DC Fridge Freezer

Model No.: GC45

OPERATION MANUAL

Thank you for choosing our DC portable fridge freezer.
Please read this manual carefully before use, and enjoy the entertainment of DC portable fridge freezer.
This manual will teach you how to operate and maintain the fridge.
This fridge must connect to a suitable DC12/24V socket.
The manufacturer and seller will not take any responsibilities about the damage fridge if the fridge doesn't connect to a suitable power.

1. Safety Precautions

⚡**Caution**

（1）　If the power cord is damaged, please replace it immediately and do not touch the damaged power cord directly with your hands. It is very dangerous!

（2）　Don't touch the fridge plug when your hand is wet or your feet in water, it is very dangerous!

⚠**Attention**

（1）　Don't use any electronic product in fridge.

（2）　Please refer to the rated voltage of fridge specification sticker and make sure fridge connect to a corrected voltage power.

（3）　Don't put the water into the fridge directly.

（4）　Don't disassemble the refrigerator or modify the refrigerator without permission.

2. Precautions for use：

（1）　The refrigerator needs to be well ventilated to facilitate heat dissipation, so there needs to be a certain space around the refrigerator, and a minimum of 10 cm is reserved around the refrigerator.

（2）　Avoid using the refrigerator in a place with high humidity, reduce the chance of rusting metal parts, and do not directly wash it with water, which may cause leakage.

（3）Avoid the refrigerator near heat and direct sunlight.

（4）Don't use corrosive liquids in refrigerators.

（5）Please disconnect the power supply if don't use the fridge for a long time.

3. Battery protection

When using DC power supply 12/24V, the refrigerator electronic system has the power protection function of the automatic control compressor system. When the input voltage reaches the minimum limit, the system will automatically cut off the compressor to protect the battery from excessive consumption; when the voltage returns to normal, the compressor will automatically operate normally. The fridge has 3 levels of battery protection:

12V DC

Battery protect level:	Cut off	Cut on
LO:	10.1V	11.1V
NE:	11.4V	12.2V
HI:	11.8V	12.6V

24V DC

Battery protect level:	Cut off	Cut on
LO:	21.5V	23.0V
NE:	22.5V	24.0V
HI:	23.0V	24.5V

4．Test running

(1) The refrigerator can be directly connected to the 12/24V DC power supply. Plug the 12/24V cable into the DC socket of the refrigerator, plug the other end of the power cord into the car power socket or other DC 12/24V socket, and ensure the power supply is stable. If the voltage is unstable, the refrigerator will not run.

(2) Connect the power supply, set the temperature to -20℃ and check the display. After 30 minutes, open the door and check the internal surface. If the inner surface is cold, it means the refrigerator working normally.

5．Control Panel and Display

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
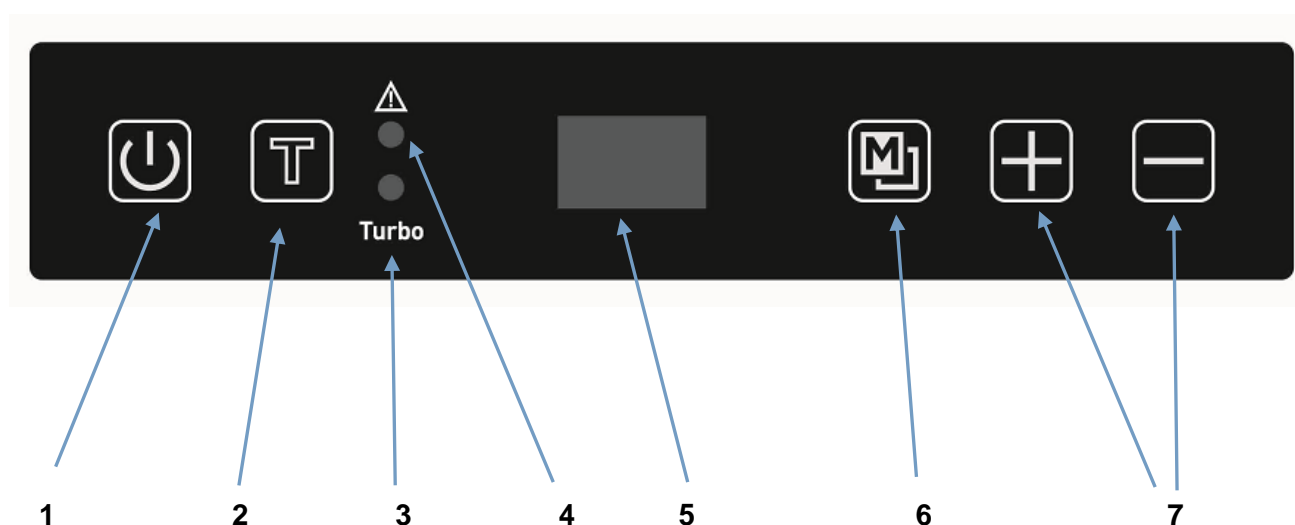
1. Power switch
2. TURBO mode choice button
3. TURBO mode indicator light
4. Fault indicator light
5. LED display
6. Function select button
7. Temperature setting button

6. Operation instructions

1. The 🔘 button is power switch. When the power cord is connected, press this button to turn on turn off the fridge. When the fridge is turned off, the LED display will be off but the fridge is in standby mode. The system will automatically record the status of last use. If the fridge is unplugged when it is turned on, it will automatically power on when it is connected again, no need to press the power switch button 🔘 again, and fridge will go on working according to last time temperature setting. If fridge power cord is connected but fridge is off, it will need to press power switch button 🔘 to turn on the fridge.

！**Caution：If turn on and turn off frequently, the fridge will not run until around 1 minute**

later due to the compressor auto-protection function.

2. Fridge temperature range from -20℃ to 10℃. Press ![minus] button to decrease the temperature, and press ![plus] button to increase the temperature. When the expected temperature reaches, the digital will flash 5 times, which means temperature is set, and then the display board will show the internal temperature.

3. Press ![T] button to turn on TURBO mode, which is fast cooling mode and power consumption will be higher in this mode. Choose TURBO mode, TURBO indicator light ![TURBO] will be on.

4. When there is a fault, the indicator light ![warning] will on or flash, and LED display will show different faulty code. This manual will explain in details at Chapter 9.

5. ![M] button functions:

   (1) Press ![M] button once to exchange Celsius degree or Fahrenheit degree temperature display, press ![plus] or ![minus] button to select.

   (2) Press ![M] button twice to enter Battery protect level selection mode, press ![plus] or ![minus] button to select LO, NE or HI level.

   (3) Press ![M] button 3 times to turn on or off Blue tooth function, press ![plus] or ![minus] button to select ON or OFF. (This function will be available only when App developed)
   After selection, the system will automatically be saved.

6. Connected to Mobile Phone:
   Step 1: Turn on the Bluetooth function and location of the phone
   Step 2: Open the Wechat
   Step 3: Enter "Colku Car Refrigerator" in the search bar
   Step 4: Click in the following mini program

   Step 5: Connecting to your unit- There are 2 ways to discover your unit within the App.
   Option 1 - Scan QR code
   Step 1: Click this blue button.

Step 2: Scan QR code -this is on a sticker adhered to the side of the unit.

Option 2 - 'Search' for the device
Step 1: Click this white button.

Step 2: Select your unit from the list.

What can I do through the app now that I am activated and connected?
- Turn your fridge on and off
- Adjust the fridge temperature between -22℃ to +10℃
- Check the current temperature
- Switch between different modes
- Choose the 'Battery Protection Level' (LO/NE/HI)
- Improve warranty card information

7.Technology Parameters

Model No.	GC45
Climate Type	ST
Capacity	44L (without divider) freezer:30L, fridge:11L (with divider)
Voltage	12/24V DC
Input power	55W
Refrigerant	R134a (33g)
Isolation	C-Pentane
Lowest temperature	-20℃
Highest temperature	10℃
Product dimension	L702xW420xH443 mm with handle

8．Circle diagram
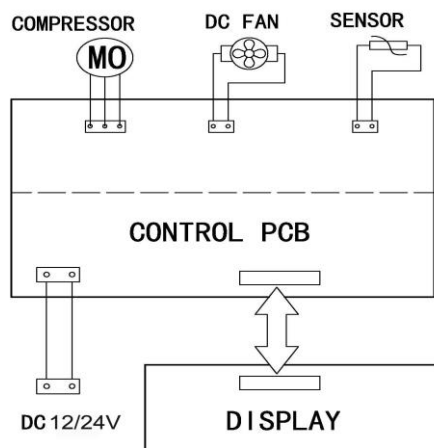
9. Troubleshooting

Trouble	Reason	Solution
Fridge doesn't run	1. Check if the power supply is connected properly. 2. Check if the power supply is faulty. 3. Check if the power switch turns on. 4. If power cord fuse is blown.	1. Ensure that the power supply is in good contact and turn on the power switch. 2. Change the power cord fuse.
Fridge poor cooling	1. The area is poorly ventilated, the door seal is damaged or deformed, the seal is not good; the refrigerator door is not closed tight; the hot food is too much; direct sunlight, or the ambient temperature is too high or there is a heat source nearby. 2. Improper temperature setting. 3. Refrigerant leak, system faulty.	1. Ensure fridge seal is good, away from the heat source and avoid direct sunlight. 2. Proper setting temperature. 3. Find professional person to fix.
Compressor doesn't run	Controller error	Find professional person to fix.
	Thermostat protection temperature is set too high, environment temperature is too low, or fridge has reached expected temperature.	Set a suitable temperature
	Fridge doesn't put on the surface properly	Put the fridge on the surface properly
Fridge has abnormal noisy	1. Fridge on an unstable surface. 2. Hit the wall or other things. 3. Fridge internal parts loose.	1. Put the fridge on the surface properly. 2. Contact the professional person to check the fridge internal.

Faulty LED will be on and LED Display shows E0	NTC (the temperature sensor) broken circuit or short circuit.	- Check circuit connection - Replace NTC - Replace compressor connect PCB
Faulty LED flash 1 flashes every 4 seconds and LED Display shows E1	Low voltage	- Try on different power source (vehicle or 240V AC power). If changing power source fixed , then possible issue with the original power source. - Ensure cabling between fridge and battery is at least 0.16 inch, if the distance is more than 2 78.7 inch then use at least 0.24 inch cable.
Faulty LED flash 2 flashes every 4 seconds and LED Display shows E2	Fan issue	- Fan is drawing too many Amps (over Amps), replace fan.
Faulty LED flash 3 flashes every 4 seconds and LED Display shows E3	Compressor start issue	- Unplug cable and allow unit to rest for 10 minutes. - Try on different power source (vehicle or 240V AC power). - Electronic box fault. - Compressor fault.
Faulty LED flash 4 flashes every 4 seconds and LED Display shows E4	Low Motor speed	- Reduce products/items inside unit. - Move so unit is in a lower ambient temperature; clean vents/ensure clear air flow over compressor. - Fan fault.
Faulty LED flash 5 flashes every 4 seconds and LED Display shows E5	Over temperature	- Ambient temperature too high. - Clean vents/ensure clear air flow over compressor. - Fan fault.

The following is normal phenomenon:
1. There's "Giggle" sound by refrigerant flow when cooling ends.
2. There's fan noisy when fridge running.
3. The surface of the refrigerator is condensed. When the ambient humidity is high, and the internal temperature of the refrigerator reaches -15℃, slight condensation will occur on the surface of the refrigerator.

10．Cleaning and maintenance

1. **Cleaning method:** Unplug the power cord before cleaning and maintenance. Use a wet soft rag to wipe the inside and outside of the refrigerator. If necessary, wipe it with a neutral detergent and then wipe it with a clean cloth.

2. **Maintenance method:** Properly protect the door seals and keep it clean. Try to avoid oil stains and deformation when using. If oily substances (plant or animal oil) are attached to the plastic in the refrigerator for a long time, the plastic will easily age or crack and send peculiar smell.

3. **Precautions:** Don't directly clean the refrigerator with water to prevent electrical insulation and material rust. The following things will damage the coating and plastic parts which cannot be used for cleaning: alkaline detergent, soap, abrasive powder, hot water, brush, banana oil, gasoline and alcohol.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-Reorient or relocate the receiving antenna.
-Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help.

RF warning for Portable device: The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.