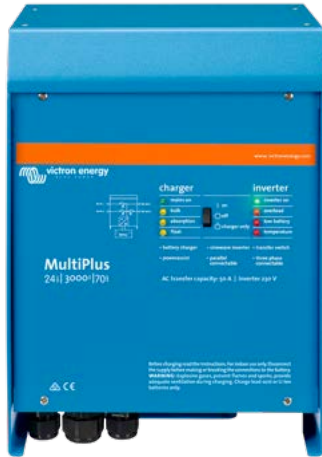


- ☐ Stand close to the Cerbo GX, within a few meters.
- ☐ Go to the WiFi settings on your phone/tablet/laptop.
- ☐ The Cerbo GX will appear in the list as Venus-HQ1940DEF4-3b6, where HQ... is the serial number printed on the side of the box.
- ☐ Connect to WiFi using the 'WiFi key', which you will find printed on the label.
- ☐ Open VictronConnect, and it will start scanning the WiFi network automatically.
- ☐ Once found, select the Cerbo GX device from the list.
- ☐ Select the Remote Console button.



Now you can see and control the touchscreen display.

Victron MultiPlus 3K Inverter



Victron Energy Multiplus is a powerful, compact 12-Volt 3000VA 120 amp 120V true sine wave inverter and a sophisticated battery charger with adaptive charge technology.

With the unique Power Assist feature, Victron Energy MultiPlus will prevent overloading a limited AC source, such as a generator or shore power connection.

With the Cerbo GX, you can monitor and control your Multi and system or systems locally (LAN) or remotely via the internet from anywhere in the world, using the free VictronConnect app and [free VRM portal](#) website. Access can be from a phone, tablet, laptop, or PC for multiple operating systems.

The firmware can be remotely updated by AEONrv engineering.

AEONrv engineering configured the MultiPlus for optimal delivery settings. The following settings have been configured:

Inverter frequency	60Hz
Input frequency range	45 - 65Hz
Input voltage range	94 - 143V AC
Inverter voltage	120V AC
Stand-alone/parallel / 3-phase	stand-alone
AES (Automatic Economy Switch)	on
Ground relay	on
Charger on/off	on
Charge curve	fixed

Charging current	75% of the maximum charging current
Battery type	lithium
Automatic equalization charging	off
Absorption voltage	28.8V
Absorption time	3 hours (30 min/battery)
Float voltage	27.2V
Repeated absorption time	1 hour
Absorption repeat interval	Seven days
AC input current limit	13A
Current limit overruled by remote	on
UPS feature	off
Dynamic current limiter	off
DC input low shut-down	23V
DC input low restart	25V
DC input low pre-alarm	24V
WeakAC	off
BoostFactor	2
Programmable relay	alarm function
PowerAssist	on

SmartSolar MPPT 100V/30A



How it works

The SmartSolar charger gathers energy from your solar panels and stores it in your batteries. Using the latest, fastest technology, SmartSolar maximizes this energy harvest. SmartSolar maintains battery health, extending its life.

The Victron Energy SmartSolar charge controller will even recharge a severely depleted battery. It can operate with a battery voltage as low as 0 Volts, provided the cells are not permanently damaged.

By constantly monitoring the voltage and current output of your solar (PV) panels, MPPT technology ensures that every drop of available power is captured and harvested for storage.

Connecting

Anytime, anywhere, remotely control and monitor the features of your SmartSolar controller with built-in Bluetooth by pairing it with your smartphone or other device via VictronConnect.

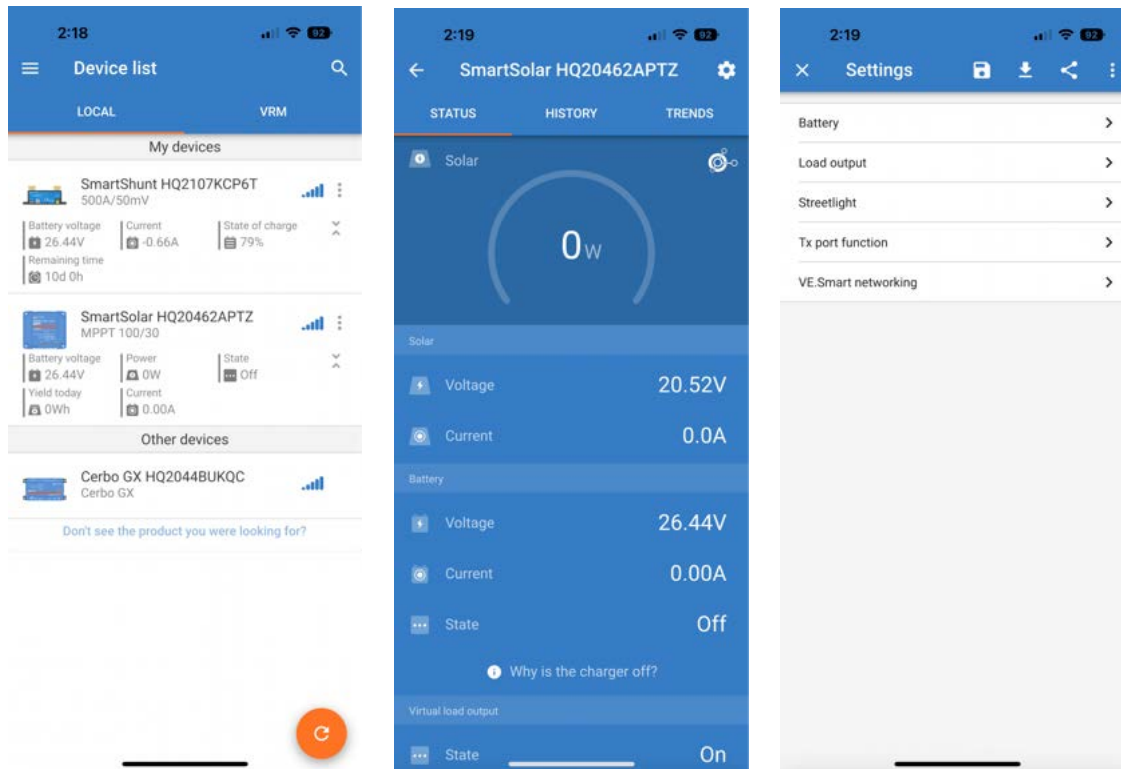
The SmartSolar is also connected to the GX device via Bluetooth and can be remotely accessed using the VRM portal.

To connect to the VictronConnect app:

- Open the VictronConnect app.
- Ensure that the SmartSolar controller is powered on
- Look for the SmartSolar in the device list in the "Local" or the "VRM" tab.
- Click on the SmartSolar.
- If you connect via Bluetooth, enter the default PIN code 000000. After entering the default PIN code, VictronConnect may ask you to change it.

You will see the current state of the SmartSolar controller.

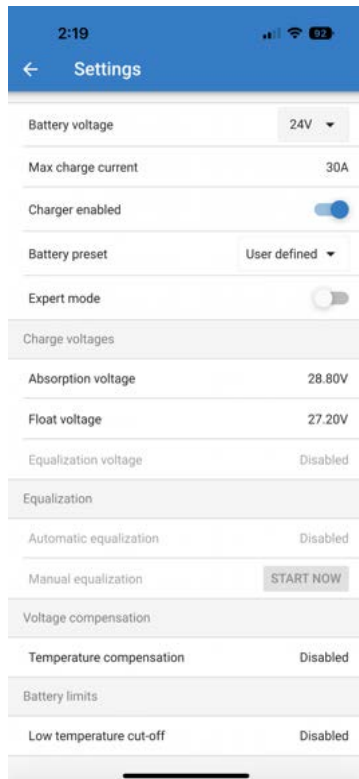
To view or change SmartSolar settings, navigate to the settings page by clicking on the cog icon at the top right of the screen.



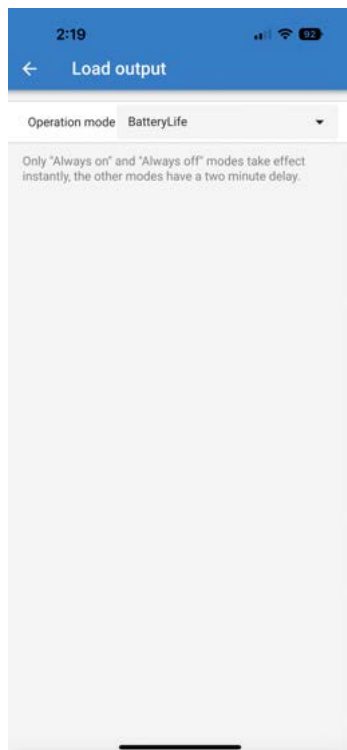
Configurations

On the **Battery** page, we configure the following parameters specific to your batteries:

- Battery voltage: 24V
- Max charge current: 30V
- Charger enabled: Yes
- Battery present: User defined
- Absorption voltage: 28.8V
- Float voltage: 27.2V
- Absorption Time: 15 min for each battery. 1.5 hrs for six batteries (available under the Expert mode).



The following pictures show the rest of the configurations from the settings menu: **Load output** and **VE. Smart Networking**. The **Streetlight** and **Tx port functions** are not configured.



Smart Shunt

How it works

The primary function of the battery monitor is to track and display the battery's state of charge, indicating the amount of charge it contains, and to prevent an unexpected total discharge.

The battery monitor continuously measures the current flow in and out of the battery. If it were a fixed current, integrating it over time involves multiplying the current and time, giving the net amount of Ah added or removed.

For example, a discharge current of 10A for 2 hours will drain the battery by 20Ah.

To complicate matters, a battery's effective capacity depends on the discharge rate, the Peukert efficiency, and, to a lesser extent, the temperature. To make things even more complicated, when charging a battery, more energy (Ah) must be pumped into the battery than retrieved during the subsequent discharge. In other words, the charge efficiency is less than 100%. The battery monitor considers all these factors when calculating the state of charge.



Connecting

The SmartShunt is an all-in-one battery monitor, but it does not have a display. Your phone acts as a display. The SmartShunt connects via Bluetooth to the VictronConnect App on your phone (or tablet), allowing you to conveniently view all monitored battery parameters, including state of charge, time to go, historical information, and much more.

The SmartShunt is also connected to the GX device via Bluetooth and can be remotely accessed using the VRM portal.

To connect with the VictronConnect app:

- Open the VictronConnect app.
- Ensure the battery monitor is powered on.
- Look for the battery monitor in the device list in the "Local" or the "VRM" tab.
- Click on the battery monitor.
- If you connect via Bluetooth, enter the default PIN code 000000. After entering the default PIN code, VictronConnect may ask you to change it.

When successfully connected, the "Bluetooth" light stays on.

To view or change battery monitor settings, navigate to the settings page by clicking on the cog icon at the top right of the screen.

Battery Starts Synchronized option.

The battery's state of charge will become 100% after the battery monitor is powered up. When set to ON, the battery monitor will consider itself synchronized when powered up, resulting in a state of charge of 100%. If set to OFF, the battery monitor will consider itself unsynchronized when powered up, resulting in a state of charge unknown until the first synchronization.

If you disconnect the batteries via the main switch and they were, for example, 75% charged at that moment, when you reconnect them, the shunt monitor will now indicate 100%. This will give a false impression that the batteries are full, while in reality, they are partially discharged.

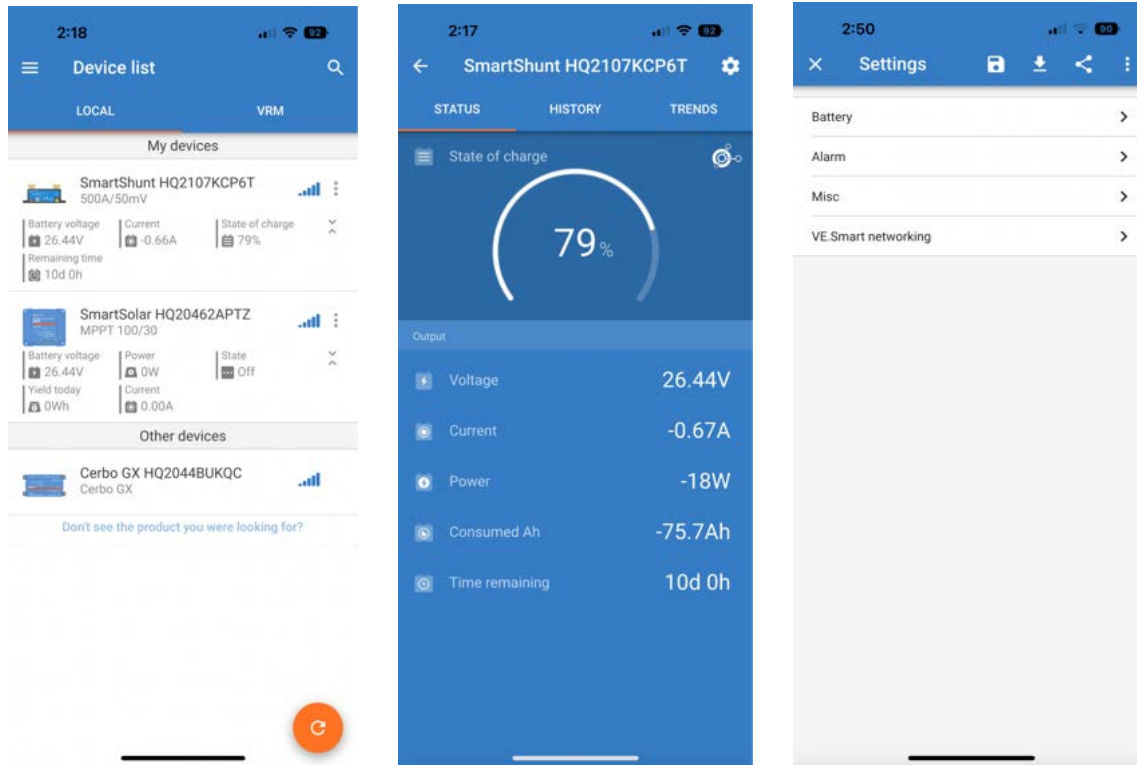
In this case, the battery monitor can be synchronized manually by pressing the "Synchronise" button in the VictronConnect app. Navigate to "Settings" and then to "Battery Settings."

You can use this chart to set the estimated state of charge:

LiFeO4 Voltage to SOC at rest

Voltage	Capacity
28.8v	100%
27.2v	100%
26.8v	99%
26.6v	90%
26.4v	70%
26.2v	40%
26.0v	30%
25.8v	20%
25.6v	17%
25.0v	14%
24.0v	9%
20.0v	0%

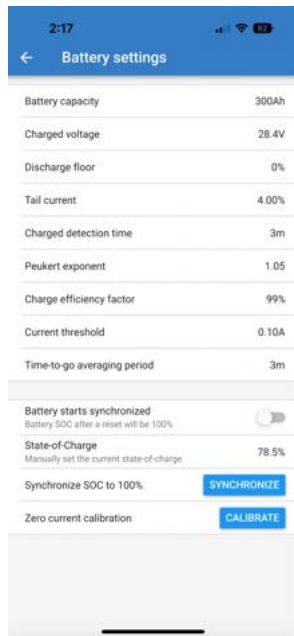
If the battery monitor does not perform regular synchronization, the state of charge value will start to drift over time. This is due to the battery monitor's minor inaccuracies and the estimation of the Peukert exponent. Once a battery has been fully charged and the charger has gone to the float stage, the battery is full, and the battery monitor will automatically synchronize by setting the state of charge value to 100%.



Configurations

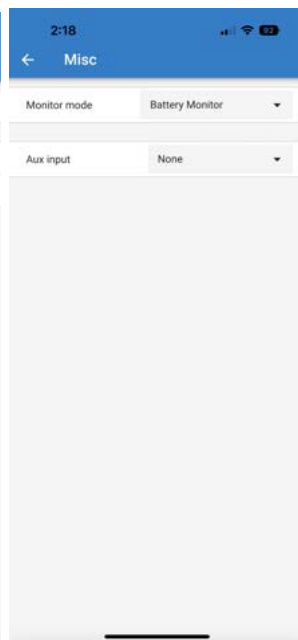
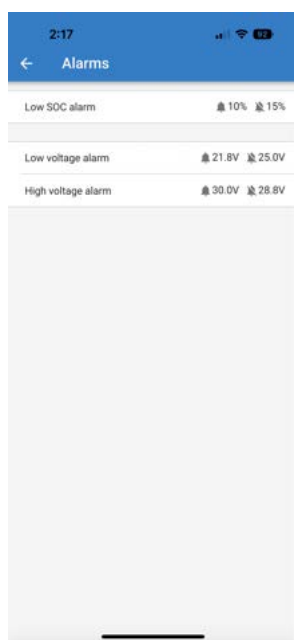
On the Battery Settings page, we set several parameters specific to Battle Born batteries:

- Battery Capacity: Total Ah of your bank of batteries (300Ah, 400Ah, or 500Ah)
- Charged voltage: 28.6V, but note that this number should be about .1 or .2 volts below the charging voltage set in the MultiPlus
- Discharge Floor: 0%
- Tail Current: 2-4%
- Charged Detection Time: 3m
- Peukert Exponent: 1.05
- Charge Efficiency Factor: 99%
- Current threshold: 0.10A
- Time to go, averaging period 3m
- Battery Starts Synchronized: Off
- Synchronize SOC to 100%: Leave alone
- Zero Current Calibration: Leave it alone



The following pictures show the rest of the configurations from the settings menu: Alarms, Misc, and VE. Smart Networking.

Alarms are enabled to notify when batteries are outside safe values.



VE.Smart Networking

VE.Smart Networking is a wireless communication network between Victron products. It is a wireless technology using Bluetooth Smart. The SmartShunt and the SmartSolar MPPT are configured to communicate using this network.

Features:

- Remote Voltage reading
- Temperature sensing
- Current sensing
- Synchronized charging

Remote voltage, temperature, and/or current sensing

VE.Smart adds remote voltage, temperature, and/or current sensing to your Victron MPPT Solar Chargers. By connecting the SmartShunt, the Solar Charger will receive the available information from the battery, like battery voltage and temperature (depending on the sensor) information, and use that data to optimize its charge parameters. This will improve charging efficiency and prolong battery life.

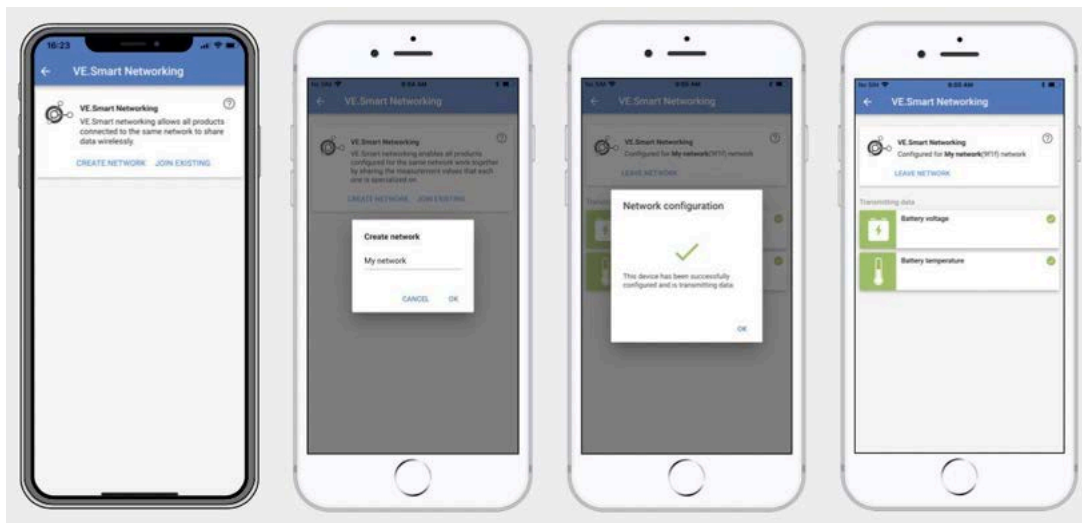
Setting up the Smart Battery Sense



The details below have already been configured in your AEONrv.

Open [VictronConnect](#), connect the device, navigate to *Settings*, and select *VE.Smart Networking*.

Click *Create Network*, and enter a name. Click *Save* and wait for the 'OK' to show up.



Go back, navigate to the Solar charger, and click *Settings*, followed by *VE.Smart Networking* followed by *Join Existing*. Now select the network created in the previous step.

Wait for the 'OK' to show.

VRM Portal

When connected to the internet, your GX device can be used in combination with the [Victron Remote Management \(VRM\) portal](#), which enables:

- Easy remote access to all statistics and the system's status online
- Remote Console on VRM: access and configure your system as if you were standing beside it
- Remote Firmware updates for connected Victron products, including Solar chargers, Smart Shunts, MultiPlus, and Cerbo GX.

AEONrv Engineering has registered your vehicle already on the VRM. You should have received an invitation to the VRM portal before you picked up your vehicle. Clicking the invitation link will automatically direct you to the account creation page. You need to register and create an account to view the AEONrv online.

When the CG device is connected to the internet, you get all the advantages of the VRM Portal. The GX sends data from all connected products to the VRM portal, where you can monitor energy usage, view the current status of connected products, configure email alarms, and download data in CSV and Excel formats.

To monitor this data from your smartphone or tablet, download the [iOS or Android VRM App](#). The app also works on a Mac. The VRM app looks the same as viewing it in a browser.

In addition to remote monitoring, an active internet connection allows the GX to check for new firmware versions, which can be automatically downloaded and installed.

There are several ways to connect a GX device to the internet:

- Run a network cable between a router and the GX Ethernet LAN port
- Connect to a router wirelessly using a USB Wi-Fi dongle plugged into the GX. The Cerbo GX includes built-in Wi-Fi. It is also possible to connect a supported external USB Wi-Fi dongle (to increase wireless range outside of a cabinet, for example). Refer to the Cerbo GX manual for details regarding supported dongles.
- Via a mobile (cellular) network, using the [GX GSM - a cellular USB modem](#) or a 3G or 4G router.
- USB Tethering on a mobile phone.

Please refer to the VRM Portal and Cerbo GX manuals for detailed information on all available features.

Sensors

Several sensors, including sensors for water levels and temperature, are installed in your RV. These sensors are connected to the Cerbo GX device, which has additional input that we are not currently using, but can be used if a user wants to install additional sensors.

AEONrv uses two water level sensors, one for fresh water and one for gray water. The electric liquid-level sending unit utilizes a Reed switch and magnetic field technology. The advantages of the Reed switch type level sender are durability and reliability. The float is the only moving part of the sender, thereby minimizing potential mechanical failures.

There are also two temperature sensors, one for the fridge and one for the house temperature. These sensors are Bluetooth-enabled sensors from Ruuvi.

Fresh Water

The freshwater sensor is from KUS.

KUS S5U Sender Unit, 27", P/N 154027 (<https://kus-usa.com/product/s5u-sender/>)

This sensor has been configured in the GX device.

To configure a new Freshwater sensor using the GX device:

1. Go to the menu page
2. Navigate to Analog Inputs: Settings -> I/O -> Analog Inputs
3. Turn on/enable the sensor
4. Go back to the main menu, and you should see the sensor.
5. Select the sensor, then select **Setup** from the menu
6. Enter your values for the sensor.
7. Go to the main menu and navigate to "Has DC system": Settings -> System setup -> Has DC system, and enable this menu item.

AEONrv is using the following setup values for the Freshwater sensor:

Menu Item	Value
Capacity	59
Standard	Custom
Sensor value when empty	244 - 253.0 Ω (depending on your calibration)
Sensor value when full	33.0 - 40.0 Ω (depending on your calibration)
Fluid type	Freshwater
Volume unit	U.S. gallon
Custom shape	N/A
Average time	10s
Sensor value	This is the value of the current sensor reading
Low level alarm	> submenu below
Enable alarm	(<input type="radio"/>) (on)
Active level	5%
Restore level	7%
Delay	30s

Menu Item	Value
High level alarm	> submenu below
Enable alarm	(O) (off)
Active level	95%
Restore level	93%
Delay	5s



The sensor values for empty and full can be adjusted later if you find that they need to be optimized for your tank.

To change the name of the sensor, from the main device menu, select the sensor and then select **Device** from the menu. The Device menu contains the following items.

Menu Item	Value
Connected	Yes
Connection	Tank Level input # (could be 1-4)
Product	Generic Tank input
Name	Water (<i>select this item to change the name</i>)
Product ID	A161
Firmware version	--
VRM instance	## (the ID of the device on VRM)

Gray Water

The gray water sensor is from KUS.

KUS SHST Holding Tank Sender Unit, 12", P/N 26421
[\(https://kus-usa.com/product/s5u-sender/\)](https://kus-usa.com/product/s5u-sender/)

This sensor has already been configured in the GX device.

To configure a new Gray water sensor using the GX device:

1. Go to the menu page
2. Navigate to Analog Inputs: Settings -> I/O -> Analog Inputs
3. Turn on/enable the sensor
4. Go back to the main menu, and you should see the sensor.
5. Select the sensor, then select **Setup** from the menu
6. Enter your values for the sensor.

AEONrv is using the following values for the Gray water sensor:

Menu Item	Value
Capacity	25
Standard	Custom
Sensor value when empty	244 - 253.0 Ω (depending on your calibration)
Sensor value when full	33.0 - 40.0 Ω (depending on your calibration)
Fluid type	Waste water
Volume unit	U.S. gallon
Custom shape	N/A
Average time	10s
Sensor value	This is the value of the current sensor reading
Low level alarm	> submenu below Note: Not enabled
Enable alarm	(<input type="radio"/>) (off)
Active level	10%
Restore level	15%
Delay	30s
High level alarm	> submenu below
Enable alarm	(<input type="radio"/>) (on)

Menu Item	Value
Active level	90%
Restore level	85%
Delay	5s



The sensor values for empty and full can be adjusted later if you find that they need to be optimized for your tank.

To change the name of the sensor, from the main device menu, select the sensor and then select **Device** from the menu. The Device menu contains the following items.:

Menu Item	Value
Connected	Yes
Connection	Tank Level input # (could be 1-4)
Product	Generic Tank input
Name	Gray Water (<i>select this item to change the name</i>)
Product ID	A161
Firmware version	--
VRM instance	## (the ID of the device on VRM)

Temperature Sensors

The GX device has four ports for hardwired temperature sensors.

They are used to measure & monitor all kinds of temperature inputs.

Sensors are enabled (and disabled) in the GX device settings' Settings -> I/O -> Analog inputs menu.

Once enabled, temperature sensor data is visible in the device list and logged to VRM.

Selecting the temperature sensor from the device list menu allows you to set the Temperature Type setting to either Battery, Fridge, or Generic. It is also possible to set a custom name in the Device menu.

AEONrv uses two hardwired sensor inputs, one for battery temperature and one for temperature behind the fridge. The sensors are connected to the GX device's relay inputs one and two. The relays are programmed to turn on fans when temperatures reach a certain point and turn off when the temperature goes below the same point.

Two fans are inside the electrical compartment, controlled by the same relay. One fan is located right below the fridge compressor.

Ruuvi Sensors

The GX device supports Ruuvi sensors that present data on the monitoring screen. AEONrv provides two Ruuvi sensors that can be placed anywhere inside the RV. Additional sensors can easily be added if desired.

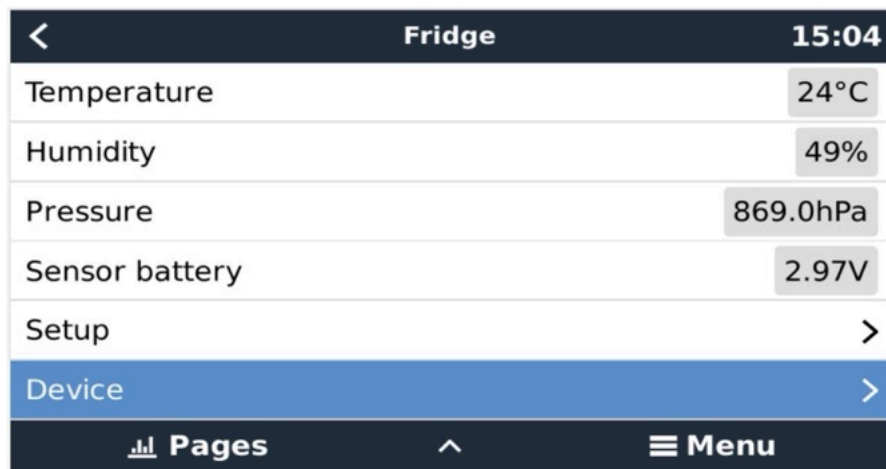
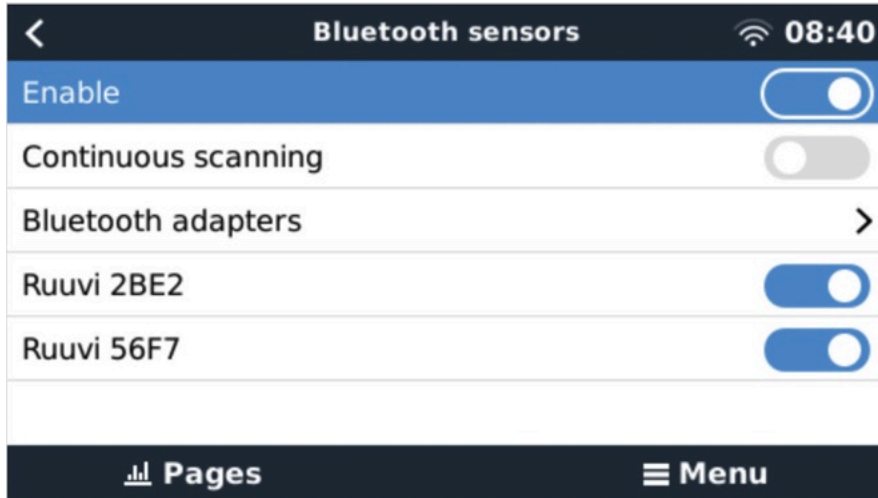
Using Bluetooth, the Ruuvi sensor features temperature, humidity, and atmospheric pressure streamed wirelessly to the GX device. Users can set automated actions based on the information provided by the Ruuvi sensors.

Note: The Cerbo GX built-in Bluetooth connection is disabled when the internal CPU temperature exceeds 127 degrees F (influenced by load and/or ambient temperature). For reliable operation, an optional USB Bluetooth adapter is necessary.

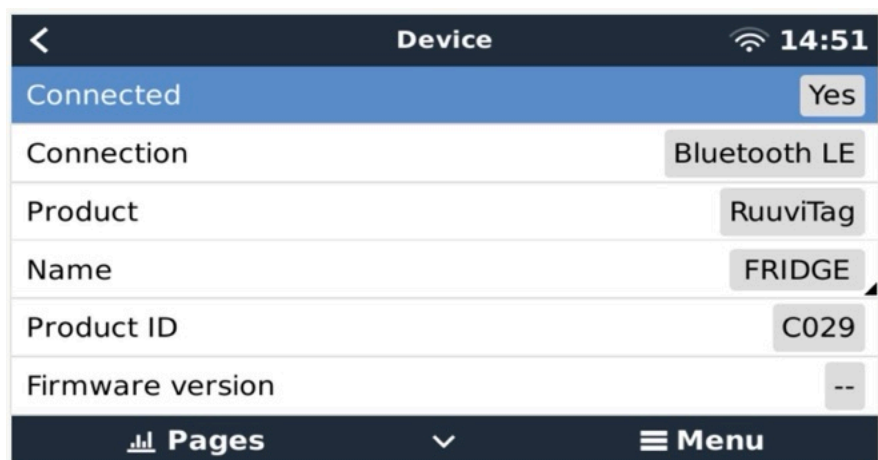
Installation procedure

On the GX device, ensure Bluetooth is enabled in the Bluetooth menu (enabled by default)

1. From the main menu, navigate to Settings → I/O → Bluetooth sensors menu, and then enable Bluetooth temperature sensors.
2. Pull out the plastic tab on the Ruuvi sensor, and the unit will transmit its temperature information.
3. The sensor should appear in the menu, "Ruuvi #####" - with a four-hexadecimal device ID, enabling the specific Ruuvi sensor.
4. Go back to the main menu and select the Ruuvi device.



From the Device menu item, you can set a custom name.



From the Setup menu, you can select the Type of sensor.

Type		15:05
Battery	<input type="radio"/>	
Fridge	<input checked="" type="radio"/>	
Generic	<input type="radio"/>	

Section 7: Care and Maintenance

General Information

Periodic maintenance and cleaning of your RV are essential to maintain its dependability, safety, and appearance, ensuring many miles of trouble-free operation and protecting your investment.

Keep accurate records of all maintenance functions performed and follow all owner obligations, as Ford may require to keep your warranty in force.

It is also important to note that operating conditions will affect service timetables. Driving in extreme conditions, such as heavy dust, frequent short trips, or heavy start-and-stop traffic, will shorten the time between service appointments. Discuss service timetables with both AEONrv and a Ford service representative.

Preventive maintenance often pays for itself by catching or preventing problems before they occur. Many repair costs are significantly increased by ignoring minor issues, allowing them to develop into more significant problems and possibly voiding your warranty due to neglect, misuse, or abuse. If left unattended, minor problems may also begin to affect other parts and systems of the RV.



We have seen reports of broken or cracked windshields on the Ford Transit forums. This can occur during cold weather when the windshield is icy and the defrosting feature is activated. To prevent this from happening, we suggest heating the cab before starting to defrost the windshield.



Your AEON requires a break-in period. According to Ford, “For the first 1000 miles, avoid driving at high speeds, heavy braking, aggressive shifting, or using your RV to tow. During this time, your RV may exhibit some unusual characteristics.”



After the first 500-1000 miles of driving, we recommend checking the VanCompass lift-kit bolt torque specs. For details, see the VanCompass [installation instructions](#).

Ford Perimeter Plus Alarm

The Perimeter Alarm and Remote Start module is installed and configured on all vehicles. In the 2023 AEONrv model and later, the module is installed behind the glove box. It is zip-tied to a wire bundle in the back right side of the area.

In the 2021 AEONrv model, the module is behind the small square cover under the steering wheel. It can be accessed by removing the panel where the switches are mounted.

Adjusting the Alarm Sensitivity

The alarm sensitivity can be adjusted by turning the black knob located on the unit.



To decrease sensitivity, turn the knob counterclockwise. On the 2021 model, the knob is located on the right side.

Tire Change

Please refer to the Ford Transit manual for their recommended procedure before attempting to change a tire.

The jack and winch arm are located in a compartment by the passenger entry door.

Before starting the process, perform the following:

1. Position on firm level ground
2. Parking brake engaged
3. Hazard lights on



Never put body parts under a jacked vehicle.

Lower the vehicle immediately after the tire change.

Use wheel wedges on the opposite end before lifting.

Only use the specified jacking points.

Never jack on these locations

- a) Body panels or floor pan
- b) Brake lines or fuel lines
- c) Differential housing sides

Before jacking up the vehicle, lower the spare tire by inserting the winch arm in one of the access ports. There is an access port on each side of the frame. The spare tire is attached to a wire with a hook.

Front Jacking Points

Place the jack head on the reinforced bolted body brackets under the front of the vehicle. These are specifically designed steel mounting points. Position the jack head under the protrusions at the rear of the front sub-frame.

Rear Jacking Points

Place the jack head directly under the rear axle.

Finishing

When the tire replacement is done, raise the bad tire back into the spare tire location using the reverse process. Check that all the lug nuts are tight. Check the tire pressure. The spare tire should be inflated to 65PSI. This pressure is between the recommended pressures for the front and rear tires.

Van Compass Suspension Upgrades

The AEONrv includes various suspension upgrades developed by our partner, Van Compass. These include their Stage 3 Topo 2.0 System, which provides custom-tuned Falcon shocks, a 5-leaf mini rear spring pack, shock mounts, and a tuned front coil spring. We also install their ¼" steel differential skid plate.

Maintaining Bolt Torques

Maintaining the specified torque for all the bolts used in the Van Compass suspension upgrades is essential. We recommend having AEONrv or another Van Compass certified installer check the bolt torques after 1000 miles when new and roughly every 15,000 miles after that, especially if a lot of off-road driving is involved.

Detailed installation instructions from Van Compass describe the torque values for each suspension upgrade.

TOPO 2.0 Front Suspension Kit

<https://cdn.shopify.com/s/files/1/0871/7220/files/7043-7044-INST-V1.9.pdf?v=1640643679>

Rear Leaf Pack

<https://cdn.shopify.com/s/files/1/0871/7220/files/7013-SPRING-INST-V1.0.pdf?v=1622059570>

Rear Falcon 2.1 Shocks

<https://cdn.shopify.com/s/files/1/0871/7220/files/3046-3048-INST-V1.1.pdf?v=1680811474>

High Clearance Shock Brackets

<https://cdn.shopify.com/s/files/1/0871/7220/files/3022-INST-V1.0.pdf?v=1613506603>

Battle Born Batteries

How to Properly Store Batteries

We recommend bringing your Battle Born batteries to full charge before long-term storage. Disconnect the batteries from any loads and turn off the main disconnect switch. Turn off the solar switch and the battery heating switch.

On average, batteries lose approximately 2-3% of their capacity monthly. This loss rate is subject to increasing if stored in extreme environmental conditions.



If the battery heating is turned on, the batteries will deplete themselves in just a few weeks if the temperature is below freezing.

How to Maintain the Batteries

Battle Born Batteries require very little maintenance. Suppose your battery consists of two 12V batteries wired in series to form a 24V cell. In that case, it is recommended that you fully charge the batteries individually once a year if the system is used frequently. We also recommend checking the state of charge of each battery individually every six months and fully charging each battery if the voltage difference between the two 12V batteries that make up the 24V cell exceeds 0.2 volts. This top charging will internally balance your batteries to ensure they reach their expected life span and allow you to get their full power out with each use.

We recommend using the Victron Blue Smart IP65 12-volt, 15-amp charger to charge your 12V batteries. It is equipped with built-in Bluetooth, enabling users to check the status of both the charger and the battery on a smartphone, tablet, or laptop. The VictronConnect app will allow you to configure all charger settings.



Ensure the batteries are frequently charged to 14.2V—14.6V for internal balance. The BMS has a built-in passive balancing system that handles this for you.

24V Batteries

Starting with the 2023 models, AEONrv is using 24V batteries. A 24V battery is fully charged at 27.2V.

To charge the batteries, we recommend using the Victron Blue Smart IP22 Charger 24/16(1) 120V NEMA 5-15



This charger is a professional battery charger with built-in Bluetooth. The charger offers a wireless solution for monitoring voltage and current, adjusting settings, and updating the charger with new features, all with high efficiency. With up to 94% efficiency, these chargers generate up to four times less heat when compared to the industry standard. Once the battery is fully charged, power consumption reduces to 0,5 watts, some five to ten times better than the industry standard. Adaptive 6-stage charge algorithm: test - bulk – absorption - recondition – float – storage

Total Composites Fiberglass

The house is built with composite fiberglass with a polyurethane foam core, which makes it lighter, stronger, and better insulated than “traditional” RV build materials. The insulation value and low maintenance of the body make it more efficient, causing less wear and tear on your equipment.

The foam core has an R-value of 5 per inch and is specifically designed for the automotive industry. The roof, floor, front, and back walls are 3.23”/84mm thick, giving an insulation value of up to R16.

One of the most significant issues campers face is thermal transfer, commonly referred to as cold bridging. Thermal transfer is generated by materials conducting heat/cold through the outside walls; therefore, any type of struts, bolts, or extrusions made of conductive materials will create condensation on the inside of your camper. This can become a significant issue when water collects in hidden areas behind cabinets, resulting in decay, mold, and unpleasant odors. Our goal is to develop a product that addresses this issue. We utilize specialized glue techniques to mount cabinets without screws, utilizing non-conductive corner extrusions.

Attaching Objects to Fiberglass

We want to avoid drill holes when attaching objects to the fiberglass walls. The fiberglass is very thin and will not hold screws well. Use VHB tape to attach smaller objects to the walls. If you need to drill holes for screws, apply glue or silicone to the hole before inserting the screw.

If you need to install objects to the outside walls, we recommend using VHB tape or Korapop glue.

You can use screws when attaching an object to the inside wood walls or the fiberglass polycarbonate honeycomb walls. We also recommend using VHB tape when attaching to the honeycomb walls.

The floor has $\frac{5}{8}$ " plywood below the fiberglass surface. You can use wood screws when attaching objects to the floor.

The pultrusions are made of thicker fiberglass and can support screws. If you need to attach an object to the pultrusion, drill a pilot hole, and insert some glue or silicone in the hole before securing the screw.

Please consult AEONrv engineering if you plan to make any significant additions or configurations.

Cleaning

All fiberglass is cared for the same way as any automotive finish. Any finish will deteriorate with time. Exposure to extreme sunlight, air pollutants, and excessive moisture can increase dulling and fading. Regular washing will help prevent this.

- Wash the exterior every 90 days with warm water and a mild detergent.
- Do not use a pressure washer to wash the exterior of your RV. This may damage it.
- You can use a car wash pressure washer that is not particularly powerful.
- Immediately remove bird droppings, tree sap, insects, and tar to avoid staining.
- Wax at least once a year with a standard liquid or paste wax.
- Prolonged storage of the RV should be in a sheltered environment when possible.

Clean the inside fiberglass surfaces with alcohol or a liquid detergent and warm water. Avoid using abrasive cleaners, as they may scratch and dull the surface or any item containing acetone.

Repair

Fiberglass can be repaired more easily than metal or wood. However, it requires some skills and supplies to do a good repair. The outer surface is made of a gelcoat that is shiny and very hard. Most of the time, minor dents and scratches can be buffed out. If you need to perform major repairs, please consult AEONrv engineering.

If your RV's exterior has been painted and needs repairs to the surface, please contact AEONrv support for recommendations on how best to perform the repairs.

Exterior Paint

You cannot prevent external influences like humidity, changes in temperature, sunlight, road salt, industrial gases, bird droppings, tree sap, etc., from attacking a vehicle's coating. Without regular, adequate paintwork aftercare, the gloss will soon fade, and the coating will lose its resistance to external influences. The solution to this problem is regular paintwork maintenance, combined with the use of aftercare products, to preserve the value of the RV's coating. Before polishing or waxing the paint coating of your RV, it must first be washed thoroughly. Never use polish or wax in full sunlight, as the warm surface of the paintwork is more sensitive and, therefore, more challenging to work on.

When washing your painted RV, make sure the RV's surface temperature is under 90°F and is not in direct sunlight. Rinse the entire RV to remove all loose dirt and grime. Never hold a pressure washer close to the surface of the RV. Use a fan-type spray nozzle on your water hose, ensuring the sprayer produces a fan-shaped stream of water rather than a single, straight stream.

Most car stores offer mild car wash shampoos that are safe for clear coat finishes. We recommend using baby shampoo as it will not leave a film on the outside of the RV. Adding 1/2 cup of food-grade vinegar will boost any cleaner's cleaning ability and soften the water. This also helps to minimize water spots. Avoid using dish soap, detergents with degreasing agents, or industrial cleaners, as they can cause damage to the finish. Use 100% cotton or Lamb's wool pads or wash mitts to wash the painted surfaces of your RV. Use a different mitt for washing the wheels and undercarriage. Change the water in your wash bucket often, or place a "dirt guard" at the bottom of the bucket to keep the cleaning pad or wash mitt free from dirt and debris. No brushes should be used on the painted surface of your RV. Using a brush can cause damage to the finish.

Drying your RV is just as important as washing it. Today's tap and well water contains many chemicals that could water-stain your RV's finish. After washing, dry your RV with the squeegee or a clean 100% leather chamois. You can also use fresh Microfiber towels for drying.

AEONrv currently offers two paint options using high-quality automotive paint. The paint has been applied in four layers, with a clear coat as the top layer.

If your RV has been painted, we provide touch-up paint to repair smaller areas.

We don't recommend users repaint their RVs; if they do, we don't recommend changing to a darker color. Higher surface temperatures could increase the risk of delamination, softening the panel adhesive, and possibly causing the foam cores and FRP skin to separate. We will guide you through the repair process in the event of delamination caused by high heat damage; however, we cannot accept it as a warranty claim.

Sanitize Fresh Water Tanks

AEONrv recommends regularly draining and sanitizing your freshwater system to ensure your freshwater tanks provide safe water for drinking, showering, and washing dishes. The tanks should be sanitized at least once per year. If you don't use the RV for four weeks or more, sanitize the tanks before your next trip.

What you need to start the sanitizing:

- Measuring cup
- Funnel
- 5-gallon bucket or water storage container
- Potable water hose
- Unscented bleach or [RV tank sanitizer](#) (never use colored or scented bleach).

Sanitize with Bleach

Before draining your freshwater system, park your AEONrv, where water will percolate into the soil or run downhill safely. For example, don't do this in an RV park if the slope will create a pool of water in your neighbor's site.

Because you'll eventually be draining flushing bleach or a cleaning solution out of your water system, your best choice is to park where you can access a sewer connection and a freshwater source.

Follow these step-by-step instructions to sanitize your entire freshwater system:

Step 1: Turn Off Your Water Heater and Water Pump

Draining your freshwater system with the water heater on can damage the tank. Turn off your water heater and run hot water for a minute to empty the heated water before draining it.

Turn off the water pump and open all faucets in your kitchen, bathroom, and shower. This will allow air to assist in completely draining water from your freshwater system naturally.

Open the pressure relief valve to drain the water heater tank.

Ensure your gray water tank is empty before proceeding. Alternatively, if you're in an excellent location, you can set up your hose connection to an outlet to quickly empty your gray water tank when needed.

Step 2: Drain the Fresh Water

Attach the hose to the freshwater tank drain. Open the low-point and tank drains to use gravity to drain water from the plumbing lines of your freshwater tank.

Step 3: Add Bleach Mixture to the Fresh Water Tank

Add one cup of bleach to four gallons of water to dilute it. Don't add the bleach directly to your freshwater tank; instead, use a funnel to pour the bleach mixture into the freshwater inlet.



You can double the bleach in the mixture to speed up the sanitation process. In this case, you only need to let the bleach solution sit for 2 hours, which is less effective than letting the solution sit for 12 hours.

Step 4: Fill the Tank with Potable Water and Pump It Through The System

The next step is to fill your tank with clean water. Connect your water hose to a freshwater connection and fill your tank so that it mixes your bleach dilution throughout the entire tank.

Once your tank is full, replace the cap on your freshwater inlet. Next, **circulate the bleach solution throughout the plumbing lines.**



Bypass the water filtration system to prevent the bleach from being filtered out.

Open all the faucets and showerheads and allow the bleached water to run through every part of your freshwater system for 2-3 minutes. It's okay to have a trace amount of bleached water in your gray tank for 12-24 hours, but no longer.

Once the water has circulated for several minutes, you can close the faucets and the showerhead.

Step 5: Let The Water Sit For 12-24 Hours

Proper tank sanitization doesn't happen immediately. **Let your mixture of clean water and bleach sit in your tank and plumbing lines for 12-24 hours before draining it.**



DO NOT let the bleach mixture sit for more than 24 hours.

Step 6: Drain the Tank

After at least 12 hours (but no more than 24), it's time to drain the system. Your best bet is to have full hookups for this process. If you're using bleach, it's recommended to avoid emptying your tank into the soil, as it can harm plant life and degrade soil health.

The best option is to turn on your water pump, open all your faucets (plus the shower), and let the water move through the system and into your gray water tank.

Don't let the solution sit in your gray holding tank. Running it through the gray water tank can also partially sanitize it simultaneously.

If you run your bleach mixture through your plumbing system and into your gray water tank, drain the freshwater tank completely to prevent a small amount of water and bleach from getting left behind.

Another option is to drain them the same way you initially drained your tanks to prepare for sanitization: Open the freshwater drain valve and allow the water to drain completely. However, you should only do this using an environmentally friendly cleaner (i.e., not bleach).

Step 7: Flush The System

Your final step is to refill your tank with fresh water and circulate it through the system with your water pump. Open all the faucets and flush the system until the smell of bleach is no longer detectable. At this point, you can leave the handle for your gray water tank open, allowing the system to remain open as you flush the remaining bleach solution.

You should be ready for another full year of camping. If you're not heading out for a trip immediately and overnight temperatures will stay above freezing, leave your tank empty until you need water inside your RV.

Remember to turn the water filtration system back on.

Sanitize Without Bleach

If you don't want to use bleach, there is a more environmentally friendly way to sanitize an RV freshwater tank. You will follow the same basic steps outlined above, but substitute a biodegradable cleaner for the bleach mixture in step three.

If you're looking for a complete freshwater tank sanitizing solution, we recommend checking out this [all-in-one kit from Thetford](#). It's a simple two-part system that cleans and sanitizes your freshwater tank, removing harmful bacteria so you can enjoy safe water on all your upcoming

RV adventures. Follow the instructions carefully to use the correct quantity for the size of your freshwater tanks.

Espar Airtronic Heater

Annual or pre-season maintenance is recommended for all Espar Airtronic heaters to ensure a trouble-free cold weather season. Please use the recommended tools and follow the procedures outlined in the heater manual while removing and reinstalling the different heater components. It should be noted that periodic heater maintenance is the responsibility of the heater's owner and is not covered under Espar's warranty. If the heater needs repair, please contact the AEONrv support team.

Heater Clearances: Before operation, ensure that the heater is not subjected to external loads from heavy objects placed on top of it. This may cause damage to the heater parts and affect its regular operation. Ensure sufficient clearances, as recommended in the heater manual, are maintained around the heater, even while the vehicle is in operation.

Air Inlet & Outlet: Check the return air inlet port and hot air outlet vents for blockages. Inspect the length of ducting for any damage and replace it as necessary. Ensure all ducting connections are secure. Discourage the placement of heat-sensitive materials too close to the heater, ducting components, or hot air outlet ports.

Wiring & Electrical Connections: Check all electrical connections from the heater to the batteries. Inspect the harnesses for wear and abrasion along their length. If the insulation is broken or damaged, the harness may need to be replaced.

Glow Pin & Glow Plugs: Remove the glow pin/plug and, if necessary, clean it. If the glow pin/plug shows signs of dissimilar color or distortions, replace it. Inspect the glow pin/plug wires for damage, and replace them if necessary. Remember to clean the chamber and ensure the ventilation hole is clear of any obstructions. Then, replace the glow pin/plug.

Glow Pin/Plug Screen: Regardless of its condition, remove and replace the glow pin screen annually. Make sure that the new screen is installed correctly.

Exhaust: Check the condition of the exhaust pipe. Inspect the exhaust piping for any holes or breaks and have it replaced if necessary. Make sure all connections are sealed securely.

Combustion Air Intake: Check the condition of the combustion air intake tube. Clear any blockages. If damaged, have it replaced. Ensure that the combustion air intake tube is secured in place.

Fuel Metering Pump: Ensure the pump has not been damaged or moved. An incorrectly mounted fuel metering pump may lead to excessive carbon issues. Check the fuel lines for possible leaks, loose clamps, and other issues. If there is an excessive amount of carbon buildup, this can indicate a problem with the fuel metering pump. Contact the AEONrv support team to address excessive carbon buildup.

Burner Tube: If the heater is smoking excessively during operation, remove and inspect the burner tube for any damage or clogs. The burner should be light brown. Clean any carbon buildup inside the burner tube. Inspect the inside of the heat exchanger and remove any loose carbon.

Gaskets: When reassembling the burner and the heat exchanger, use a new thermal insulator each time. Likewise, when reassembling the blower motor assembly, use a new gasket each time.

Run Once a Month: Regardless of the season, run the heater for at least 20 minutes every month. This will help the heater burn away any combustion residue in the chamber. It will ensure that the fuel in the lines to the heater does not gel and solidify and will start reliably when the heating season arrives.

Find and Clear Fault Code

When your Heater is acting up, it will give out a fault code or error code to help you understand the problem. Discover the meaning of these codes and learn how to resolve the issue. Additionally, find instructions on how to perform an Espar heater reset.

The heater will indicate an error by displaying a generic code and a wrench symbol. This is just a basic indication that your Espar Hydronic or Airtronic has errors stored in its memory.

No matter whether it's a connectivity issue, fuel shortage, incorrect connections, under- or over-voltage, heaters show fault codes that can narrow down your investigation. However, multiple fault codes can even cause a heater lockout.

Here is a list of all [Espar Airtronic fault codes](#) with explanations and potential remedies.

To access the fault codes on your Pro controller:

1. To access the workshop menu, select the **Settings menu** and then hold the **BACK button** pressed for longer than **2 seconds** while the clock symbol under the gear wheel symbol is flashing.
2. Scroll to **ERROR MEMORY** and confirm by pressing the **main button**.

To read and delete fault memory, first, access the workshop menu on the EasyStart Pro controller.

1. Open the vehicle **workshop menu**
2. Scroll to the **"Error Memory"** option
3. **Confirm the selection** by pressing the operating button.
4. **Select [Read]** by turning the operating button and confirm by pressing.
5. **Read out** the fault message and remedy the fault as described in the fault code table.
6. Then **select [Delete]** by turning the operating button.
7. **Delete the fault list** by pressing the operating button.
8. Always **write down the Fault codes** before deleting, even if no repairs are needed.

Refrigerator/Freezer

- Do not attempt to remove, move, or modify the fridge in any way
- Cleaning and maintenance of the ventilated condenser must only be done by an authorized and trained technician
- Only an authorized and trained technician should attempt to do any repairs



Before performing any maintenance or cleaning, including the ventilated condenser, disconnect the 24V power by removing the batteries or pulling the fridge's 24V 7.5A fuse. When reinstalling the fuse, ensure the main battery and solar switches are off.

Defrosting and Cleaning

The frequency of defrost is dependent on the number of door openings, the ambient temperature, and the humidity level.

Typically, it is a good practice to defrost once there is ¼" of frost buildup on either side of the evaporator (cold plate). When defrosting, the unit is shut off by turning the thermostat counterclockwise to the OFF (0) position. Prop the door open.

We suggest placing a towel at the bottom of the refrigerator to catch excess moisture. Speeding up the process with a knife or scraper is strongly discouraged due to the likelihood of rupturing the refrigerant circuit.

Now that the unit has been defrosted, the interior can be cleaned with a non-abrasive cleaner.



Do not use "brilo" or "sos" type abrasive pads, as they will score the surfaces. Baking soda is recommended.

We recommend cleaning the outside of the refrigerator frequently and the inside after each use to avoid the formation of unpleasant odors or mold. Before cleaning the fridge, ensure it is turned off.

Wash the outside of the refrigerator with lukewarm water, rinse with cold water, and dry with a soft cloth. Avoid using abrasive or aggressive products.

It is recommended that the condenser be inspected and cleaned at least once a year. Contact our support team to locate an authorized and trained technician to do this work.

Long-term storage

To avoid unpleasant smells, empty and thoroughly clean the inside of the fridge before storing. Disconnect the refrigerator from the electrical power supply and leave the doors in the "Vent Position."

Refrigerator Troubleshooting

Problem	Cause	Solution
The refrigerator does not start.	No electrical current.	Verify that you have a 24V DC power source and that the fuse is not blown.
The refrigerator is not running.	The thermostat is in the off position.	Move the thermostat to the recommended position.

The refrigerator does not cool.	Insufficient output.	Check that: (a) the door and drawer close hermetically; (b) the condenser is not clogged with dust.
The refrigerator does not stop.	The internal temperature is too high.	Check that the door is completely closed.
The LED light does not come on.	The light is faulty.	Contact support.

Cabinet Pulls, Hinges, and Slides

Lubricate pulls and slides if they start getting stiff using [Blaster Dry Lube](#). Whip off any excess lube.

Hinges should generally not be lubricated.

Tighten screws and loose fasteners periodically. Screws for slides and hinges may become loose over time. This is expected since they are exposed to temperature changes, vibrations, and heavy weights (such as bed stairs). In colder weather, the metal will contract around the screw head, an effect that will push the fastener outwards and cause it to come loose.

While tightening loose screws is essential, it is advisable not to screw them in too hard, as this action can cause stripping at the top of the fastener. Needless to mention that damage to the screw's head automatically means you will have to replace it since you'll not be able to tighten it in fully anymore.

Windows and Doors

Check the seals around the windows and doors regularly (at least every six months) to verify if sealant and adhesives are present and complete.

Maintaining the seals and adhesives is essential to prevent moisture from entering the RV. Inspect any seals for signs of drying out and wear when washing your RV. Be aware that weather conditions and road vibrations can cause seals to dry, crack, or separate.

Adjust and lubricate latches and moving parts annually to ensure windows remain operative. Also, check the condition and operation of door locks, adjusting and lubricating as necessary.

Roof

Inspection of roof components at least every six months is crucial to ensure seams and seals are not cracked or worn. Proper maintenance of seals is necessary to keep moisture from entering the RV. If you encounter dry, cracked, or weathered seals and adhesives, reseal or replace them as required. A mild household soap solution and a soft brush can be used on the roof and solar panels.

Lights

Check the operation of exterior lights each time the vehicle is prepared for a trip. Check clearance, turn signals, brakes, and backup lights to ensure they are functioning correctly. Any bulbs that fail to light should be checked and replaced with a new bulb of the same size and wattage.

A failure of more than one light, such as both tail lights not operating, may indicate a burned-out fuse. Check the fuse and replace it with the same rating if necessary.

Storing the RV

When storing the RV for an extended period, certain precautions must be taken to protect it. The following steps are general suggestions:

- Park the RV on a level surface.
- Clean the RV thoroughly, inside and out.
- Remove all food products.
- Moisture can collect on inside surfaces during cold weather when humidity is high. Consider using a dehumidifier or other products that remove condensation to reduce moisture. To reduce the possibility of condensation, air out the RV occasionally during storage.
- Consider placing insect and/or rodent prevention products inside the RV.
- Turn off all electrical switches and appliances.
- Close all shades and curtains.
- Be sure all windows, doors, and vents are securely closed.
- Remove the bamboo cutting board from the sink. Moisture can be trapped underneath and cause mold to develop.
- Check the interior of the RV periodically to ensure that leaks have not occurred or that condensation has not formed, damaging interior components.
- Ensure the chassis and house batteries are appropriately maintained before and during storage. After extended storage, a battery will gradually lose charge, even when disconnected by the battery disconnect switch. We recommend bringing the Battle Born batteries to full charge. Disconnect the batteries from any loads and turn off the main disconnect switch. Turn off the solar switch and the battery heating switch. On average, the batteries lose approximately 2-3% of their monthly capacity. This loss rate increases if the material is stored in extreme environmental conditions.
- Ensure the tires are inflated to the correct pressure and check them periodically.
- Cover tires to prevent deterioration.
- Keep the roof free from snow and ice. Check it periodically, and after a heavy snowfall.
- Winterize the water system. Follow the winterization procedure outlined in the Plumbing section, [titled "Storage and Winterization."](#)

Cleaning the Interior

The interior of your AEONrv has been designed with comfort, convenience, durability, and aesthetic appeal in mind. Proper interior care and maintenance knowledge will enhance your enjoyment and prolong the life of your RV.

Cabinetry

The cabinetry is made of high-quality plywood with a hard, almost scratch-proof, thermally fused laminate exterior. It can be cleaned with soap and water or a household cleaner, such as Formula 409 or an equivalent.

Seating Area

Clean the vinyl cushions with soap and water or a household cleaner, such as Formula 409 or an equivalent.

Countertop

The countertop can be cleaned with ordinary household cleaners. Most residues can be removed with warm, soapy water. Do not use abrasive cleaners.

Bamboo

AEONrv uses two products for protecting and maintaining the Bamboo. Follow the instructions for each product used.

- Dinette table and Cutting board: The base is two coats of Watco 241758 Butcher Block Oil & Finish. The surface can be sanded to remove scratches and stains. Repeat the initial finish procedure with oil if sanding is needed.
- Shower tray: The base is two coats of Watco 241758 Butcher Block Oil & Finish. We apply two coats of Bona Traffic Anti-Slip product to prevent the tray from becoming slippery. It is also a water-protecting formula. If sanding is needed, reapply several coats of both products.

Flooring

The amount of daily usage will determine how often cleaning is required. Sweep or vacuum. Wipe over with a clean, damp mop or cloth, which should be rinsed frequently in clean water. When necessary, wash with a solution of clean water and mild soap. Spots, marks, and spillages should be wiped up immediately.

Do not use wire or nylon scouring pads, furniture polish, spirit-based polishes, powders, liquid abrasive cleaners, bleach, or strong detergents. Always follow the manufacturer's instructions. Check that any cleaner is suitable for use with vinyl floor coverings.

Bathroom

Use warm water and a liquid detergent. Do not use abrasive cleaners; they may scratch and dull the surface of the walls and sink.

Kitchen Sink

The stainless steel sink is from Ruvati and carries a limited lifetime warranty. It has a basket strainer, a drain cover, a rinse grid, and a deep basket disposal flange.

Care and maintenance:

- Clean regularly with regular detergent and warm water.
- Always dry your sink after use and buff it with a soft cloth. This will ensure no buildup of limescale or other mineral deposits.
- Clean the sink once or twice a month using a non-abrasive cleaner, such as Barkeeper's Friend, and a clean, soft sponge. Scrub in the same direction as the sink's natural grain.
- Never let soap or other household cleaners dry on the sink's surface. Most products contain additives that can affect the sink's finish.
- Never use bleach solutions on the sink, as they harm stainless steel. If left on the sink too long, it can cause surface pitting.
- Never use a steel wool pad to clean your sink. Doing so may damage the sink's surface and cause discoloration.
- Minor scratching of the sink's surface is extremely difficult to avoid and is not something to be unduly concerned about. These marks are usually superficial and can be removed with a stainless steel cleaner.
- Using grids will reduce the sink's exposure to scratches.

Kitchen Faucet

The kitchen faucet is from AguaStellaUSA (www.aquastellausa.com). The all-metal construction features a pull-down sprayer with dual functions: spray and stream. Switch by **sliding** the round button on the sprayer head **up and down**. **Don't push it in!**

It also features a Neoperl aerator that helps conserve water.

Maintenance:

- Screw off the sprayer head once per season, remove the screen and washer, turn on the faucet, and let the water run for about 30 seconds to flush out any dirt that may be in the hose. Then, screw on the sprayer head and ensure the screen and washer are in place.
- Keep the Allen Key included in the package. It can be used to assemble the faucet.
- Keep the Blue Aerator Key included in the package. It can be used to screw off the aerator to clean or replace.

Care and cleaning:

- Use a soft cloth or sponge with the most common household cleaners.
- Wipe all surfaces clean and rinse them immediately with water after applying the cleaner.
- To prevent water spots, rinse and wipe it with a damp cloth after every use.
- Don't use cleaners containing any abrasive powders, bleach, ammonia, vinegar, chlorine, etc.
- Avoid using abrasive materials when cleaning.

Soap Dispenser

The dispenser is from AguaStellaUSA. Lift the pump head and pour soap into the bottle to fill it. Push down directly on the pump head to dispense the soap. Don't push down on the spot.

Care and cleaning:

- Use the exact details of the kitchen faucet.

Induction Cooktop

The cooktop is easy to maintain. Use a moist cloth with a mild detergent to wipe off grease and stains, then let it dry. Protect the cooktop from dust by storing it under the sink when not in use.



Things to avoid doing:

- Clean the surface with metal scouring pads, abrasives, or solvents
 - Immerse the cord or cooktop unit in water or other liquids
 - Keep the unit plugged in while cleaning it
 - Keep the unit plugged in when not in use
 - Store or clean the unit while it is still hot
 - Place objects heavier than 25 pounds on the cooktop surface
 - Use the unit if the cooktop surface or power cord is damaged
 - Keep the cooktop unit on or near other heat sources.
-

Care and Maintenance Checklist

Before each use:

- ☐ Check the operation of exterior lights
 - ☐ Headlights
 - ☐ Tail lights
 - ☐ Turn signals
 - ☐ Marker lights
- ☐ Horn
- ☐ Windshield wipers
- ☐ Fire Extinguisher
- ☐ Smoke/Carbon Monoxide Alarm - test operation
- ☐ Inspect the hitch receiver
- ☐ Check tire pressure and tread wear

As Needed:

- ☐ Headlight alignment
- ☐ Appliances: see the manufacturer's maintenance guides
- ☐ Frame and Chassis: see Ford's maintenance guide
- ☐ Sanitize the plumbing system
- ☐ Winterize the plumbing system

After 1000 miles of driving:

- ☐ VanCompass lift-kit re-torque. Double-check all torque specs after 1000 miles of driving. See the VanCompass [installation instructions](#) for details.

Periodically:

- ☐ Check all battery electrical connections to ensure no loose connections.

- ☐ Check for loose screws and fasteners.
- ☐ Defrost refrigerator

Monthly:

- ☐ Switch the Espar heater on for about 20 minutes
- ☐ Check GFCI receptacles
- ☐ Check 24V and 12V fuses and 120V breakers

Six Months:

- ☐ Check the seals around the windows and doors to verify if sealant and adhesives are present and complete.
- ☐ Inspect the roof components to ensure seams and seals are not cracked or worn.
- ☐ Inspect the exterior AC unit for damage
- ☐ Check/clean/replace AC filters
- ☐ Clean roof and walls
- ☐ Flush the underside of the vehicle

Yearly:

- ☐ Lubricate latches, locks, and hinges
- ☐ Check front wheel alignment
- ☐ Clean water pump strain filter

Appendix A - Manufacturer's Warranty and User Manual List

- ☐ AquaStella Faucet Instructions & Warranty - 2 to 5 years
- ☐ AquaStella Soap Dispenser Instructions & Warranty - 2 to 5 years
- ☐ Battle Born Battery Manual and Installation Guide & Warranty - 10 years
- ☐ Better Living Trio Soap Dispenser Instructions & Warranty - 2 years
- ☐ Clearsource Water Filter instructions & Care Guide & Warranty - 1 year
- ☐ Duxtop Induction Cooktop User Manual & Warranty - 2 years
- ☐ Eberspacher Heater Operating and Maintenance Instructions, Warranty Registration Card - 2 years or 2,000 hours of operation
- ☐ Eberspacher EasyStart Pro Quick Start Guide
- ☐ Ford Perimeter Plus Vehicle Security and Remote Start Owner's Manual & Warranty - 1 year or 12,000 miles
- ☐ Giandel Inverter Instructions & Warranty - 1 year
- ☐ Isotemp Water Heater Installation and Operating Instructions & Warranty - 2 to 5 years
- ☐ Kidde Fire Extinguisher Owner's Manual & Warranty - 6 years
- ☐ Kidde Fire Smoke and Carbon Monoxide Alarm User Guide & Warranty - 10 years
- ☐ MAXXFan Installation Instructions, Information, and Operating Guide & Warranty - 2 years
- ☐ MAXXShade Plus Installation Instructions, Information, and Operating Guide & Warranty - 1 year
- ☐ Nautilus Shower Door Warranty - 1 year
- ☐ Pentair SHURFLO Aqua King II Installation and Operation Tips, Warranty - 3 months
- ☐ Pulse Shower Valve Owner's Manual & Warranty - 5 years
- ☐ Pioneer Heat Pump Installation & User's Manual, Registration Card & Warranty - 5 years
- ☐ Renogy Solar Panels Warranty - material and workmanship - 5 years; performance warranty: 5 years 95% output, 10 years 90% output, 25 years 80% output
- ☐ Ruvati Sink Installation Guide, Certificate of Warranty - Limited Lifetime
- ☐ Thetford Cassette Toilet User Manual & Warranty Statement - 1 year
- ☐ Torklift Stairs Booklet & Warranty - 90 days
- ☐ Torklift Glow Step Lock Booklet & Warranty - 90 days
- ☐ US Solid motorized ball valve for gray tank & Warranty - 1 year
- ☐ Victron Energy MultiPlus Manual, all Victron components Warranty - 5 years
- ☐ Vitrifrigo Fridge Instruction Manual, Installation, Use, and Maintenance Manual, Warranty Card - 2 years
- ☐ WFCO Product Information & Warranty - 2 years
- ☐ Zinus Mattress Instructions & Warranty - 10 years

Options:

- ☐ Baja Designs Lights Product Registration Card - Limited Lifetime or 49,930 hours of operation
- ☐ Commercial Chef Microwave User Manual & Warranty - 1 year
- ☐ Highway Products Semi-truck Box Warranty - Limited Lifetime

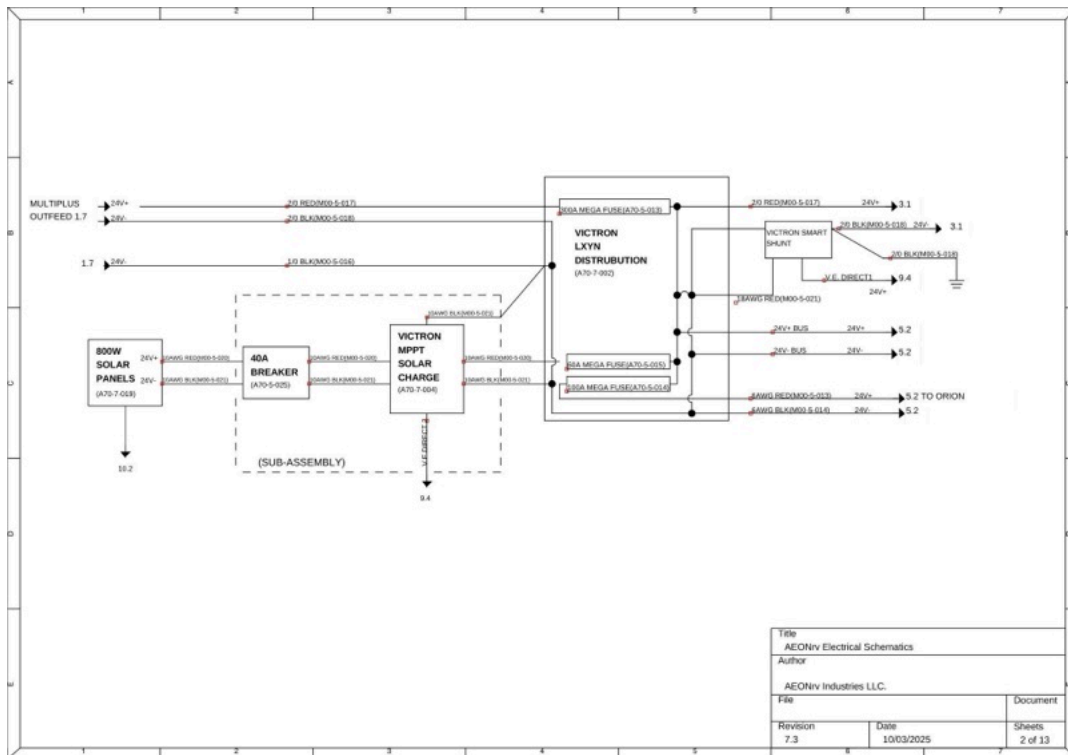
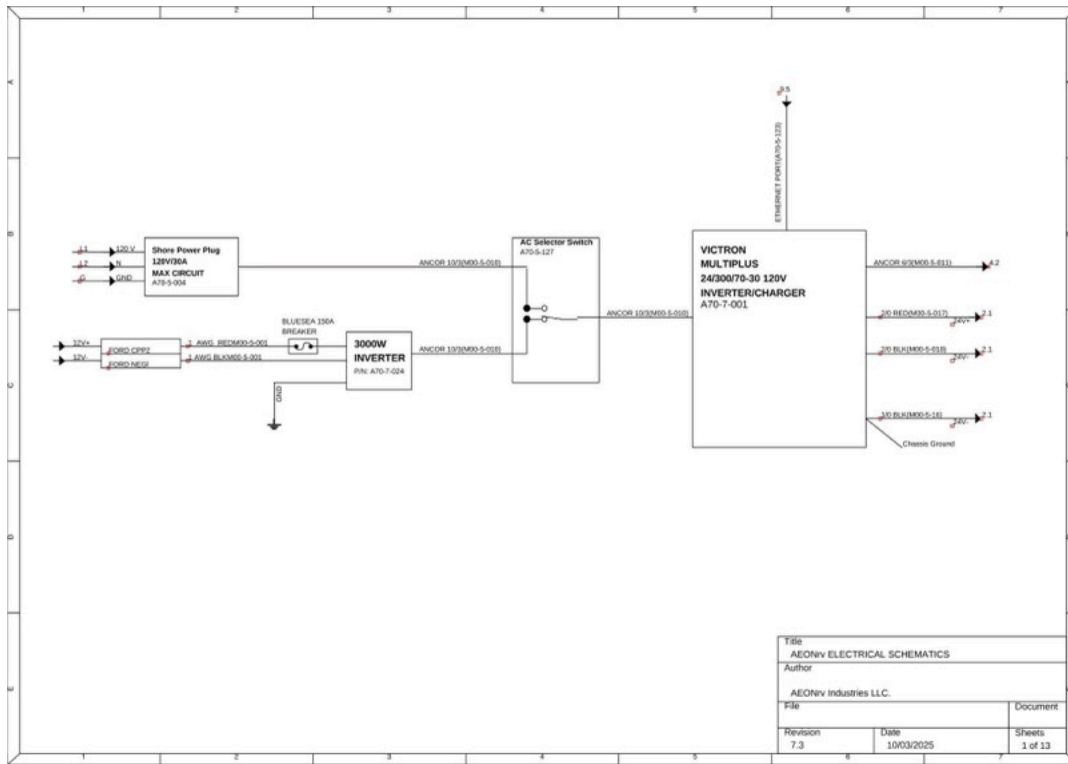
Appendix B - AEONrv Customer Walkthrough Checklist

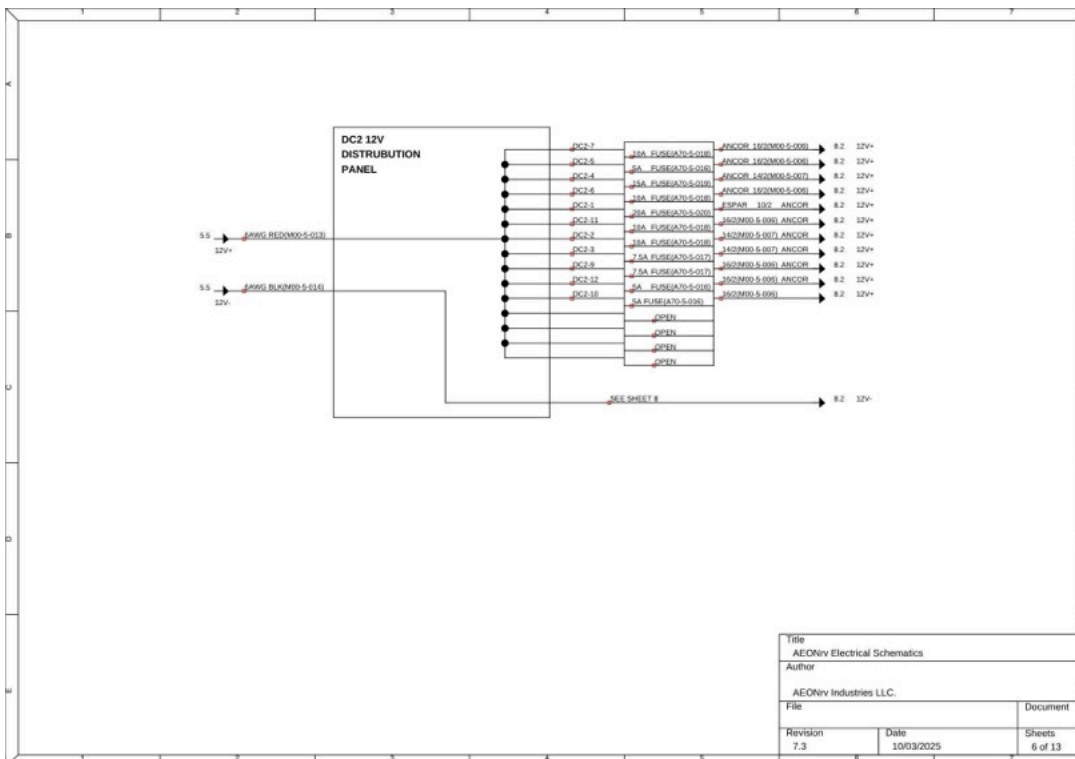
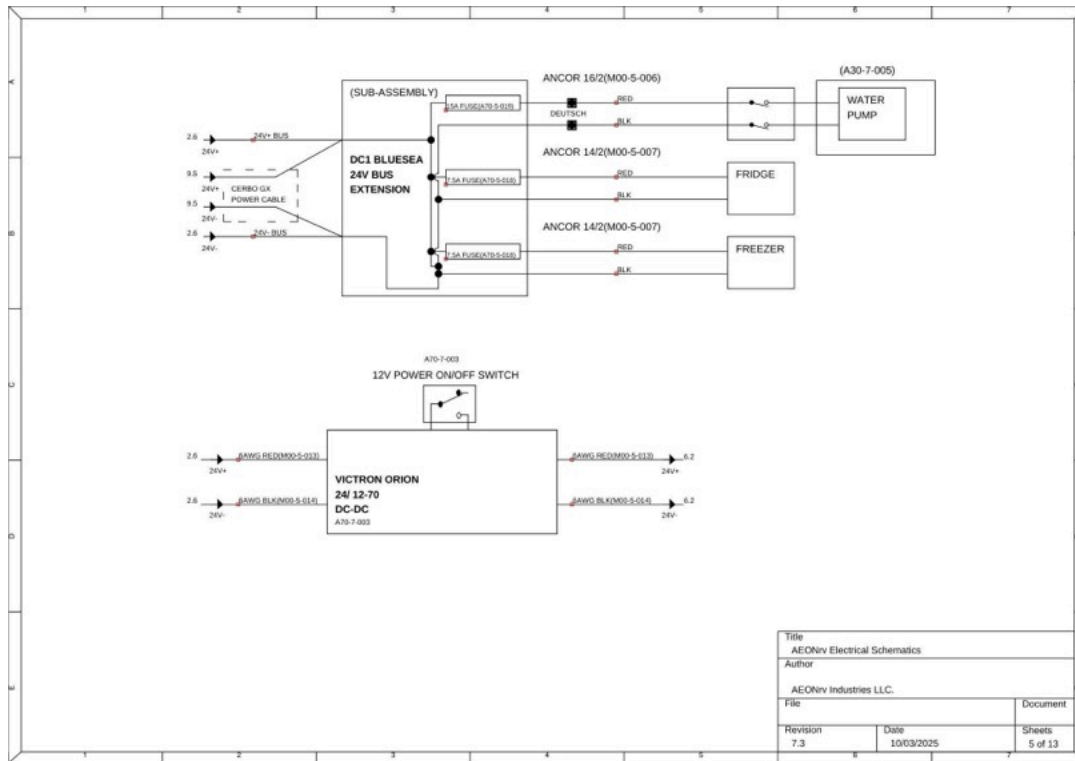
Software	Download and install the following applications on their mobile device before the walkthrough.
<input type="checkbox"/>	Victron Connect (https://nocache.victronenergy.com/panel-systems-remote-monitoring/victronconnect)
<input type="checkbox"/>	FordPass (https://apps.apple.com/us/app/fordpass-vehicle-controls/id1095418609 OR https://play.google.com/store/apps/details?id=com.ford.fordpass&pli=1)
<input type="checkbox"/>	Ruuvi Station (https://apps.apple.com/us/app/ruuvi-station/id1384475885 OR https://play.google.com/store/apps/details?id=com.ruuvi.station)
<input type="checkbox"/>	Create a user account on the VRM Portal (https://vrm.victronenergy.com/). The customer should have received an invitation to join their installation before the walkthrough.
General	General Transit vehicle operations and information is detailed in the Ford Transit manual.
<input type="checkbox"/>	Verify all customer-ordered options are installed.
<input type="checkbox"/>	All literature is included: 3rd party warranty and user documentation for all major components and appliances AEONrv Final Invoice, Sales/Warranty Agreement, Owner Guide NV DMV Bill of Sale, Title, & Drive-Away Permit
<input type="checkbox"/>	All keys are provided: vehicle, entry/garage, cassette door, stair lock pin, (optional) toolbox, and fold-down table.
<input type="checkbox"/>	Starting the vehicle, including remote start and Ford perimeter security system operation
<input type="checkbox"/>	Spare tire and tools locations and operations
<input type="checkbox"/>	Backup camera functions and operations
<input type="checkbox"/>	Transit power heated seats and heated mirror operations.
<input type="checkbox"/>	Transit AWD, towing modes, and manual shifting
<input type="checkbox"/>	Filling the gas tank, including from a gas can, and the Espar gas heater warning
<input type="checkbox"/>	Handling with a test drive
Exterior	Inspect the exterior.
<input type="checkbox"/>	Entry door features and operations, how to lock from inside and outside
<input type="checkbox"/>	Entry steps operations, including fold down and up, and locking
<input type="checkbox"/>	Toilet cassette door operations, tank removal, and proper dumping
<input type="checkbox"/>	Coolant line shutoff/bypass valves locations and operation
<input type="checkbox"/>	Gray water tank location and manual ball valve operation
<input type="checkbox"/>	Garage door locking and usage
<input type="checkbox"/>	L-track usage and weight limits
<input type="checkbox"/>	Solar panel access and cleaning
<input type="checkbox"/>	Shore power cord inspection and plug usage

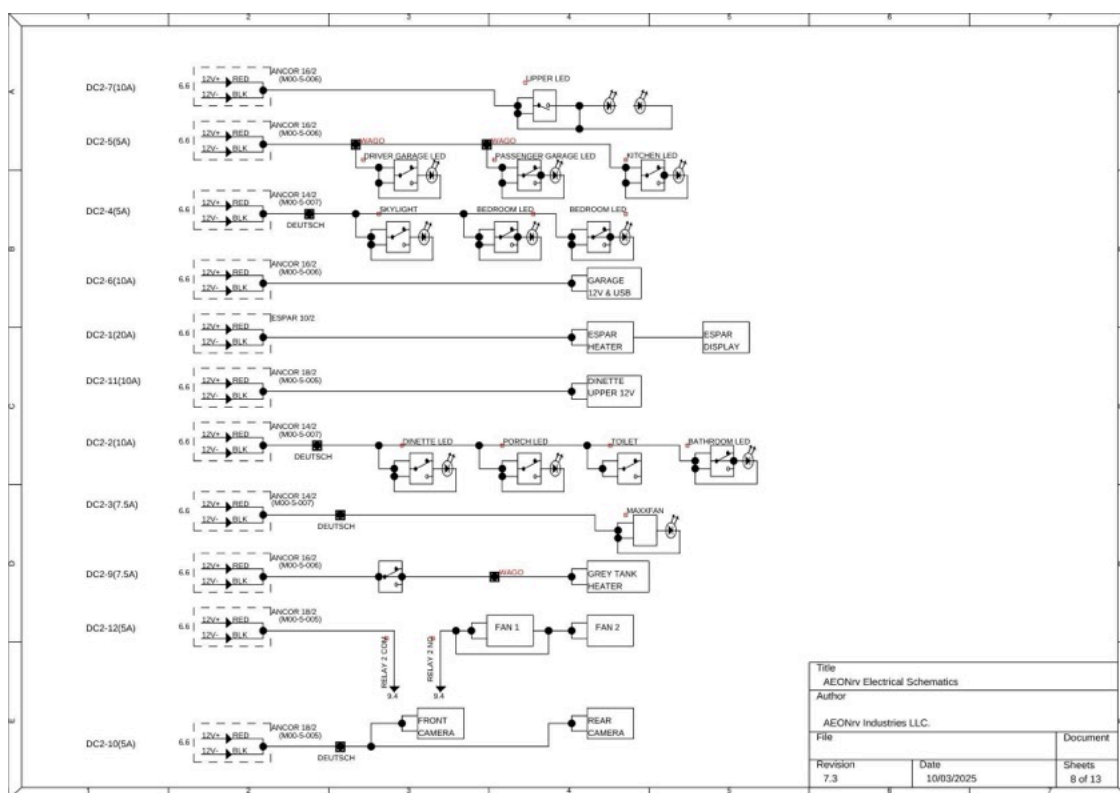
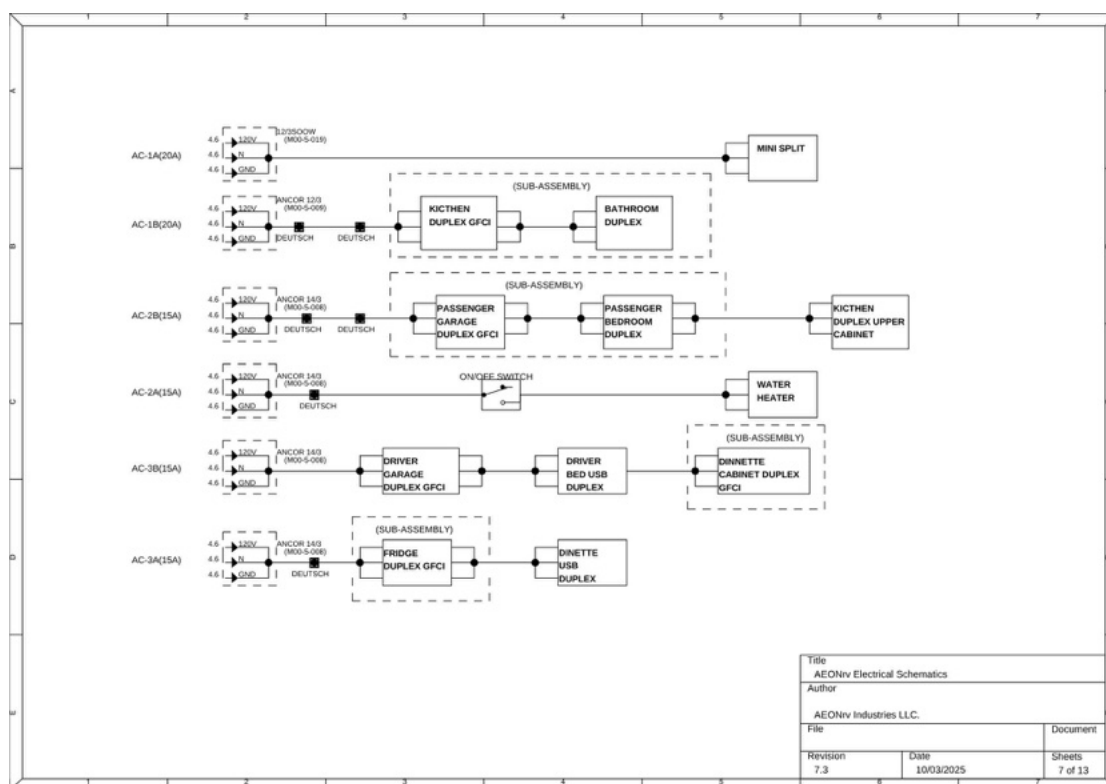
<input type="checkbox"/>	Fresh water tank filling process and drain locations
<input type="checkbox"/>	Fresh water tank locations and cleanouts
<input type="checkbox"/>	Water filter system operations, including filter removal tool, cleaning, purging, and bypass valves
<input type="checkbox"/>	Optional: MoonShade setup and take down.
<input type="checkbox"/>	Optional: Toolbox usage and locking
<input type="checkbox"/>	Optional: Fold down table usage and locking
Interior	<i>Inspect the interior.</i>
<input type="checkbox"/>	Fire extinguisher location and usage, review emergency exits.
<input type="checkbox"/>	Smoke & carbon monoxide alarm location, usage, and maintenance
<input type="checkbox"/>	Bedroom mattress appearance and airflow pad checked
<input type="checkbox"/>	Pullout bedroom stair operations, glow-in-the-dark strips, and a safety handle
<input type="checkbox"/>	Skylight operations, including manual crank and usage as an emergency exit
<input type="checkbox"/>	Dimmable reading lights operation
<input type="checkbox"/>	Wardrobe door operations, including the hidden valuables door
<input type="checkbox"/>	Pantry door and solid waste door operation
<input type="checkbox"/>	Upper cabinet operation, including user wire turn to the roof.
<input type="checkbox"/>	Dinette cushion usage and inspection
<input type="checkbox"/>	Dinette extensions usage and how to turn them into a bed and put cushions in the back.
<input type="checkbox"/>	Dinette passenger seat belt operations
<input type="checkbox"/>	Dinette table usage, including moving and locking
<input type="checkbox"/>	Windows locking, screens, and proper opening usage
<input type="checkbox"/>	Shower door operation and cleaning
<input type="checkbox"/>	Sliding door between the cab and house operations, and locking mechanism.
Plumbing	<i>Inspect all plumbing fittings and valves for leaks.</i>
<input type="checkbox"/>	Water pump usage, switch, and access
<input type="checkbox"/>	Water heater switch and access
<input type="checkbox"/>	Water heater tank access, mixing valve, dump valve, and reset button operation
<input type="checkbox"/>	Gray water actuated ball valve dump switch location and operation
<input type="checkbox"/>	Shower operations, including wand turn-off and opening the shower pan drain
<input type="checkbox"/>	Faucet operations in the kitchen and bathroom, including draining the fold-down sink
<input type="checkbox"/>	Toilet operation, including flushing and rotating
Electrical	<i>The electrical compartment is under the dinette and contains the main electrical components.</i>

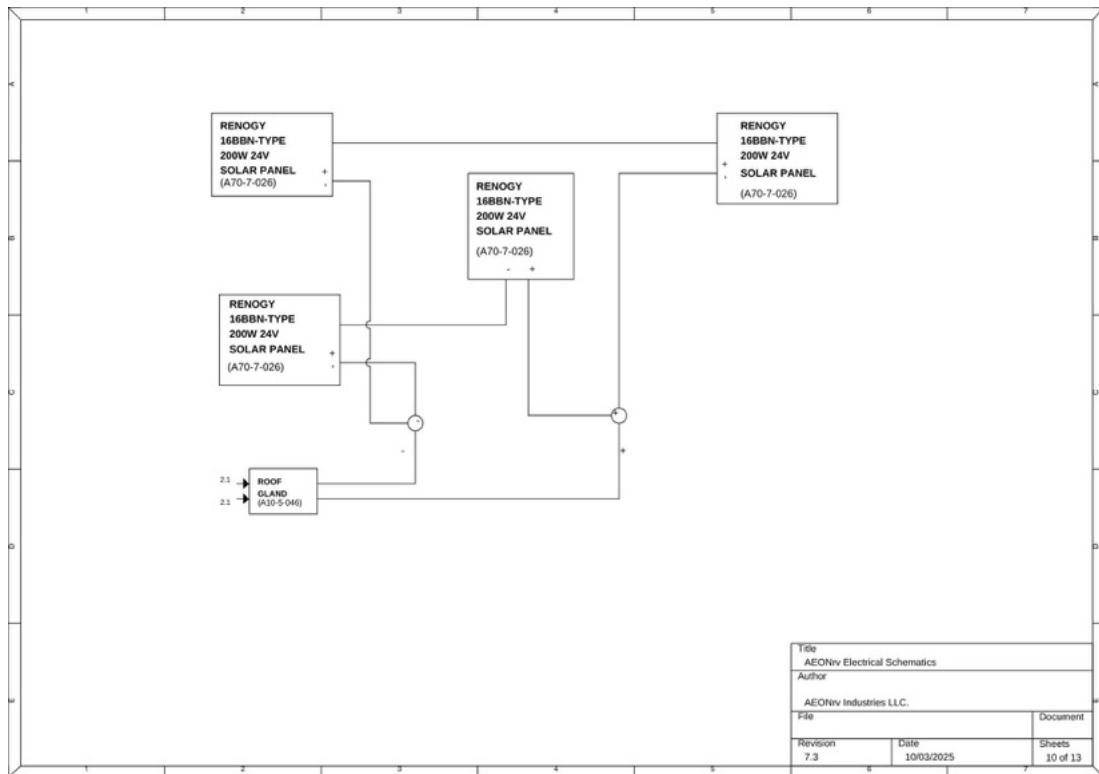
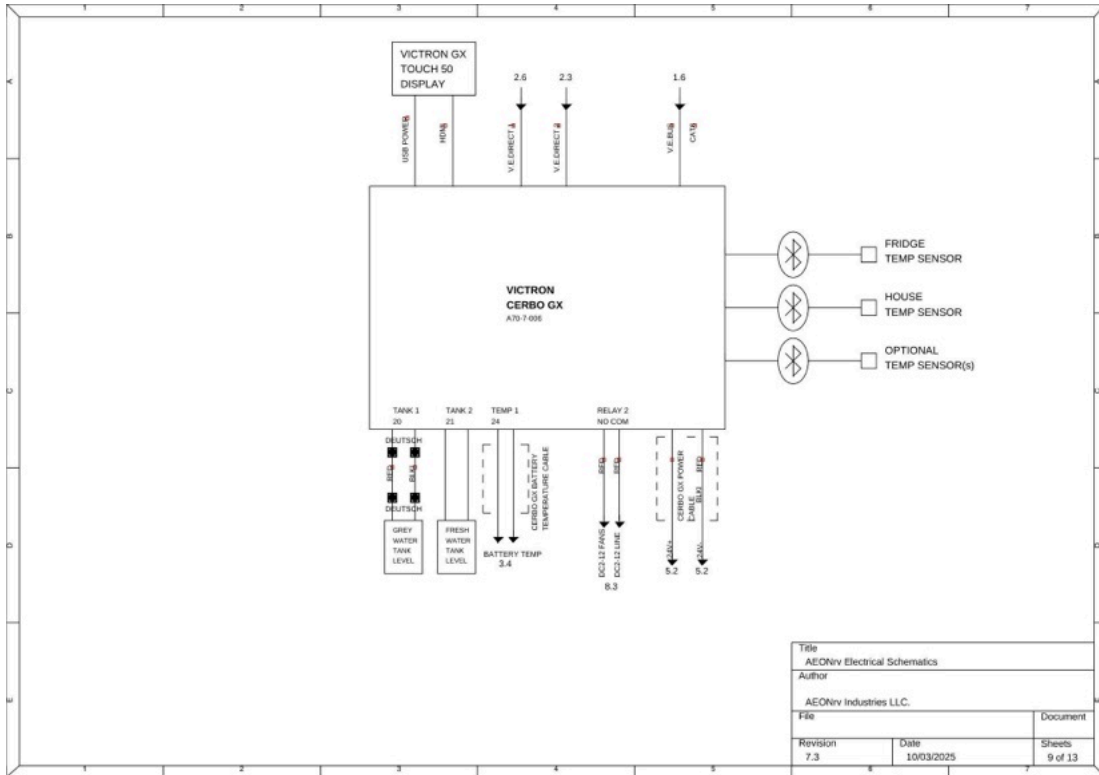
<input type="checkbox"/>	CerboGX operations, including monitoring batteries, water tanks, temperatures, and other Victron equipment
<input type="checkbox"/>	120 VAC system circuits, breakers, and operations
<input type="checkbox"/>	24 VDC system circuits, fuses, switches, and operations
<input type="checkbox"/>	12 VDC system circuits, fuses, and operations
<input type="checkbox"/>	Ground fault circuit interrupter (GFCI) locations and usage
<input type="checkbox"/>	USB port locations and usage
<input type="checkbox"/>	All interior lights and switches, including remote control of color LEDs
<input type="checkbox"/>	All exterior lights and switches
<input type="checkbox"/>	Battery system disconnect switch and operations.
<input type="checkbox"/>	Battery heating operations and switch.
<input type="checkbox"/>	Shore Power/Alternator charging inverter switch operations, including AC selector switch and 150A breaker location.
<input type="checkbox"/>	Solar disconnect switch operation
<input type="checkbox"/>	Victron inverter charger operations, both manual and via touchscreen
Appliances	<i>User manuals will be provided for each supplied appliance.</i>
<input type="checkbox"/>	Pioneer mini-split AC/heat-pump operation, including remote control
<input type="checkbox"/>	MaxxFan operation, including remote control, light, and cover
<input type="checkbox"/>	Induction cooktop operations and storage
<input type="checkbox"/>	Fridge and freezer usage
<input type="checkbox"/>	Espar heater operations, controls, and venting
<input type="checkbox"/>	Optional: Microwave usage

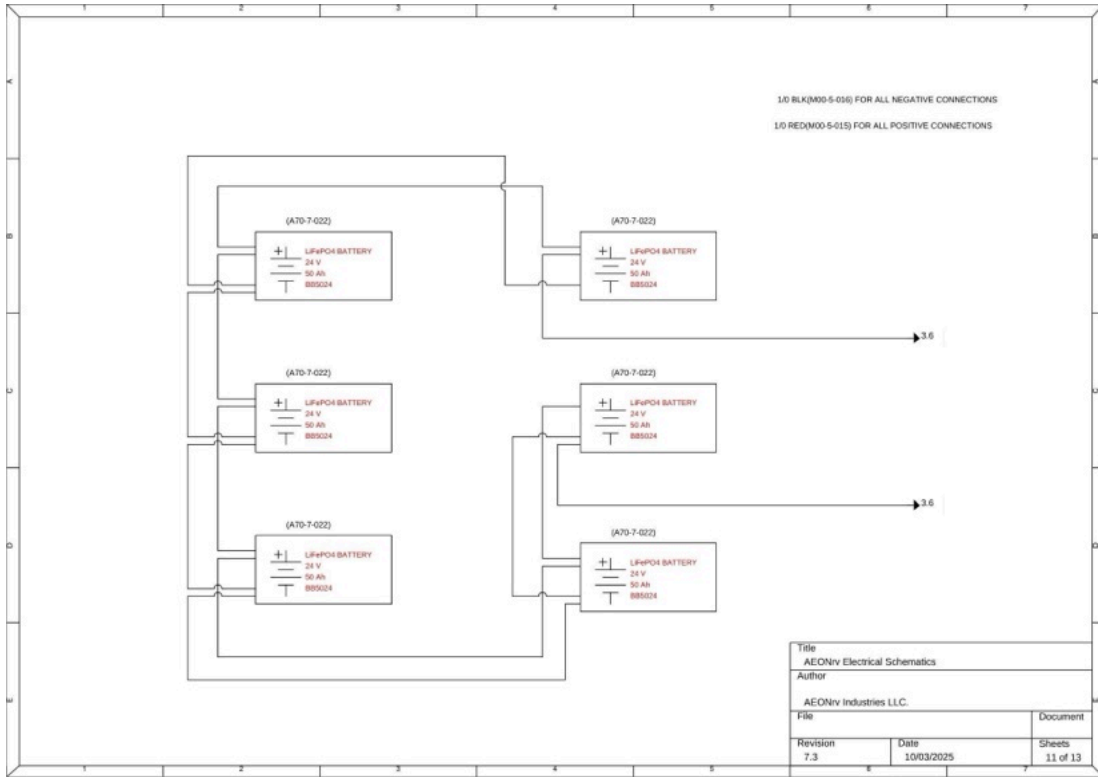
Appendix C - AEONrv Electrical Schematics

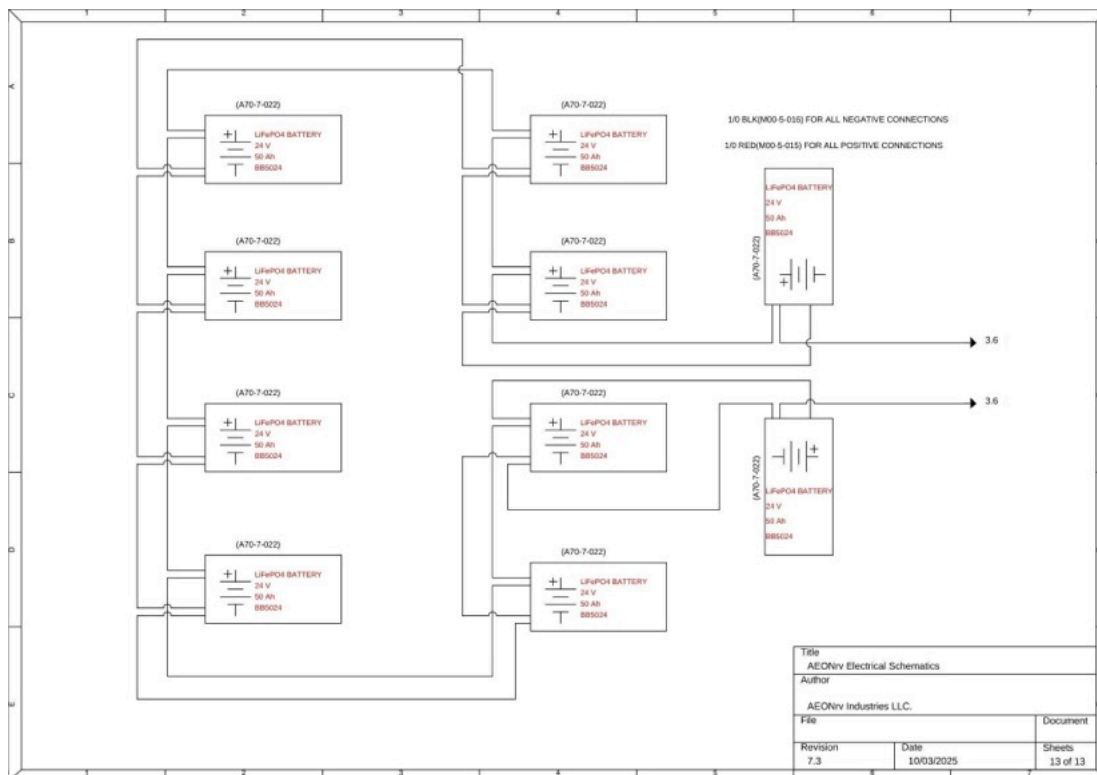
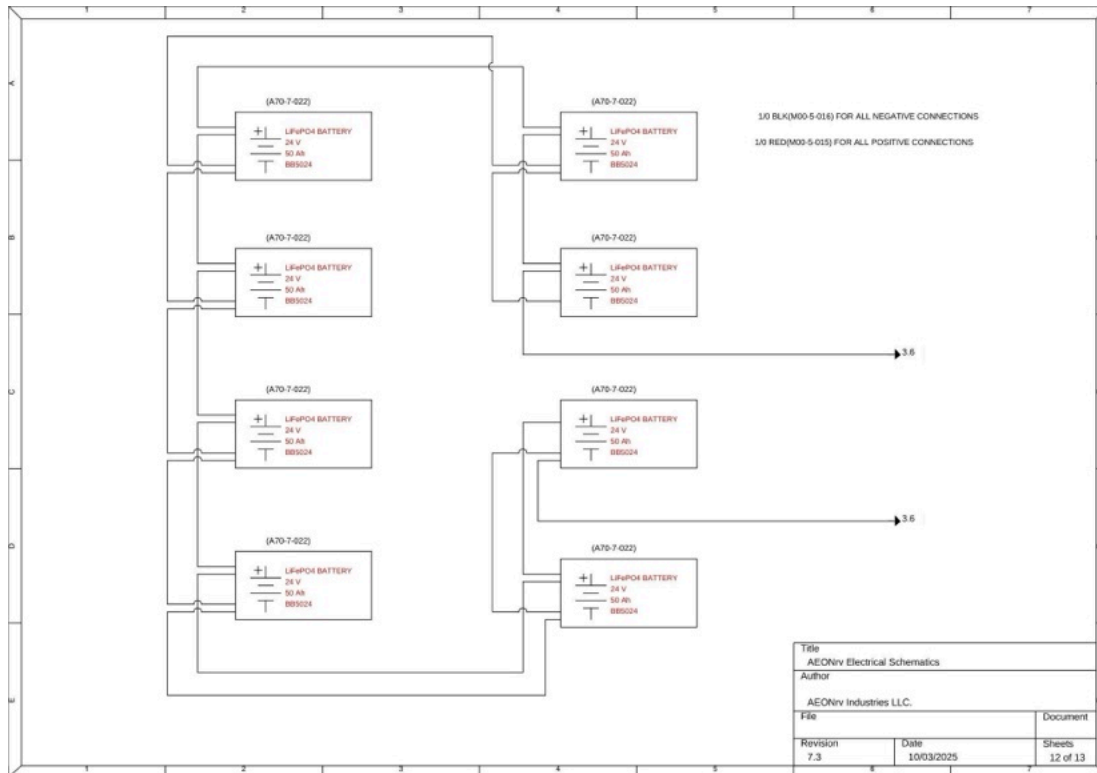












Appendix D - AEONrv Plumbing Schematics

