

ULTRA-LOW TEMPERATURE FREEZER



Instruction Manual



Model : LF-300B

Please read this manual carefully before using the instrument

Labnics Equipment

Thank You for Buying a LABNICS Freezer!

- For your personal safety and better performance of the unit, please read this Instruction Manual thoroughly and save it properly for future reference.
- Failure to read, understand and follow the instructions given in this manual may result in damage to the unit, injury to operating personnel and poor equipment performance.
- The material in this manual is for information purposes only. The contents and the product it describes are subject to change without notice. **LABNICS** makes no representations or warranties with respect to this manual.
- Always take precautionary measures (clothing, gloves, goggles etc.) while using the equipment. Always dissipate extreme cold or heat and wear protective clothing.
- Always follow good hygiene practices.
- Each individual is responsible for his or her own safety.



SAFE CUE:-

- Please read this manual carefully while using our machine for the first time.
- The one who operates Ultra Low temperature Freezer should be trained and authorized.
- The maintenance of equipment should be made by **LABNICS** or their agent.
- If you have some query whose solution is not given in the manual, then please contact **LABNICS** or agent, and ask the right way to solve it.
- It is better to use **LABNICS** fittings, because in case customer use other's spare parts then **LABNICS** will not take any responsibility for the malfunction and damage caused to the equipment. But customers can contact **LABNICS**.
- Should check and keep proper maintenance of Ultra low temperature freezer at the proper time.
- Avoid storing alive life, flowers and others which are not fit for the low temperature.
- To ensure proper ventilation and functions of freezer, keep body back and both sides of freezer away from the wall at least 30cm apart and should not be blocked by any barrier.
- When working with Ultra Low temperature Freezer, inner temperature remains very low. So do wear glove while touching the cover board.
- If the power gets shut off, wait for 5 minutes to connect again so as to prevent compressor damage.

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CHAPTER1. SCHEMATIC PICTURE AND DESCRIPTION:-



Ultra-low temperature freezer is designed to store materials under very low temperature condition for hospitals, epidemic stations, blood banks, research institutes, universities, biological pharmaceutical industries and gene engineering, etc. The internal temperature in cabinet can be easily adjusted through the keys on control panel. All operations are convenient and reliable.

CHAPTER 2. PRE-INSTALLATION:-

- 1) **How to Transport:** Pick up the unit from the bottom of tank and a slant with 45° is acceptable. All transportation should be done carefully.
- 2) Remove all wrappers.
- 3) Check accessories and documents according to package list.
- 4) Clean the unit thoroughly before any operation.
- 5) **Installing Location:** Do not keep the unit in direct sunlight or near heating diffusers, radiators, or other sources of heat. The ambient temperature should not exceed 32°C. A minimum 20cm space on the sides, rear and top should be provided for better air circulation and heat discharge. Avoid location where there is too much cold, high humidity and can be easily splashed by water.

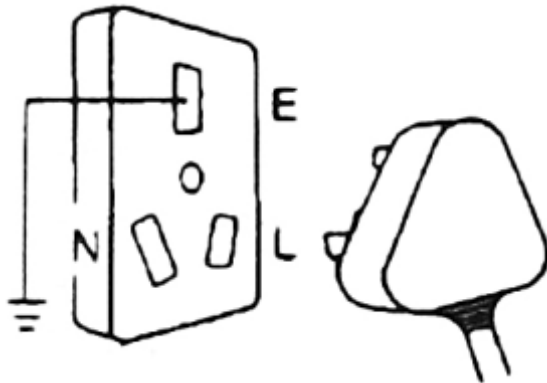
-  **Notice:** While moving the freezer, wheel should not damage the line.
-  **Notice:** Take away the packing base before running the freezer.
-  **Notice:** After connecting the power supply, do not keep the goods immediately in the freezer. Please wait for about 12 hours

6) Freezer working conditions are:-

- Environment temperature: - 10°C ~ 40°C
- Relative Humidity: - 80%
- No strong shake and caustic gas around.
- No sunshine and other cold/hot power effect.



Ultra Low Temperature Freezer Working Rule: Running intermission



P3 : N and E ports can't connect

Safety Introduction:-

- 1) **Power supply** : This LF-300B freezer is designed for operating under 220V/50HZ AC power supply. The unit can normally start under the voltage varying from 198V to 242V.
- 2) Must provide one single exclusive plug receptacle with credible grounding to the unit.
- 3) Inflammable and explosive materials, as well as high corrosive acid and alkali must be strictly prohibited in cabinet.
- 4) Keep the keys properly, so that the children's can't be able to open the back door which may result in unexpected injury.
- 5) To avoid cold injury, please place and remove goods with protective gloves.

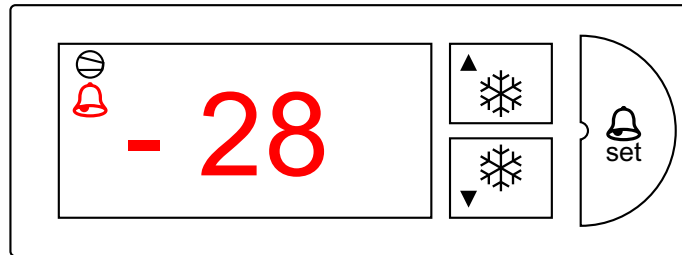
CHAPTER 3. OPERATION DIRECTION:-

3.1 When Using For the First Time:-

- 1) Please use the warm water and then little scour it to clean the freezer.
- 2) To adjust the freezer at -40°C, connect the power, compressor will start after 3minutes. Now 30minutes later, the freezer temperature drops and it mean the refrigeration system is normal. We advice you to first adjust the temperature at -35°C, then after stopping the machine, set temperature at -40°C.
- 3) Keep the goods in freezer only after the temperature drops.
- 4) To save the power, please don't often open and close the door.

3.2 Adjust the Temperature:-

Display Temperature



How to set the temperature:-

5 seconds after turning on the power, screen will display the current temperature. Please follow the following steps to adjust the temperature:-

The control panel can adjust manually, step as A-B :

- Press **"Set"** 2 seconds, will shows the current temperature and glitter.
- Through **▲** or **▼** keys you can increase or decrease the temperature, then press the **"set"** key to confirm the temperature. If after 30 seconds it doesn't get confirm, it means that the temperature set is invalid, and will automatically show the original temperature.
- **High/low temperature alarm:-**
The factory original figure is 10, it mean that the alarm will lights up if the temperature is higher or lower than 10°C, and the alarm is also equipped with the buzzer. (Press **"set"** which can stop the alarm). It is quite normal, if the alarm buzzes when used for the first time till temperature comes down and then alarm will get canceled automatically.
- P4 is the direction to show compressor starting: **"1" lighting all the time:** - mean the compressor is running. **1 Glittering Durative:** - means the compressor is still waiting to get started. (Connect the power and start after 3 minutes). If compressor glitters twice and halts once, it means the compressor is running all the time.
- Press **"3"** key for 5 seconds for continuous activation or stop the compressor. For regular working of freezer and to provide protection to compressor, don't press the **"3"** beyond 5 seconds.
- Press **"4"** key for 5seconds to close the freezer, within 35minutes the compressor stops and the screen * will start lighting and thus show the temperature at a time when freezer is closed.



LABNICS hold the right to update or improve the products.

If you have not entered the other parameters carefully, then please don't change them randomly. (Do not use the **"set"** key). Connect the power again.

CHAPTER 4. DEFROST, UNUSED, MAINTENANCE:-

4.1 Defrost:-

- If there is some frost on the surface of chamber for a long time then it will decrease the performance of freezer. So if the thickness of frost is more than 10mm then some defrost operations are recommended.
- After the freezer working for 192hours, system will get automatic defrost.

4.2 Maintenance:-

- Do not keep heavy goods in the freezer so as to prevent the body.
- Should clean the freezer at regular intervals. (For safety purpose, please draw out the power pin first)
- Use soft and warm cloth to clean the freezer inner and outer surface.
- Please use the scour to wipe and then clean with soft cloth.
- Once the freezer starts working it is best to use it continuously.



DO NOT sprinkle water on the faces of cabinets, which may decrease insulating property of electric parts and rust metal parts.



DO NOT use hot water, corrosive cleanser and organic solvent!



Note: Prohibit the children for playing games around the freezer.

CHAPTER 5. SERVICE AFTER SALE:-

Some unexpected failures may arise during running. Please pay attention to the running status of your LF-300B freezer. If any exceptional case arises, please check and solve it according to the following introductions. If the problem is not solved well, please contact our service center for details.

Problem	Possible Cause
ULT freezer does not operate	Power outage has occurred. The plug is bad or not securely plugged-in. Fuse is blown. Voltage is too low or too high.
Compressor does not work	Power in control panel is off. Temperature setting is wrong.
Temperature is higher than setting	Frost in inner wall is too thick The door is not closed properly or is opened too frequently. Overfull materials are put into chamber. Ambient temperature is too high.
Too great noise	Freezer is not leveled well. Freezer leans upon the wall.

Below are normal operations:

- There are some light clashes when the compressor starts up and stops.
- During rainy and watery season some frost may accumulate on the surfaces of cabinets. Please clean it with dry rag.
- DO NOT open the door twice within 5 minutes. This may lead the hot air into the interior of freezer and the door may be difficult to open because of a negative pressure due to a sharp decrease of temperature of this part air.

CHAPTER 6. TECHNICAL SPECIFICATIONS:-

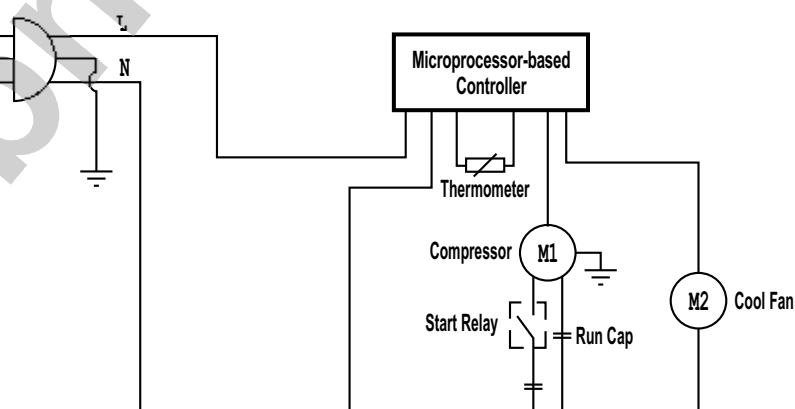
Model No.	LF-300B
Climatic Type	N
Storing Temperature	-10 ~ -40°C
Valid Capacity (L)	90
Rating Voltage (V)	220
Rating Frequency (Hz)	50
The Facility Safe Types	I Kind B Type
Input Power (W)	200
Refrigeration	R 502g
Size (D×W×H) mm	623 x 544 x 842
Weight (Kg)	46
Catalog No.	04590302

The encasement list

Item	Instruction Manual	Key	Defrost shovel
Qty	1	2	1

CHAPTER 7. CIRCUIT DIAGRAM:-

Power Supply :



All technical parameters and circuit diagram in nameplate are final ones for your units.

SERVICE REPORT

Customer's Address : _____ _____	Tel.No.: _____ Fax No.: _____ Weekly Off.: _____
Contact Person / Designation : _____	Dept.: _____

Date	Time		System Configuration	Model	Serial No.	Date :	SR. No.	
	From	To					Status : OK <input type="checkbox"/>	Not OK <input type="checkbox"/>
						Installation <input type="checkbox"/>	Warranty <input type="checkbox"/>	
						Demonstration <input type="checkbox"/>		
						Maintenance <input type="checkbox"/>	Contract <input type="checkbox"/>	
						Repairs <input type="checkbox"/>		
						Application <input type="checkbox"/>	Billable <input type="checkbox"/>	
						Calibration <input type="checkbox"/>		
						Validation <input type="checkbox"/>	Courtesy <input type="checkbox"/>	

Nature of Problem : _____

Observation & Action Taken : _____

Customer's Remarks : _____

Parts Replaced : _____

Parts Recommended / Action Required : Yes <input type="checkbox"/> No <input type="checkbox"/>		Requisition Number :
Service Engineer's Name & Signature	Customer's Name, Signature, Date & Stamp	