

User Manual

12/24V Fridge/Freezer



MODEL- QN20/QN30

*Read user manual before operating your fridge/freezer

*Please stand for 30 minutes before the first use

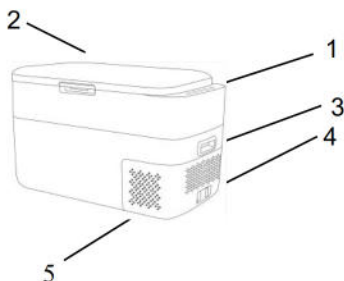
SAFETY INSTRUCTIONS

Please read the user manual and safety instructions carefully before using the appliance.

- By ignoring the safety instructions, the manufacturer will not hold responsible for the damage.
- The use of accessories that are not recommended by manufacturer can cause injuries and will invalidate any warranty that you may have.
- The appliance shall not be exposed under raining. Place the refrigerator on a dry, protected surface, away from corners.
- Do not use this appliance near direct heat sources. For example, a cooker, radiator or exposing it to direct sunlight.
- Do not place ice or liquids which are not sealed in packaging in the refrigerator.
- Do not place hot food in the refrigerator.
- The power cable must be replaced by qualified technical person.
- Before any maintenance on the refrigerator, disconnect the power cable from the plug.
- This appliance is suitable for camping use.
- Ensure that the fridge has sufficient ventilation at all times and that nothing could cover or hinder the ventilation slots.
- Do not use mechanical devices or others to accelerate the defrosting process, other than those recommended by the manufacturer.
- Do not use electrical appliances inside the food storage compartments of the appliance, unless they are of the type recommended by the manufacturer.
- Do not store explosive substances or flammable products in the refrigerator.
- Do not touch the compressor or the condenser. They are hot.
- When positioning the appliance, ensure the supply cord is not trapped or damaged.
- Do not locate multiple portable socket-outlets or portable power supplies at the rear of the appliance.

SKETCH MAP OF MAIN PARTS

1. Operation Panel
2. Door Chain
3. Handle
4. Power Interface
5. Compressor ventilation slots



DATA SHEET

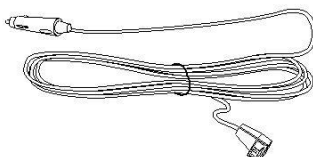
Model	QN20	QN30
Capacity	20L	30L
Dimension	580*340*270MM	580*340*370MM
Net Weight	10KG	10.6KG
Rated Power	45W	45W
Rated Voltage	12/24V	12/24V
Rated Current	4.2A/2.1A	4.2A/2.1A

POWER CABLE CONNECTION

- 1.Connect the DC power cable with refrigerator power supply.
- 2.Put the refrigerator well in the car (Car Boot or Auto Seat)
- 3.Put the power cable well according to the interior decorated of car, and connect the cigarette lighter plug to the cigarette lighter hole.
- 4.Press the button ON/OFF, then the refrigerator starts to work.



Connect car cigarette lighter



DC Power cable



Connect the car refrigerator

POWER MANAGEMENT

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

DC input	12V or 24V
DC cable	2.5m,16AWG

For optimum performance and efficiency, it is important that the appliance has a reliable 15A fuse protected DC supply in good condition. Direct connection to the battery is recommended and reduces the risk of voltage dropping to the appliance.

Remark:

- You can refer to the above pictures to connect the power cable.
- 12V/24V DC power cable.
- If you need to use 220~240 AC power, please connect with power adapter.

OPERATION INSTRUCTION

1. Press the [on/off] to turn on the fridge, Press and hold [on/off] 5 seconds to turn off the fridge.
2. Press "+" "-" to adjust the temperature
3. Press ⚙️ one time into the temperature setting, then press "+" "-" to adjust the temperature.
4. Press ⚙️ twice into the mode setting, then press "+" "-" to choose High or ECO mode. The light will be red in H mode and green in ECO Mode.
5. Press and hold "+" "-" 5 seconds into the voltage protection setting, then press "+" "-" to choose "High", "Medium" and "Low".
6. If no any operation more than 5 seconds, operation panel will be locked.

The Temperature be showed is the cabin temperature, not the setting temperature.



FAULTS

E1	Battery voltage is low.
E2	Fan failure.
E3	Compressor startup problems.
E4	Compressor's running speed fails to reach the requirements.
E5	The model is overheating.
E6	NTC of cooling mode: open circuit or short circuit.

BATTERY PROTECTION

	Resistor KΩ	12Vcut-out V	12Vcut-in V	24Vcut-out V	24Vcut-in V
Low	0.82	9.6	10.9	21.3	22.7
Med	4.7	10.1	11.4	22.3	23.7
High	47	11.1	12.4	24.3	25.7

SIMPLE DIAGNOSIS

♦ The car refrigerator doesn't work.

- Check whether the power is connected correctly.
(Whether the plug is loose, whether the Positive and negative poles are reversed)
- Check the power switch on the display panel.
- Check the heat dissipation and ventilation are normal.
- Check whether the fuse is fused.

♦ Bad refrigeration.

- Check that the door is closed.
- Check whether the sealing strip of the door cover is deformed, damaged or not tightly sealed.
- Car refrigerators with poor ventilation and heat dissipation.
- Improper temperature setting.

♦ Noise abnormality.

- Car refrigerator placed unsteady.
- Touch a wall or other object.
- Internal parts loose or falling off.

♦ Frosting on refrigerator surface.

- When ambient air humidity is greater than 75%, there will be slight condensation on the surface of the cabinet, which is a normal phenomenon.

HELPFUL ADVICE

Where the refrigerator does not function or functions incorrectly, before contacting one of our technical assistance centers, ensure that:

- a) There is a power supply.
- b) The voltage complies with that indicated on the plate.
- c) The connections and poles are correct.
- d) The ventilation grids are not obstructed.
- e) The fridge unit is not placed near to a heat source.
- f) The power supply fuse is not interrupted.

TIPS AND SUGGESTIONS



- Fresh and frozen foods should not be stored together. The coldness from the frozen goods can be transferred to the other produce causing layer between these goods.



- When the appliance is being set at 0° or lower temperatures, do not store glass bottles or liquids such as beer, milk, juices or soft drinks in the unit as these may freeze and shatter.



- Items such as fruit and vegetables should be stored closer to the top of the cabinet as this area is normally slightly warmer. This will reduce the risk of spoiling and ensures that damage is not caused by being crushed by heavier items.



- To improve the efficiency of your Fridge/Freezer it is better to have the cabinet as full as possible at all times. A full cabinet will provide lower power consumption over 24 hours than a half empty one. When the cabinet is full there is little air space between the goods so the cold air is trapped, when there is lots of air the coldness can not be captured and held. On a trip it is a good idea to replace finished products with bottles of water or similar. This will fill the empty spaces and allow the coldness to remain within the cabinet.



- Make your selection of what you wish to remove from the cabinet before you open the door. This will reduce the time that the cabinet is open and the level of warm air that will enter the cabinet while the door is open.



- When located in the rear of a car or trailer, it is recommended that the appliance be kept away from direct sunlight to reduce the risk of increased heat. It should also be provided with suitable ventilation to guarantee efficient power consumption and performance. You must remember that when a vehicle is parked in the sun on a day where the ambient temperature is +30°C, the interior of the vehicle can reach +55°C.