

# *Kalamera*



## **INSTRUCTION MANUAL**

**PORTABLE COMPRESSOR REFRIGERATOR**

**Model: KRC-45SS / KRC-55SS / KRC-65SS**

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

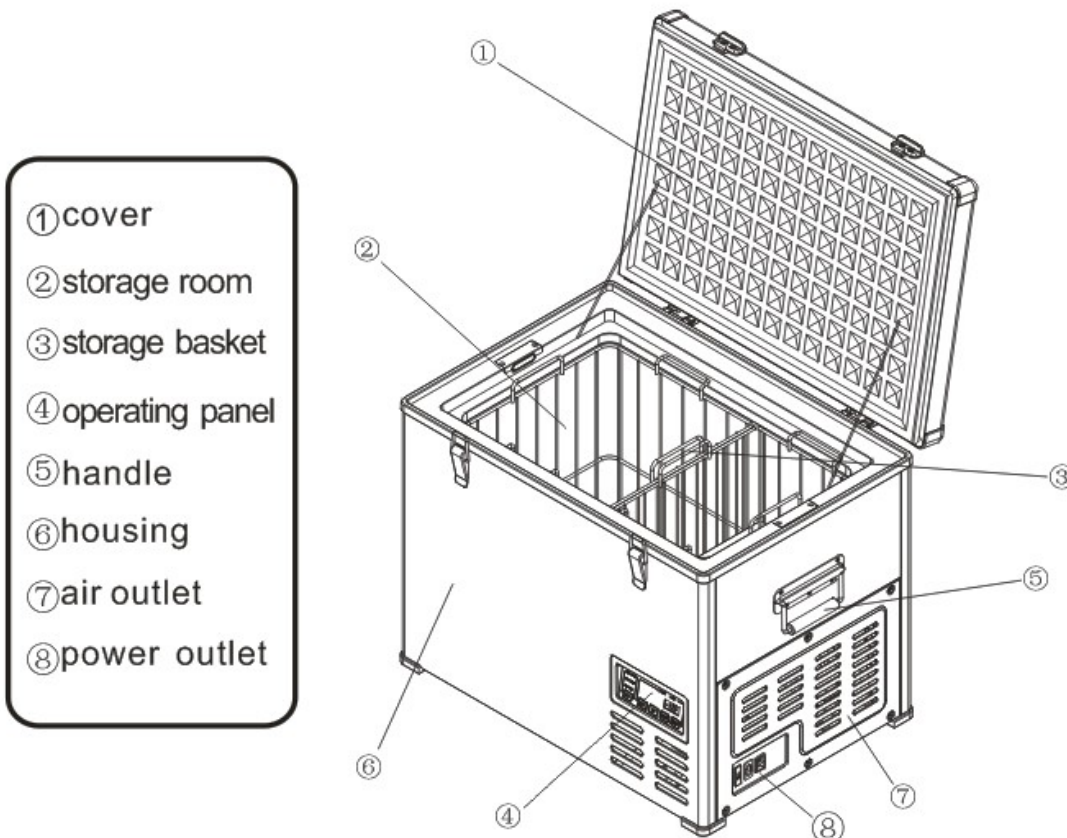
## I. Product features

- The refrigerator is suitable for cooling and freezing foods or drinks.
- The device is designed to be operated from a 12 V $\equiv$  or 24 V $\equiv$  on-board supply socket of a vehicle (e. g. cigarette lighter), boat or caravan.
- Can be used not only on DC 12V/24V power supply, but also on AC 100-240V through external DC/AC power supply adapter.
- The cooling device is also intended to be used in household and similar applications.
- Using high efficiency compressor cooling and insulation materials without CFC to make sure the refrigerator to achieve rapid cooling performance.
- Using DC inverter compressor cooling technology, environment-friendly refrigerant, to achieve rapid cooling.
- With big capacity movable storage basket.
- Using microcomputer control, button/key pressing operation and LED display, accurately control the temperature, also indicate failure tips and temperature setting -7 to 50°F.
- With low voltage protection, power supply reverse polarity protection, ultra-high temperature protection for safely use.



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

## II. Parts list



### III. Safety instructions

We hereby declare that, the damage caused by the following acts shall not be responsible for:

- Faulty installation or connection.
- Over voltage and mechanical damage cause.
- Transforming the refrigerator without permission.
- Failure to manual operation.

- Pay attention to the voltage description on the rating label, and ensure that the power cord is connected to right power outlet.

- If this power cable is damaged, it must be replaced by the manufacturer, customer service or a similarly qualified person in order to prevent safety hazards.

- Disconnect the power supply when cleaning and maintenance or stop use.

#### ***NOTICE! Danger of damage!***

Disconnect the refrigerator and other consumer units 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 authorized person; improper maintenance may lead to unexpected dangers or damages.

- Corrosive materials cannot be stored.

- The appliance should be placed at the dry place, and 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 well-ventilated for heating yield.

- 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 use it for the first time. Specifics please refer to the “**Cleaning and maintenance**”.

2. Energy-saving tips

- Select a well-ventilated place and keep the refrigerator away from heat or direct sunlight.

- Cool the hot food before putting into the refrigerator.

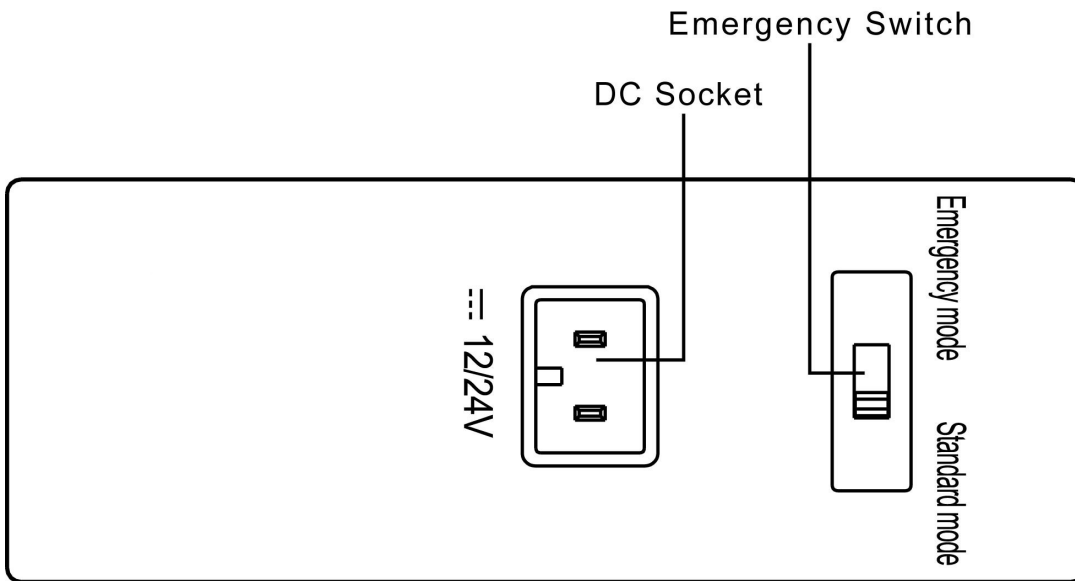
- Reduce the times and lasting time to open the lid.

- Defrost in time when inner frost.

- Setting temperature properly and reduce unnecessary low temperature setting.

### V. Operation and function

#### 1. Connecting to power



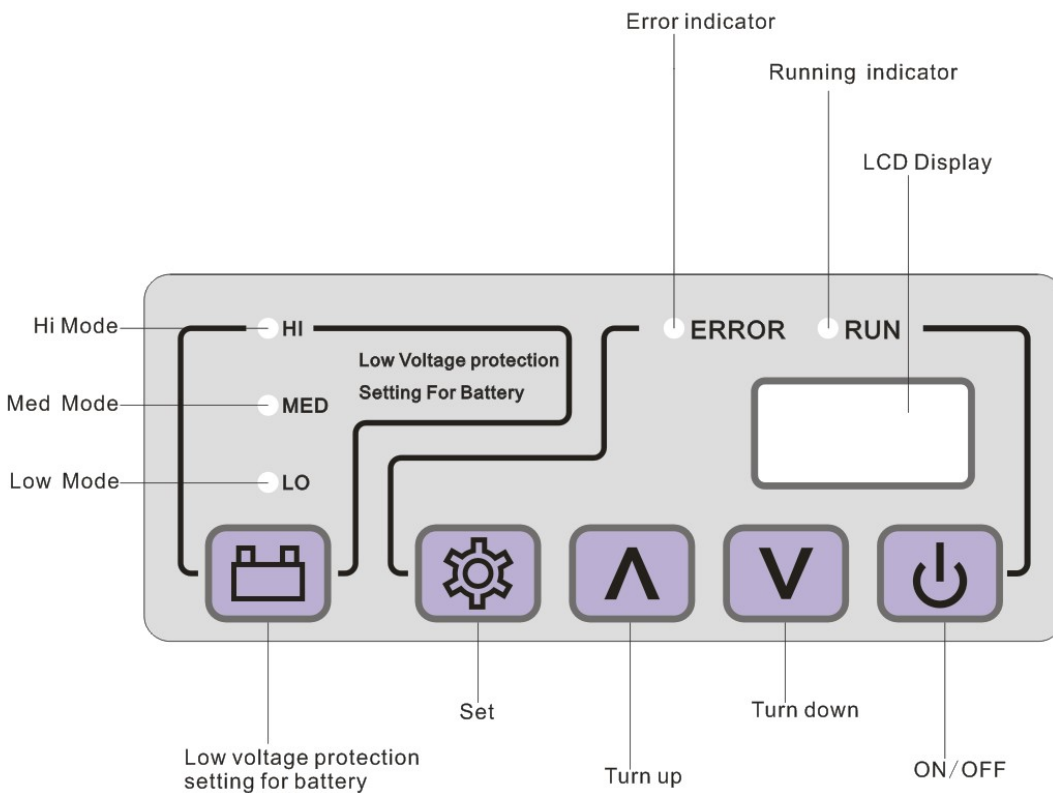
-Slide emergency switch to **Standard mode** position.

-Insert DC plug into a car's cigarette lighter socket or other DC 12V/24V socket.




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

## 2. Operating panel



## 3. Turning on the refrigerator

-After switch on the power, power indicator light will be Orange. Digital display is without displaying, the refrigerator is standing by.

-Press  button three seconds continually.


Digital display will show the current interior temperature. Power light will turn to Yellow, the refrigerator start working.






CAUTION

Please place the refrigerator in good condition of ventilating, and check for making sure that the heat dissipation outlet is not blocked.

#### 4. Setting the temperature

-Press  button once, start setting temperature status.

-Combining   to set temperature from -7 to 50°F.

-Press  button once again, start exchange status for centigrade (°C) degree and Fahrenheit degree (°F).

-Combining   to exchange centigrade degree and Fahrenheit degree.

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



Temperature range of the Display is -30-60°C (-22 to 140°F)

#### **NOTE**

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



  should be used combining with  button. Without pressing  button,   are useless.



The set-up parameters are still effective when the refrigerator is energized again; it means that the refrigerator has memory function.



When the refrigerator's interior temperature reaches the setting temperature, compressor stop work. Power indicator light turn to orange color. In switch on status, the color of power indicator light shows the compressor status, green indicates working, orange indicates stopping.


#### 5. Battery protector setting

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

**NOTICE! Danger of damage!**

When switched off by the battery monitor, the battery will no longer be fully charged. Avoid starting repeatedly or operating current consumers without longer charging phases. Ensure that the battery is recharged.

-Press the  button for 3 seconds, then come into battery protection setting 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.

## 6. Turning off the refrigerator

In working status, press  button three seconds continually to turn off the refrigerator. Pull out power plug.

## 7. Emergency Mode

While the operating panel malfunctions, Emergency mode is applicable.



Slide Emergency switch to **Emergency mode** position, start this function. In such mode, temperature setting function is not available, refrigerating speed is down, and this mode is only for provisional use.



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



**CAUTION** This mode is not suitable for long time food storage; If the switch is in the “Emergency mode” position, the refrigerator with full cooling capacity. Super-cooled temperature may freeze off the food.

## VI.Manipulating of battery protector (Low voltage protection)

-While the battery’s voltage drops to the set-up data, compressor will stop working, so as to protect the battery against over discharge; once the battery’s voltage reaches the restart data after charging, compressor will start immediately.



-While the battery's voltage is too low, battery protector will take effect. Red malfunction indicator light will blink. Now you need to charge the battery.



-While the battery protector cut off the battery connection, you should warrant the battery to be charged sufficiently, so as avoid frequent restarting of compressor.

Voltage range of battery protector:

Power Supply	Status Battery protector	Low Mode	Medium Mode	High Mode
DC 12V	Cutting-off 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	Cutting-off 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 is supplied by the auto starter battery, HI mode setting is proposed, so as to warrant that vehicle's battery power is in high level.  
If you use additional battery for power supply, Lo mode setting is applicable.



-Refrigerator is designed to have the function to rework when connect to power after power off. If the refrigerator is shutdown under abnormal situation, it will work automatically when connect to power 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:

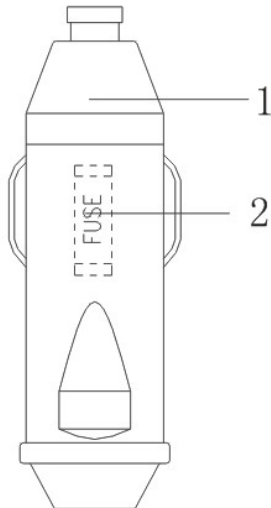
- Take the stored material from the refrigerator.
- If it is necessary, the stored material could be stored in another refrigerator.
- Cut off the power, open the refrigerator's lid, and keep it open until the ice and frost melt away.
- Use clean cloth to wipe off the defrosted water.



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

## VIII. Replacing fuse and the interior light





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

- Unplug the DC power plug;
- Turn anticlockwise the cap to remove it and 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 fuse should be within 10-15A, no less than 10A and Max. is 15A. Fuse with rated current less than 10A will be easily burnt during compressor starting procedure; Fuse with rated current more than 15A will burn battery fuse in car when refrigerator use car battery.

2. Steps for replacing the light:

- Unplug the power plug and open refrigerator's lid;
- Unscrew the light pressing board with a screwdriver;
- Pry out the transparent light cover;
- Remove light component from transparent light cover;
- Replace the defective light component with a new one;
- Fit new light component using reverse of removal instructions.

## IX. Cleaning and Maintenance



CAUTION

Warnings: Always disconnect the device from the mains 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 heat dissipation window frequently to ensure good heat dissipation.

## 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 matching or not; The ignition must be switched on in most vehicles to apply current to the cigarette lighter.
	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 check whether plug connects correctly.
Digital display shows Err1 or Err2.	Temperature sensor broken	Repair it to appointed maintenance center.
Digital display shows Err1 or Err3	Input power is too low(Low voltage protection)	Check power supply and connecting wire; if power supply by battery, then need to change or charge battery.
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 needed.
Temperature control.	Temperature transmitter broken.	Send to appointed maintenance center for repair.
	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, send to appointed maintenance center for repair.



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 charge your battery.

## **XI. Packing list**

No.	Quantity	Description
1	1	Compressor fridge
2	1	DC cable
3	1	AC cable
4	1	User manual
5	1	Storage basket 1
6	1	Storage basket 2