



SetPower

RV45S

User Manual

V1.3

CONTENT

1.SAFETY INFORMATION_____01

2.DATA SHEET_____02

3.DESCRPTION_____02

4.GETTING STARTED_____03

5.OPERATION OF RV45S_____07

6.MAINTENANCE_____07

7.CLEANING_____07

8.SUGGESTIONS_____07

9.GENERAL SAFETY MESSAGES_____07

10.NOTICE_____08

11.FAULTS_____08

1.SAFETY INFORMATION

Please read this operating manual carefully before starting the appliance. Keep it in a safe place for future reference. If the appliance is passed on to another person, this instruction manual must be handed over to the user along with it.

The manufacturer cannot be held liable for damage resulting from improper usage or incorrect operation.

WARNING

- This 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 or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be ensured that they do not play with the appliance.
- Cleaning and user maintenance shall not be carried out by children without supervision.
- Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.
- Do not use this appliance near direct heat sources, for example, a cooker, radiator or exposing it to direct sunlight.
- The appliance shall not be exposed to rain. Place the refrigerator on a dry, protected surface, away from edges.
- Do not use an extension cord.

NOTICE

- No responsible for the damage by ignoring the safety instructions SetPower.
- The use of accessories that are not recommended by SetPower can cause injuries and will invalidate any warranty that you may have.
- Place the products so that they do not collide against each other or break when the appliance is in motion.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- Disconnect the power cable from the plug before carrying out any maintenance.
- Do not place carbonated drinks and gaseous drinks under 0°C(32°F) in this appliance.

INTENDED TO USE

This appliance is intended to be used in household and similar applications such as:

- Staff kitchen areas in shops, of fces and other working environments.
- Farm houses and by clients in hotels, motels and other residential type environments.
- Bed and breakfast type environments.
- Catering and similar non-retail applications.

CAUTION

- Keep ventilation openings, clear of obstruction in the appliance enclosure or in the built-in structure.
- Do not use electrical appliances inside the food storage compartments of the appliance, unless they are of the type recommended by SetPower.
- Do not place ice or liquids which are not sealed in containers within the refrigerator.
- Do not place hot products or hot food in this appliance.

CORRECT DISPOSAL OF THIS PRODUCT:

To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the recovery systems or contact the retailer that they can take this product for environmental safe recycling.

DANGER

- Risk of child entrapment.

Before you throw away your old refrigerator or freezer:

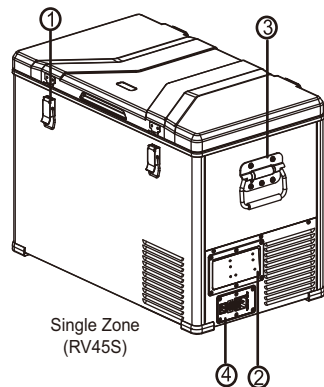
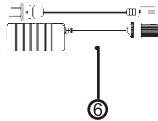
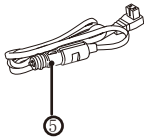
- Take off the doors.
- Leave the shelves in place so that children may not easily climb inside.

2. DATA SHEET

Model	RV45S
External dimensions (LxWxH)	693x407x477mm(27.3x16.0x18.8 inch)
Net weight	21 kg(46.3 lbs)
Installed power	85W
Supply voltage	DC 12V/24V , AC 110 -120 V (for US) /AC 100-240V (for AU & EU)
Temperature setting	-18°C to +10°C (0°F to 50°F)
Refrigerant gas	R134a-CFC Free
Insulation	C-pentane
Shell material	Metal cabinet

3. DESCRIPTION

- 1 Lid Handle
- 2 Control Panel
- 3 Carry Handle
- 4 Power Input Panel
- 5 12V/24V DC Power Cable
- 6 110-120V AC Adapter



4. GETTING STARTED

Installation

Please check whether the parts of Fridge/Freezer are complete after unpacking.

Note:

Place the unit in a dry place which is protected against splashing water. Do not place directly adjacent to sources of heat (heating, gas ovens, hot water, pipes or under the blazing sun).

The normal operation of the appliance requires heat to be radiated away from the condenser located at the end of the cabinet. Adequate airflow is required around the compressor at all times. (Fig. 1).

The cooling system has been designed to operate correctly when the appliance is positioned on angles up to 30 degrees. It is recommended that the time the unit is exposed to angles over 30 degrees is limited to a maximum of four (4) hours continuous operation. (Fig. 2).

Application and Operative Cooling Range

The cooling compartment has varying temperature zones. The values indicated on the digital display are related to the middle of the cabinet. The Single Zone Fridge/Freezer is designed to either refrigerate or freeze food. The Fridge/Freezer may be used for outdoor, use such as for camping purposes. The Fridge/Freezer is designed to operate in ambient temperatures from -18°C to $+10^{\circ}\text{C}$ (0°F to 50°F) in a maximum air humidity of 90%. The Fridge/Freezer can operate continuously at an angle of 30° maximum.

Fig. 1

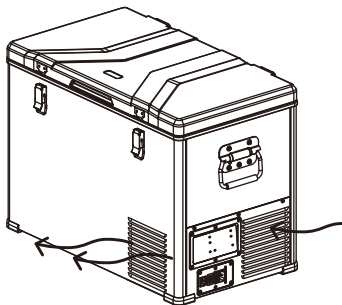
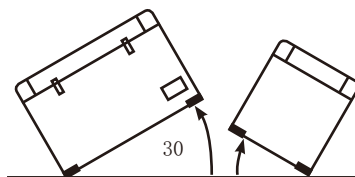


Fig. 2



Power Requirements

The Fridge/Freezer is designed to operate on AC or DC voltage.

- Connect with 110-120V via AC adapter
- DC input 12V or 24V DC (e.g. car cigarette lighter or car battery)
- If the Fridge/Freeze is operating when the vehicle ignition switched OFF, the Fridge/Freezer will switch OFF automatically when the power source voltage falls below the Battery Monitor cut-out setting.
- The Fridge/Freezer will automatically switch back ON when the vehicle is re-started and the power source voltage reaches the Battery Monitor cut-in setting.

Operating your Fridge/Freezer with 12/24V DC

- Plug the 12V/24V DC power cable into the DC POWER socket (as circled) on the end of the Fridge/Freezer and then connect to the vehicle cigarette lighter socket or suitable 12V or 24V DC power source.
- The refrigerator has a memory function. If you do not actively turn off the power, the Fridge/Freezer will automatically turn on after reconnecting the power, there is no requirement to switch the appliance on.
- The display will automatically show the current internal cabinet temperature.
- For optimum performance and efficiency, it is important that the Fridge/Freezer has a reliable DC power source. It is recommended that connect the battery in directly and reduce the risk of voltage dropping to the appliance.
- Use only the 3.5m DC power cable supplied with the Fridge/Freezer.

IMPORTANT:

- If a DC extension cable is required we recommended use of a 6mm dia. (AWG11) 4.58mm² Twin Sheath Two Core cable with direct connection to the positive and negative battery terminals with 15A inline fuse protection.
- The Fridge/Freezer is equipped with an electronic control system that will prevent polarity reversal. In the event that the battery connection is reversed the unit will not start or operate. The power input socket is fitted with a 15A blade fuse for protection.

12/24V DC Power Requirements

If your Fridge/Freezer is cutting out prematurely, it could be due to:

1. The low voltage protection being set too high on the Battery Monitor.
 2. DC power cable and/or connections are not suitable to carry the required current. Check the power cable and all connections and adjust the Battery Monitor on the control panel.
- The Fridge/Freezer is equipped with a multi-level Battery Monitor that protects your vehicle battery against excessive discharging when the Fridge/Freezer is connected to 12V or 24V DC power source.

IMPORTANT: When using the Fridge/Freezer with DC power supply, we recommended setting the Battery Monitor to LOW (L).

NOTE: A battery charger may only be connected to the battery when the Fridge/Freezer has been disconnected from the DC power source.

- Over-voltage may cause damage to the electronics of the Fridge/Freezer.
- Your Fridge/Freezer is equipped with reverse polarity protection. It protects your Fridge/Freezer against reverse battery connection and short circuit.
- As a protection for your battery, the Fridge/Freezer switches OFF automatically if the power source voltage is insufficient.

NOTE: It is important that the correct cable size and gauge is used for the installation of the DC supply as over distance the voltage can decrease if the incorrect cable size and gauge cable is being used.

- Always consult a qualified automotive electrician when using a DC extension cable.

Operating your Fridge/Freezer with 110/120V(100-240V) AC

- Plug the 110-120V(100-240V) with AC adapter.
- Keep pressing the ON/OFF button for 3 seconds to switch the appliance on.
- The display will automatically show the current internal cabinet temperature.
- The power input socket is fitted with a 15A blade fuse for protection.

5. OPERATION OF RV45S

BATTERY MONITOR

The device is equipped with a multi-level battery monitor that protects your vehicle battery against excessive discharging when the appliance is connected to 12/24V supply.

If the appliance is operated when the vehicle ignition switched off, the appliance switches off automatically as soon as the supply voltage falls below a set level.

The appliance will switch back on once the battery has been recharged to the cut in voltage level.

Press and hold  button for several seconds until the desired setting is reached.

Battery Protection	Mode	Input Power: 12V	Input Power: 24V
	LOW	When 9.6V, it's off: when 10.9V, it's on.	When 21.3V, it's off: When 22.7V, it's on.
	MID	When 10.1V, it's off: when 11.4V, it's on	When 22.3V, it's off: When 23.7V, it's on.
	HIGH	When 11.1V, it's off: when 12.4V, it's on.	When 24.3V, it's off: When 25.7V, it's on.

CUT IN / CUT OUT

- Your fridge has built in battery protection and needs a minimum 10.9 V to start and 9.6 V to continue operating.
- During operation a load is placed on the power supply and voltage can drop by as much as 2 V, especially if the wiring is insufficient (less than 6mm direct to battery) or if there is a loose connection somewhere.
- If this occurs when you try and start your SetPower and the power supply drops under 10.9 V it will not start. If this occurs when your SetPower is running and the power supply drops below 9.6 V it will stop.

COMMON 12V POWER SUPPLY ISSUES

Wiring

Often the standard wiring from the car battery to the 12V outlet is too small.

A minimum 6mm automotive wiring should be used and the earth should be wired directly back to the battery.


Battery

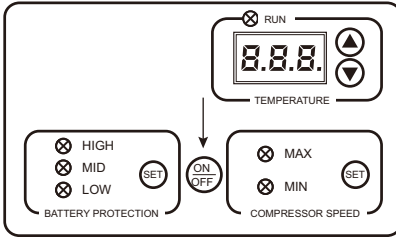
The car battery could be old, undersized or have a dead cell causing too much voltage drop.

Connections

The 12 V plug, car 12 V socket or any of the connections between the fridge and the battery could be faulty or have come loose since installation.

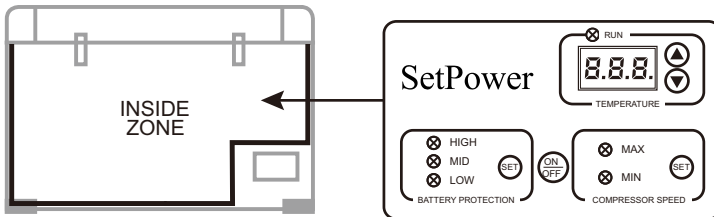
POWERING ON

Connect to the desired input voltage, press and hold the  button for several seconds to turn the unit on, the display will show the current internal cabinet temperature.





TEMPERATURE CONTROLLER

The Temperature Controller provides the ability to set the desired temperature level. The Temperature Monitor would display the actual temperature of the cabinet and set temperature. The flashed number means the set temperature. If not flash, it means the actual temperature of the cabinet.



When your appliance is first connected to AC or DC input, the gauge will show the current cabinet temperature, to adjust the temperature follow these steps:

Press  or  until the desired level is reached, press and hold the button to accelerate the process.


Once selected the display will flash a number of times before returning to the current temperature. The electronic controller has been programmed to maintain an average of the set temperature. The compressor will start up when the internal cabinet temperature increases 0.5 to 1.5 degrees above that selected and will run until the temperature is 0.5 to 1.5 degrees below the set temperature.


TEMPERATURE CONVERSION OF RV45 SERIES

When the appliance is on, press and hold the  and  buttons for several seconds in the compressor speed area at the same time to switch back and forth between Celsius and Fahrenheit.

ECO/MAX FUNCTION

This function allows the compressor speed to be slowed down to increase operating efficiencies (ECO) or increase the compressor speed to provide "quick" cool down times (MAX).

Press and hold the  button to commence the "MIN" operation mode, the MIN indicator will illuminate.

Press and hold the  button again to select the MAX operating mode. The MAX indicator red light will illuminate.

ENERGY SAVING TIPS

Choose a well ventilated installation location which is protected from direct sunlight and allows air to circulate around the cabinet.

Allow hot food to cool down first before you place it into the cabinet.

Do not open or leave the lid open more often than necessary.

If ice forms on the internal walls or lid defrost the appliance.

Select the desired cabinet temperature in relation to the intended use, avoid setting unnecessarily low temperatures.

6. MAINTENANCE



Before carrying out any maintenance operation on the refrigerator, take the power cable out of its socket.

7. CLEANING

- Regularly clean the inside and outside of the refrigerator using only warm water and a neutral detergent.
- Subsequent to washing, rinse with clean water and dry thoroughly using a soft cloth.
- Do not use the following: special glass and mirror cleaning products, liquid, powder, or spray detergents, alcohol, ammonia or abrasive products.
- If you are not using the refrigerator, we suggest cleaning it well inside and leaving the door ajar to ventilate the interior.

8. SUGGESTIONS

Should the device fail to work or work badly, before referring to our after-sales service, make sure that:

- a) the feeding voltage is not missing;
- b) the voltage is the same as the one shown on the plate;
- c) the connections and the polarities are right;
- d) the airing grids are not covered over;
- e) the refrigerator unit is not near any heat source;
- f) the fuse of the feeding line is not blown.

9. GENERAL SAFETY MESSAGES



Failure to obey the following warnings could result in death or serious injury:

- **ELECTRICAL SHOCK HAZARD.** Do not immerse the product in water, or use it in an area that is excessively muddy.
- Do not use the cooler for any purpose other than as a mobile cooling device.



FALL HAZARD. Do not stand on the cooler. Doing so could damage the unit or cause minor to moderate injury.

10. NOTICE

Failure to obey the following notices could result in property damage:

- Keep sand or dirt away from the cooling system ventilation area.
- Do not leave the cooler on the deck of a boat for an extended period. Salt water damage to the cooling system, electronics, or metal hardware could occur.
- Do not expose the cooler to extreme heat.
- Only use mild soap and water to clean the cooler.
- Do not use a DC extension cord.
- Do not use a power strip or two-way splitter.
- Do not use power cord adapters of any kind other than those provided by the manufacturer.
- Do not use ice cubes or fill the cooler with water. If ice does accumulate at the bottom of the cooler, defrost the unit and use the drain plug to drain the water.
- Do not modify the unit in any way.
- Do not place hot materials (75 °F or higher) in the cooler. Allow materials to cool (50 °F or less) before placing them inside the cooler.
- Do not tip or store the cooler at an angle greater than 30° for extended periods. Compressor oil contamination of the cooling system could occur.
- Allow 2–4 inches of space around the cooler at all times for proper ventilation of the cooling system.
- The cooler must be secured at all times using straps or a mounting plate, especially in mobile applications.

11. FAULTS

Number of flashes	Error type
E1	The low battery protection mode take effect (the input voltage is lower than set value)
E2	Fan error/Short circuit/ Frequently start and stop(Amp > 0.65A)
E3	Compressor motor start error (Motor block or refrigeration system pressure difference is too large.)
E4	The motor speed of the compressor is too low (the refrigeration system is overloaded, the motor cannot maintain the minimum speed of 1850r/min)
E5	Temperature too high or too low to protect the compressor control module (when the environment temperature is too high or too low, or system load is too large, causing module/ECU internal temperature 100 °C > or < - 10 °C)
E6	Thermal head fault (Open circuit or short circuit)

OUR GUARANTEE

SetPower product comes with a 3-year warranty on the compressor and 1 year warranty on all other parts for your peace of mind. In the unlikely event this product fails when used according to our user guide, we will either repair or replace it. For full warranty terms and conditions on this product, please see the user guide.

We'd welcome you contact us support@setpowerusa.com if you have any question about the product.

Quality Service Guarantee

This product is warranted for 3 years on the compressor and 1 year for all other parts from the date of purchase. Our goods come with guarantees that cannot be excluded under the Local Consumer Law. You are entitled to a replacement or refund for a major failure and 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. Warranty does not cover products that have not been used in accordance with user guide or are outside the warranty terms and conditions.



official@setpowerusa.com

support@setpowerusa.com

SetPower

3-YEAR WARRANTY

