

Rohnson®



Portable Compressor Refrigerator and Freezer R-4052 Operating Instruction



Thank you for purchasing this portable automobile refrigerator. Please read this user manual carefully before using this product.

Main Features

- Reliable mobile refrigeration system
- High efficiency, low-energy consumption
- Dual DC power supply (12V/24V)
- Battery protection system against over-charge
- Dual zones for both refrigeration and freezing (maximum temperature -20°C)
- Touch-screen operation, electronic temperature control

Low-voltage battery protection

This product is built-in with automatic low-voltage battery protection function. Once the DC power supply voltage drops to the cut-off value, the compressor will be turned off automatically, and the error code E1 will appear on the display screen.

Press and hold SET button, and press UP ▲ or DOWN ▼ button to switch among High (HI), Medium (NE), and Low (Lo).

Battery Protection	Cut-Off Value (12V/24V)	Turn-on Value (12V/24V)
Low	10.5V/21.9V	11.1V/22.9V
Medium	11.8V/22.3V	11.8V/23.9V
High	11.4V/24.5V	12.5V/25.9V

Safety Instructions

Warning: If any of your product's power cord is worn or damaged, please stop use the product.

Warning: If the circuit system was soaked in water, please do not attempt to operate or continue to use the product.

Prior to normal operation, please make sure the fuse is connected to the circuit, it cannot be replaced with the fuse of different specifications. Recommended specifications for the fuse: DC 12V/15A, 24V/7.5A.

Make sure that the power supply is connected to the outlet is within the specified range, and confirm that the power supply polarity is correct. Please refer to the voltage specification on the technical data label at the bottom of the refrigerator.

Please do not put any electrical equipment inside the refrigerator so to prevent damage.

Precautions for Product Use

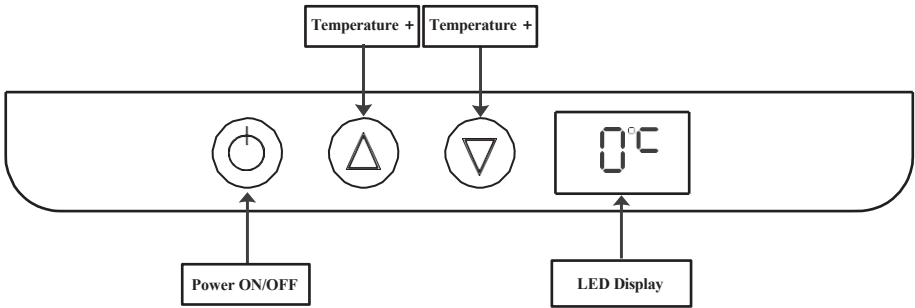
- Please keep the refrigerator well-ventilated during normal operation, especially the rear vents. It is best to keep the distance at least 100mm between all sides of the refrigerator and other objects.
- Please make sure that the refrigerator liner is not covered with serous frost (keep the refrigerator door sealed securely to prevent moisture from entering). Otherwise, the refrigeration performance will be affected. If defrosting is required, please shut down the system until the frost melts into water, then remove the water.
- The lower the ambient temperature, the lower the energy consumption of the refrigerator.
When using the product, keep it as far away as possible from the heat source and avoid direct sunlight.
- The refrigerator should be worked in a horizontal position. It can work normally even at the maximum tilt angle of less than 30°.

Specifications of power cord

- Dual DC power supply (12V/24V)
- The power cord must have sufficient cross-sectional area and in proper length (from the battery to the refrigerator, please refer to the chart below)

Power Cord Specifications		12V Power Cord Length (max)		24V Power Cord Length (max)	
mm ²	AWG	Meter	Feet	Meter	Feet
2.5	14	2.5	8	5	16
4	12	4	13	8	26
6	10	6	20	12	39
10	8	10	33	20	66

Operating Instructions



Temperature setting range: $-20^{\circ}\text{C}\sim 10^{\circ}\text{C}$

Actual temperature range: $-20^{\circ}\text{C}\sim 10^{\circ}\text{C}$ (left zone), $0^{\circ}\text{C}\sim 10^{\circ}\text{C}$ (right zone)

There are two zones in the refrigerator, the left zone (deep freezer) and the right zone (fridge)

- Power ON/OFF:** Connect the refrigerator to the power source, either car lighter socket or wall outlet, and make sure the power is on. Press and hold the ON/OFF button for 3 seconds to switch it on. During the working state, long-press the ON/OFF button for 3 seconds to switch it off.
- Temperature Setting:** During the working state, short-press the UP/DOWN button, the set temperature value will be displayed on the screen and blinking, then short-press the UP/DOWN button to set the temperature upward or downward. While it's blinking, long-press the UP/DOWN button, the set value will be adjusted linearly by 4°C (Celsius) per second (non-jumping, no blinking during the long press process).
- Switching between "C" (Celsius) and "F" (Fahrenheit): During the working state, long-press the "temperature +" button for 3 seconds to display the current corresponding display mode. At this time, short-press "temperature +" or "temperature -" button to switch once ("C" Celsius at default), it will return to standby state after blinking 5 seconds without operation.

Low-voltage battery protection

This product is built-in with automatic low-voltage battery protection function. Once the DC power supply voltage drops to the cut-off value, the compressor will be turned off automatically, and the error code E1 will appear on the display screen.

Press and hold DOWN ▼ button, and press UP ▲ or DOWN ▼ button to switch among High, (≡≡≡), Medium (====), and Low (---)

Battery Protection	Cut-Off Value (12V/24V)	Turn-on Value (12V/24V)
≡≡≡	10.5V/21.9V	11.1V/22.9V
====	11.8V/22.3V	11.8V/23.9V
---	11.4V/24.5V	12.5V/25.9V

Troubleshooting

• Product is not working.

- Check whether the power is turned on.
- Check the input power (try to use other power source, either DC power cord or AC adapter).
- Check whether the power cord plug, and socket are connected fully and securely.
- Check whether the fuse is blown or loose.

• Poor cooling performance.

- Too much food inside the refrigerator will affect air circulation.
- Overheated food inside the refrigerator.
- Refrigerator lid is kept open for a long time or not closed properly.
- Seal for the lid was damaged.
- Poor ventilation (please make sure the product is well-vented and keep the distance at least 100mm between all sides of the refrigerator and other objects).
- Ambient temperature is too hot.
- Temperature is set too high.

• When the refrigerator is working, the sound of running water can be heard on the side wall.

- This is a normal phenomenon; it is caused by the flow of refrigerant in the pipeline.

• Abnormal noise can be heard when the refrigerator is working.

– The refrigerator is not placed in a horizontal position.

• **Damaged frozen food in the refrigerator.**

– The refrigerator temperature has been set too low.

If the above methods cannot solve your problems, please contact your dealer for repair.

Error Protection

If the NTC malfunctions, then the error code E6 will be displayed on the operation panel, the red light is on. If the compressor fails to operate, the error codes (such as E1, E2, E3, E4, and E5) will be displayed on the operation panel. The error codes and its corresponding problem with solution are shown in the chart below.

Error Code	Problem Description	Solution
E1	Input voltage is too low	Check the battery voltage and lower the battery protection level
E2	DC fan protection	Check the cooling fan
E3	Compressor protection	Disconnect the power for 30 mins, and restart
E4	Abnormal compressor speed protection	Set the control panel to change compressor speed.
E5	Control module is too hot	Move the refrigerator to a ventilated place, restart after the refrigerator temperature is lowered.

Specifications

Items \ Model #	R-4052
Rated Voltage	DC 12V/24V
Power Consumption	40W
Rated Current	3.3A (12V) 1.6A (24V)
Refrigerant	R600a



IMPORTANT INFORMATION FOR CORRECT DISPOSAL OF THE PRODUCT IN ACCORDANCE WITH EC DIRECTIVE 2002/96/EC.

At the end of its working life, the product must not be disposed of as urban waste. It must be taken to a special local authority differentiated waste collection center or to a dealer providing this service.

Disposing of a household appliance separately avoids possible negative consequences for the environment and health, deriving from inappropriate disposal and enables the constituent materials to be recovered to obtain significant savings in energy and resources. As a reminder of the need to dispose of household appliances separately, the product is marked with a crossed-out wheeled dustbin.