

# ELECTRILABS

 **(Pty) Ltd**

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## DC FRIDGE INSTRUCTION MANUAL

Please read this manual carefully, and make sure to keep this manual in the place accessible by a user at anytime.

## Preface

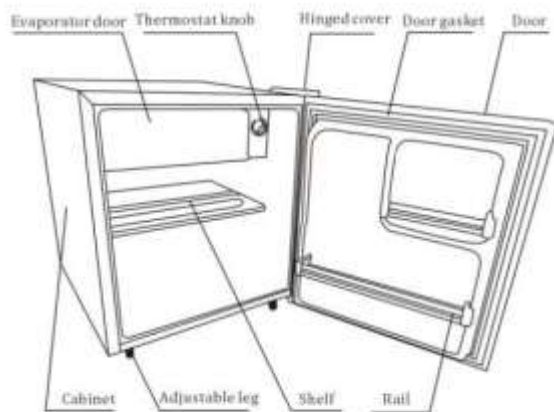
Dear User,

Thank you for choosing our company's DC fridge. This manual gives you the detailed instructions. Before you put the product into use, please read the instructions carefully and you will learn more about this product so that you can use it in an easy, convenient, proper and safe way.

To ensure read it necessary, please keep this instruction manual carefully.

## Structure of DC fridge

(Because this manual is used for several models, some features shown in the below figure may not contained in your dc fridge)



## Transportation and installation

- Do not crash and the cabinet tilt angle don't more than 45 degrees when moving the unit.
- Remove the packing material before mount the unit, such as the bubble in the bottom of the cabinet, in order to heat dissipation and reduce security risks.
- Store the unit in a location where it is not exposed to rain could result in prolong the life of the unit.
- Use the previous two foot with adjustable height to ensure the dc fridge placed smoothly when placed on the ground.
- Away from hot air sources. Cooling performance is reduced and electrical power is increased if the unit is placed near heat sources, such as hot plates and stoves and if it is exposed to direct sunlight.
- Please make more than 10cm space between dc fridge and wall to reduce radiation loss.
- Loading fuse wire into switched circuit as shown in figure 2 before the installation. You can pick up the power switch on occasion.
- Make sure that the unit does not plug into an electric power supply before the normal

operation. Because we should place the dc fridge level with the ground and let 30 minutes' standing after have cleaned.

## How to use

### ●Initial start-up

Connect the power, clockwise rotate temperature control knob, put gear in the middle position, the first time in more run-time should be longer due to the unit body heat, about one hours. The dc fridge can automatically swith machine regularly from now on.

### ●Thermostat

Used to adjust the temperature in the dc fridge cabinet, 0 is the down-gear. With the increase of the digital, the rotational temperature is reduced gradually. And the gear is away placed in the middle position in normal circumstances.

### ●dc fridge

We can store all kinds of bottles, canned drinks and eggs, fruits and vegetables, etc in the box and the shelf of T .

### ●Chilling chamber

Store food. First, clean the food. then put them into dc fridge chamber and the storage time should not be too long. Of course, you couldn't put the glass and cans or drink.

### ●Water disposal pan

Mainly to prevent the defrost water to drip on the dc fridge food. And pay attention to the water disposal pan should pour water regularly. Do not left some foods in it.

### ●Restart

Should the unit need 5 minutes' to get through the power when have to reboot after power off, otherwise it will affect the compressor life and cause damage.

## Precautions:

1. Please pay attention to the cathode of the line: red or brown line is positive wire, blue or black line is negative wire. It could cause serious damage of the electrical box, if connect it error.

2. the safe range of the voltage is from 10V to 38V. The dc fridge will have 1 to 3 start(s) when the user makes the first contact (in order to the operating voltage stability is better, all type of dc fridge to be recommended 24V).

3. The dc fridge power use battery (do not use transformer), the capacity of battery should be greater than 40 Ann and don't lost electricity.

4. Don't run in 40°C environment, otherwise it could cause damage of the dc fridge compressor.

5. Controller guard signal: the flicker frequency in 3s could make for the following failure

Number 1: hardware failure

Number 2: over-current

Number 3: under voltage or overvoltage      Number 4: thermostat disconnect

## Safety precautions:

● It is suggested to use the power line with over 2.5mm and the plug with a fuse of 15A.

● It is suggested that battery and wiring be used respectively and that the battery be fully charged all the time.

- Do not spray water directly outside or inside the dc fridge; otherwise it will cause damage or a short circuit.
- Do not store the volatile materials, alcohol or gasoline or lighter gas or banana oil etc. in case of explosion.
- Do not spray something flammable near the dc fridge in case of fire.
- Do not directly touch the compressor and condenser because the temperature of their surfaces can be so high that one will be scalded.
- Do not store materials that survive only under an exact temperature such as serum, vaccine and so on.

## Common failures and handing

A: common faults of the dc fridge and general handing method:

Num	Phenomenon		Possible reasons	Handing method	Note
1	Don't cooling(the compressor doesn't work)		Is the power joint contacted good?	To deal with sub	
			Is the battery without electricity or voltage not enough?	To charge the battery	
			Is the external fuse disconnected?	Rewirable fuse	
			Is the thermostat in the '0' position?	Rotate the thermostat knob	
			Is the connector loosed?	Insert it well	Connect with repair point
2	The compressor working all the time	The refrigeration temperature isn't enough	So many times to open the door.	Reduce the frequency to do it	
			The cabinet is overmuch, the cooling fluid to be affected.	Take some food away	
			Refrigerant leakage	Welding and cooling	Connect with repair point
	The refrigeration temperature is normal		Temperature of the environment is too high and the thermostat too low	Rotate the thermostat knob	
			Choose the strong cold gear of the thermostat	Rotate the thermostat knob	

			for a long time		
			The thermostat doesn't work	Replace equipment	Connect with repair point
3	Large noise		Body not flat	Adjust the adjustable leg	
			Line collide with each other	Adjust the line location	
			Compressor bolt loosening	Reinforce the screw	

B: The following situations of dc fridge do not indicate malfunctions:

1. When the surrounding humidity is too high, dew will appear on the shell or the door. You can use a dry cloth to clean it.
2. When the dc fridge is working, the rear condenser or the two sides of box will give out heat, which is caused by the condenser.
3. You will sometimes hear the sound of running water. It is the sound of the flow of the refrigerant in the evaporator.
4. The compressor is burning hot: when the dc fridge is working, the highest temperature of the compressor will be up to 90 degrees.

For general failures of the dc fridge, the user can refer to the table above to solve the problem by himself or herself. If the failure still cannot be solved or the user has other questions, please contact the authorized maintenance unit of our technical service department.

If the failure is not listed in the table above, it should be checked by professionals. For example the input voltage is normal while the compressor is running too frequently (which means the start-to-stop time is less than 3 minutes).