



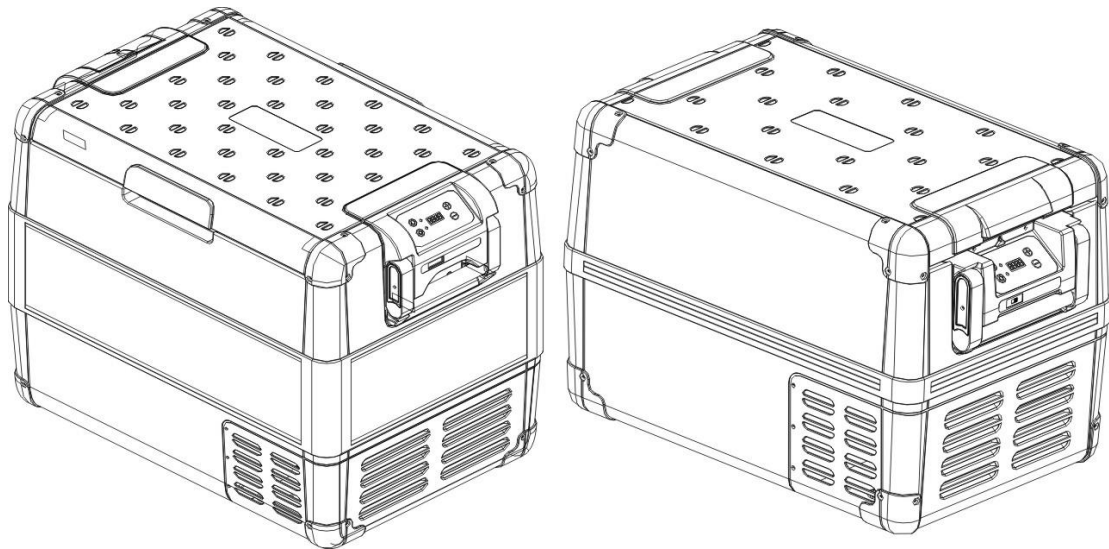
## **INSTRUCTION MANUAL**

**PORTABLE FRIDGE/FREEZER**

Models:

RVX-35 / RVX-45 / RVX-50

RVX-55 / RVX-65 / RVX-75



**PLEASE READ THIS INSTRUCTION MANUAL CAREFULLY BEFORE  
CONNECTING AND OPERATING THE APPLIANCE.  
SAVE IT FOR FUTURE REFERENCE.**

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### Notice:



CAUTION

Please pay attention to the below markings:

Safety cautions: non-standard operations could endanger personal safety or  
Result in refrigerator damage.



Hints for operation

## I. Product features

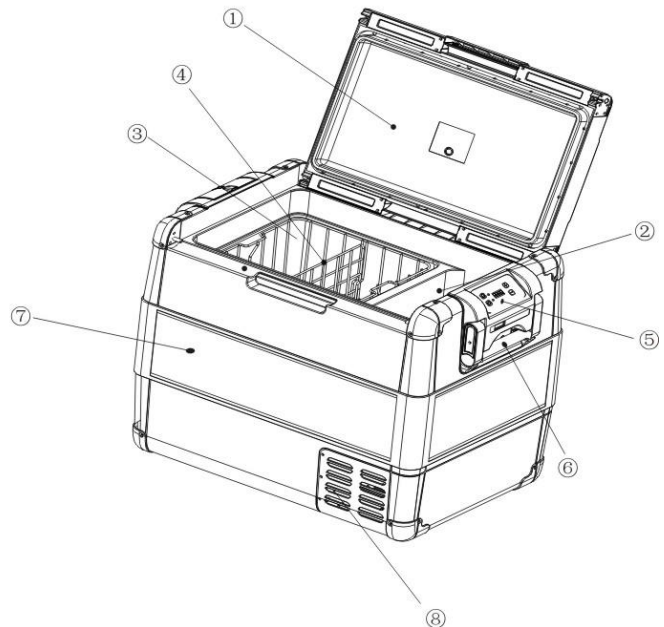
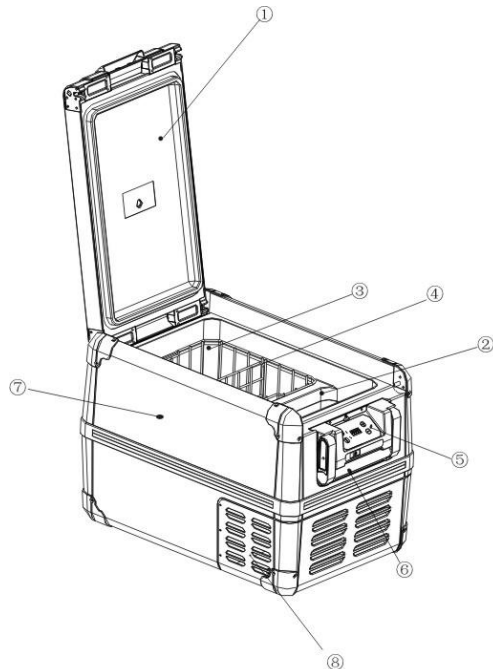
- The refrigerator is suitable for cooling or freezing food and drinks items.
- The device is designed to be operated from a 12 VDC or 24 VDC on-board power outlet of a Caravan/RV, boat or car (e.g. AUX Power socket) as well as from a 100-240 VAC mains GPO.
- The refrigerator is also intended to be used in household and similar applications.
- Using high efficiency compressor cooling technology and environment friendly refrigerant to make sure the refrigerator is able to achieve rapid cooling performance.
- Supplied with full sized removable storage basket (with divider) for item separation and ease of cleaning.
- Using microprocessor control, with touch control buttons and LED display this allows for accurate control of the temperature (-22DegC – 10DegC)
- With low voltage protection and reverse polarity protection



CAUTION When used for drug cold storage, please review if the cooling capacity matches the drug storage requirements.

## II. Parts list

1.Lid 2.Fridge compartment 3.Freezer compartment 4.Storage basket (with removable divider) 5.Operation panel 6.Handle 7.Body 8.Air vent outlet



### III. Safety instructions

- Pay attention to the voltage description on the rating label, and ensure that the power cord is connected to correct power outlet type.
- If this power cable is damaged, it must be replaced by the manufacturer, customer service centre or a similarly qualified person in order to prevent safety hazards.
- Disconnect the power supply when cleaning and performing any maintenance.

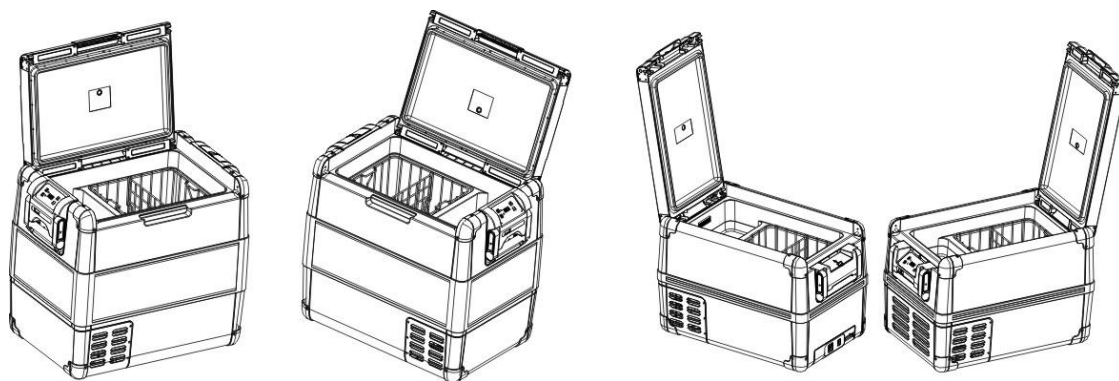
#### ***NOTICE! To prevent any damage!***

Disconnect the refrigerator and other consumer items from the battery before you connect the battery to a quick charging device.

Over-voltage can damage the electronics of the device.

- Refrigerator can only be maintained by an authorized person, improper maintenance may lead to unexpected dangers or damages.
- Corrosive materials cannot be stored in this appliance.
- The appliance should be placed in a dry place, to prevent it from water splashing, rain and moisture. Do not immerse it into water.
- Do not place the appliance near heat sources such as heaters or direct sunlight.
- Make sure the appliance is used in a well-ventilated area for normal operation.
- The appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- The appliance is only to be used with the power supply unit provided with the appliance.

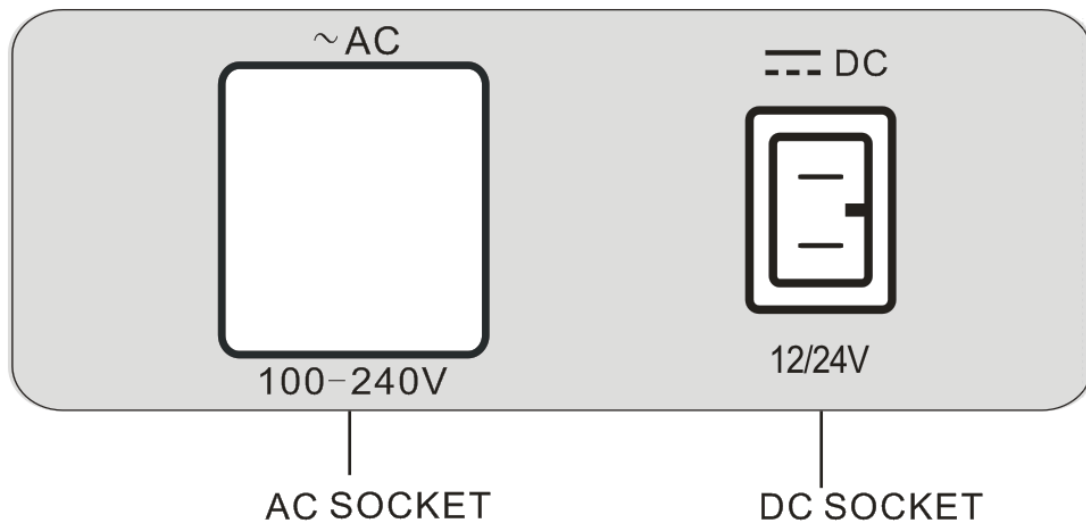
### IV. Preparing before use



1. Use a damp cloth to clean the refrigerator inside and outside when you use it for the first time. Specifics please refer to the “**Cleaning and maintenance**”.
2. For convenience, the lid can be opened from either side/end. Also you can remove the lid completely by using both lid latches at the same time. (This is great if used in a restricted height installations that prevents complete opening of the lid for access)
3. Energy-saving tips
  - Select a well-ventilated place and keep the refrigerator away from heat or direct sunlight.
  - Reduce the frequency and duration times to a minimum with the lid open.
  - Selecting correct temperature setting

## V. Operation and function

### 1. Connecting to power

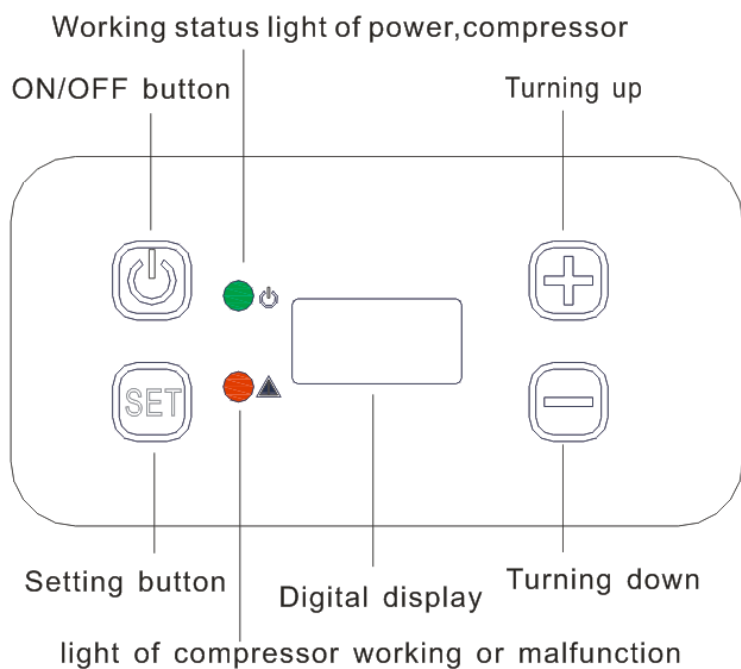


- Slide emergency switch to standard mode **NORMAL USE** position.
- Insert DC plug into vehicle AUX power socket making sure it is either a DC 12V/24V outlet.
- When using Mains power of AC 100-240V, please insert the AC plug into an AC socket. And remove the 12/24VDC power lead from the appliance at this time.




During normal operation, emergency mode is not applicable. Emergency mode is only used while the operating panel is malfunctioning.

### 2. Operating panel



### 3. Turning on the refrigerator

-Once power from MAINS or 12/24VDC is available, the Orange power indicator light will be illuminated and the appliance is in standby mode, with no Digital display seen.

-Press  button three seconds continually.

Digital display will show the current interior temperature.


Power light will turn to Green and the refrigerator will begin to start normal temperature controlled operation.






CAUTION



Please place the refrigerator in a well ventilated area, and check that the air outlet vent is **NOT** blocked or restricted.

### 4. Setting the temperature

-Press  button once, to adjust the temperature setting.

-Press either  \  buttons to select the desired temperature (-22°C to 10°C).

-Press  button once again, to adjust the display type from centigrade degree (°C) to Fahrenheit degree (°F).

-Press either  \  to swap between (°C) and (°F) display modes.

The cooling temperature appears in the display for a few seconds. The display flashes several times and then the interior temperature is displayed again.

#### **NOTE**

If the ambient temperature is above +32°C (+90 °F), the minimum temperature cannot be attained.



 \  Should be used after using the  button. Without pressing 

button firstly the  \  are non-operational.



In the event of a power out, when power is restored the original set temperature is retained.





When the refrigerator's interior temperature reaches the set temperature, the compressor will stop in operation. Power indicator light will turn to the orange color. Green indicates compressor is in operation, Orange indicates Set temperature is reached and compressor is currently off.

## 5. Battery protector setting

The appliance is equipped with a multi-level Electronic battery protector that protects your vehicle battery against excessive discharging when the appliance is connected to the on-board 12/24DC supply.

If the refrigerator is operated when the vehicle ignition is switched off, the refrigerator switches off automatically as soon as the supply voltage falls below a set level. The refrigerator will switch back on once the battery has been recharged to the restart voltage level.

-Press the  button three times.

-Use the  ,  buttons to select the electronic battery protector mode.

Digital display will be as follows:


Lo (LOW), ME (MED), HI (HIGH)

The selected mode then appears in the display for a few seconds.

The display flashes several times before it returns to the current temperature.

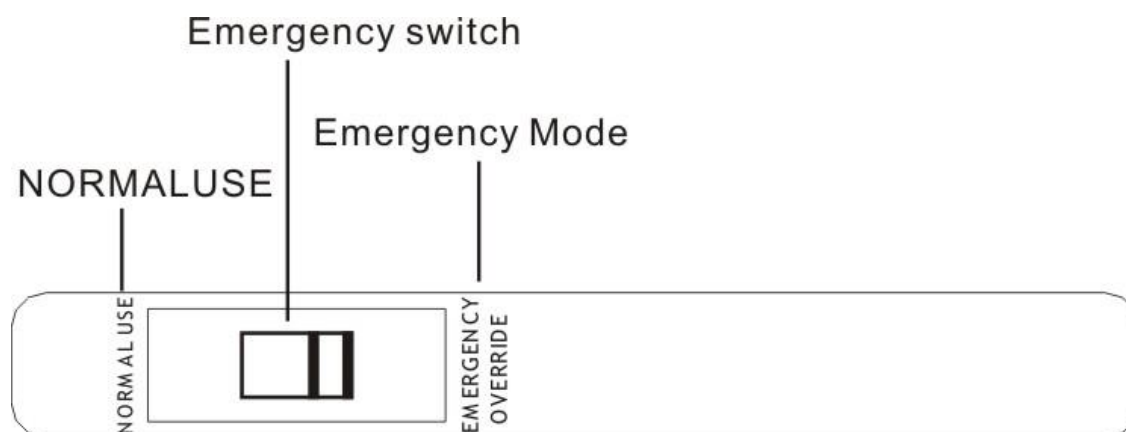
Please refer to Page 8 Voltage chart for the different battery cut out voltages.

## 6. Turning off the refrigerator

In normal operation, press  button for three seconds to turn off the refrigerator.

Pull out the power supply lead.

## 7. Emergency Mode



Should the control panel fail, Emergency operation mode (EMERGENCY OVERRIDE) is available.



Slide Emergency switch to EMERGENCY OVERRIDE position, to allow override operational mode. When in this mode, NO temperature setting function is available and compressor speed is reduced. This mode is only for temporary use.



During normal operation, emergency mode should NOT be set. Emergency mode is only used if the operating panel is malfunctioning.



**CAUTION** This mode is not suitable for long periods of food storage. If the switch is in the “EMERGENCY OVERRIDE” position, the refrigerator is set to full cooling capacity. Super-cooled temperatures may be seen and will freeze the items within the unit.

## VI. Setting the Low battery cut out (Low voltage protection)

-When powered from a vehicle 12/24VDC Aux power outlet, if no Aux charging system is used to maintain the battery (Solar panels etc.) the AUX battery voltage will decrease with use and the compressor will stop working, so as to protect the battery against over discharge. Once the battery voltage reaches the restarting voltage (after charging), the compressor will start immediately and resume normal operation.



-When the battery voltage is too low, the electronic battery protector will take effect. The Red malfunction indicator light will blink. Recharge the battery to resume normal operation.

Voltage cut out range of electronic battery protector:

Power Supply	Status Battery protector	Low Mode	Medium Mode	High Mode
DC 12V	Cut out Voltage	10.1±0.3V	11.4±0.3V	11.8±0.3V
	Restarting Voltage	11.1±0.3V	12.2±0.3V	12.6±0.3V
DC 24V	Cut out Voltage	21.5±0.3V	24.1±0.3V	24.6±0.3V
	Restarting Voltage	23.0±0.3V	25.3±0.3V	26.2±0.3V



When the refrigerator power is supplied by the Main Vehicle starting battery, HI mode setting is **recommended**, so as to warrant that vehicle’s battery power is still able to start the vehicle when required. Please contact your local Auto electrician as many options are available for aux battery fitment.

If you use additional AUX battery as a power supply, Lo and Med mode setting is available for extended use and operation. Please refer to the battery specifications for maximum recommend discharge voltages to ensure battery performance.



Should the power supply be interrupted the Refrigerator is designed to restore the previously set temperature settings when power is restored again.



## VII. Defrosting

Humidity can form frost in the interior of the cooling device or on the evaporator. This reduces the cooling capacity. Defrost the device in good time to avoid this.

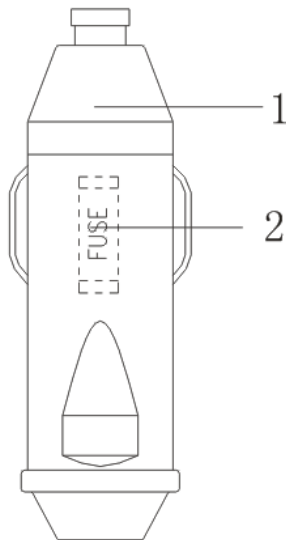
Defrosting steps are as below:

- Take the stored items from the refrigerator.
- If it is necessary, the stored items could be stored in another refrigerator.
- Cut off the power, open the refrigerator's lid, and keep it open until the ice and frost melt away.
- Use clean cloth to wipe off the defrosted water.
- A Drain bung is provided in the base of the compartment. Please ensure this is over a suitable drain or open ground if used to drain away any water from the internal base.
- Ensure this is reinstalled before normal use of the appliance once defrosting is completed.



**CAUTION** Never use hard or pointed tools to remove ice or to loosen objects that may have frozen in place.

## VIII. Replacing fuse and the light PCB



1. Steps for replacing plug fuse (12/24 V):

- Unplug the DC power plug;
- Turn cap anticlockwise to remove the fuse from the plug;
- Replace the defective fuse with a new one that has the same rating (insert style 32V 10-15A);
- Tighten the cap.



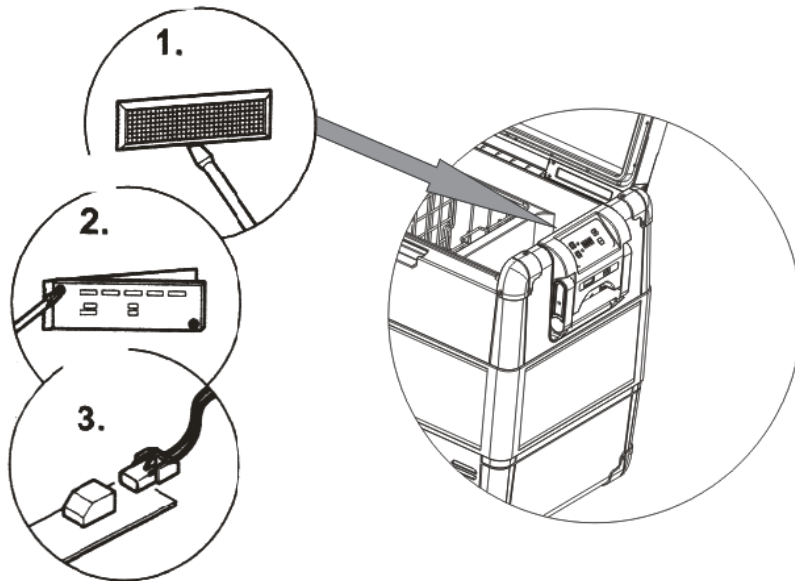
CAUTION

**Warning:** rated current for replacement fuse should be within 10-15A, no less than 10A and Max. 15A.

Fuse with rated current less than 10A will be easily burnt during compressor starting procedure;

Fuse with rated current more than 15A will impact on the Vehicle's AUX power circuit and could cause a fire from overheated cables and connections.

2. Steps for replacing the light PCB:



- Unplug the power plug and open refrigerator's lid;
  - Pry out the transparent light cover with a screwdriver;
  - Unscrew the PCB mounting board;
  - Pull out the connector wire terminal from the PCB;
  - Replace the defective light PCB with a new one;
- Fit new PCB using reverse of removal instructions.  
Press the transparent cover back into the housing.

## IX. Cleaning and Maintenance



CAUTION

Warnings: Always disconnect the appliance from the Power (Mains or DC supply) power before you clean and service it.



CAUTION

Warnings: Do not use abrasive cleaning agents or hard objects during cleaning as these can damage the refrigerator.

- Occasionally clean the device interior and exterior with a damp cloth.
- Clean air vent outlet frequently to ensure good air flow for optimal cooling and operation.

## X. Troubleshooting

Fault	Possible cause	Suggested remedy
Power indicator light is not on, refrigerator does not work.	No power input.	Check whether input power is available or not; The ignition must be switched on in most vehicles to apply current to the AUX/cigarette lighter outlets.
	Refrigerator fuse burnt.	Change fuse.
	Vehicle-mounted fuse burnt.	Refer to vehicle operating manual to change fuse.
	Cigarette lighter socket does not connect well.	Clean cigarette lighter socket or use a AUX power style outlet.
Digital display shows Err1 or Err2.	Temperature sensor broken	Please contact Sphere Service centre for further assistance.
The device does not cool (plug is inserted, "POWER" LED flashes orange, display is switched off).	Battery voltage is too low.	Test the battery and charge it as required.
Temperature control.	Temperature control panel broken.	Please contact Sphere Service centre for further assistance.
	Emergency mode.	Slide the emergency switch to normal mode.
Error indicator light blinks.	Compressor operating trouble.	It will eliminate automatically after restarting compressor; if compressor can't restart for a long time, contact Sphere Service centre for further assistance.



If Error indicator light blinks, the compressor will restart every 60 seconds until it starts successfully.

Under Emergency Mode, If Error indicator light blink every 4 seconds, it means that input voltage is lower than lowest starting voltage, you need to charge your battery.

## **XI. Packing list**

No.	Quantity	Description
1	1	Sphere refrigerator
2	1	Protective cover
3	1	AC & DC cable set
4	1	Storage basket
5	1	User manual

### **Service Contact**

#### **Coast to Coast RV Services**

**PO BOX 6287,**

**Silverwater NSW, 1811**

**+61-2-9645-7600**

**[technical@coastrv.com.au](mailto:technical@coastrv.com.au)**

**[www.coastrv.com.au](http://www.coastrv.com.au)**

### **Warranty**

#### **3YEARS (36MONTHS) Warranty**

**+ *Additional 2YEARS (24MONTHS) Compressor (part supply only) Warranty***

In Australia our Goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the Goods repaired or replaced if the Goods fail to be of acceptable quality and the failure does not amount to a major failure.

**Please refer to**

**<http://www.coastrv.com.au/warranty-policy>**

**For full terms and conditions**