

Operation Manual



BLAR-101

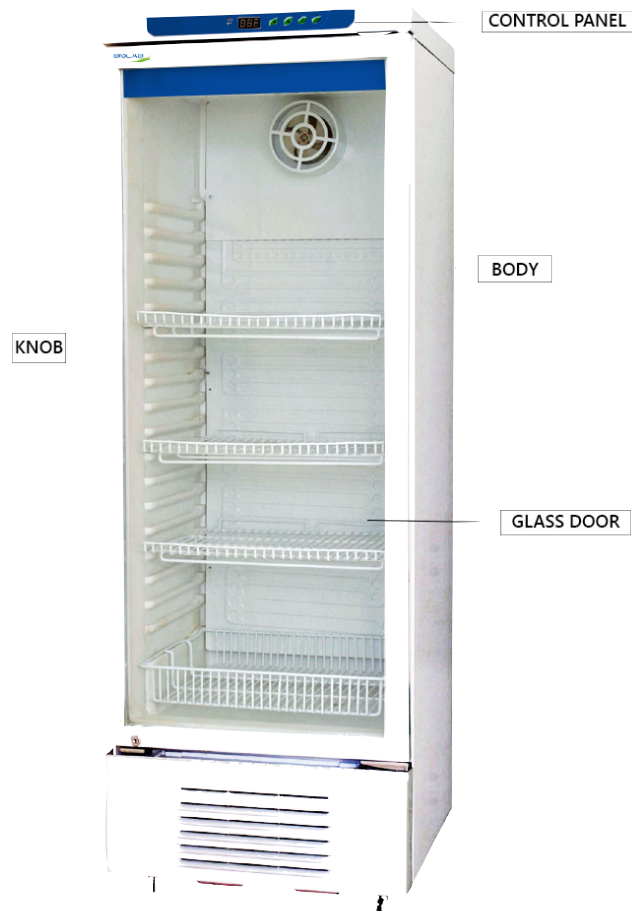
Laboratory Refrigerator

Thank you very much for Choosing Biolab products. Please read the "Operating Instructions" and "Warranty" before operating this unit to assure proper operation.

Index

1. Schematic Picture and Description.....	03
2. Pre-Installation.....	04
3. Operation Direction.....	05
4. Defrost Unused Maintenances.....	06
5. Service after sale.....	07
6. Specifications.....	08

01 Schematic Picture and Description



This series of refrigerator is designed to store materials under low temperature condition for hospital, epidemic station, blood bank, research institute, university, biological pharmaceutical industry and gene engineering, etc. The internal temperature in cabinet can be easily adjusted through keys in control panel. All operations are convenient and reliable.

02 Pre-Installation

1 How to transport: Pick up the unit from the bottom of tank and a slant plane within 45° is acceptable. All transportation should be done carefully.

2 Remove all wrappers.

3 Inspect accessories and documents according to package list.

4 Clean the unit thoroughly before any operation.

Installing location: Do not position 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. Location where is too cold and place with high humidity or can be easily splashed by water are forbidden.

Safety Introduction

1 Power supply: The refrigerator is designed to operate 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 a credible grounding to unit.

3 Inflammable and explosive materials, as well as high corrosive acid and alkali must be strictly prohibited in cabinet.

4 Keep children's away from the machine to avoid any injury.

03 Operation Direction

(1) Function Introduction to Control Panel:



a.

with unit °C under normal running condition and display different hint string under set condition: (Refer follows for details)

b. "▲""▼": Function set. Press these buttons to know different functions combining with different function keys. you can press "▲", when alarm buzzes.

c."SET": Adjust the temperature, high temperature alarm, Low temperature alarm and so on, press the "SET" key again, When alarm buzzes please press "▲", to stop the buzzer, But the indicator light will keep flashing.

d."LIGHT": The Freezer have two functions of auto-lighting and manual-lighting. At the situation of auto-lighting, The light will start flashing when the door is open, The head lamp will quench delay 5 seconds when the door closed: Also you can open the head lamp with hand, then the head lamp lighting all long will not be controlled by the door opening and closing. Press the "LIGHT" again to close the head lamp.

e. "RUN": When the system is running, The key lighting. (flicker when alarm.)

(2)Functions Setting:

a. switch on the power, The freezer turn into working.

b. Set work temperature:

Press the "Set" key: The Numeral display the "SET", and press the "SET" again, the tube show the current temperature, Use"▼", "▲"to adjust the temperature. While setting, press "SET" to set the temperature and display will be back to the normal status. The operation will be invalid if you don't press "SET" for 15 seconds, the system wrong as the last fixed data.

c. Set high temperature limit (HTL):

After finished the temperature, Press the "SET", The Numeral display show "H" and flash,

then press the "SET" again, Now to view the high temperature limit, Use "▼", "▲" to adjust, and press "SET" again. The operation will be invalid if you don't press "SET" for 15 seconds, the system wrong as the last fixed data. (Suggest to set as 15)

d. Set low temperature limit (LTL)

After finished setting the High temperature limit, Press the "SET", The Numeral display show "L" and flash, then push the "SET" again, Now show the low temperature limit, Use "▼", "▲" to adjust, and press "SET" again. The operation will be invalid if you don't press "SET" for 15 seconds, the system wrong as the last fixed data. (Suggest to set as 0)

e. Set Lighting

The system acquiesce the head lamp as auto-light. Then the lamp lighting after open the door, Quenching delay 1 minute after closing the door. Press the "Light", the head lamp on manual-light mode, the lamp will keep flashing all long till you press the "Light" again.

DO NOT place anything immediately after the power supply is connected. It is recommended to wait for about 2~3 hours before loading any material.

04 Defrost Unused Maintenances

1 Leave Unused: If the unit is not used for long time, please disconnect the power supply and maintain as the following procedures. For next time operation, ensure there is no any water around the liners to avoid the seal of door to be frozen.

2 Clean and Maintenance: 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!

Notice: For personal safety, please cut the power supply before any maintenance! Wear special protective gloves and wipe the inward and outward wall with wet and soft rag.

05 Service after sale

Some unexpected failures may arise during running period. Please pay attention to running status of your ULT freezer. If any exceptional case arises, please check and solve it according to the following introductions. Please contact for further assistance.

Problem	Possible Cause
ULT freezer does not operate	<ul style="list-style-type: none"> ● 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 operate	<ul style="list-style-type: none"> ● Power in control panel is off. ● Temperature setting is wrong.
Temperature is higher than setting	<ul style="list-style-type: none"> ● Frost in inner wall is too thick ● The door is not closed properly or is opened too frequently. ● Overfull materials are put. ● Ambient temperature is too high.
Too great noise	<ul style="list-style-type: none"> ● Freezer is not leveled well. ● Freezer leans upon the wall.

Below are normal operation:

1 There are some light clashes when the compressor starts up and stops.

2 During rainy and watery season some frost may accumulate on the surfaces of cabinets. Please clean it with dry rag.

3 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.

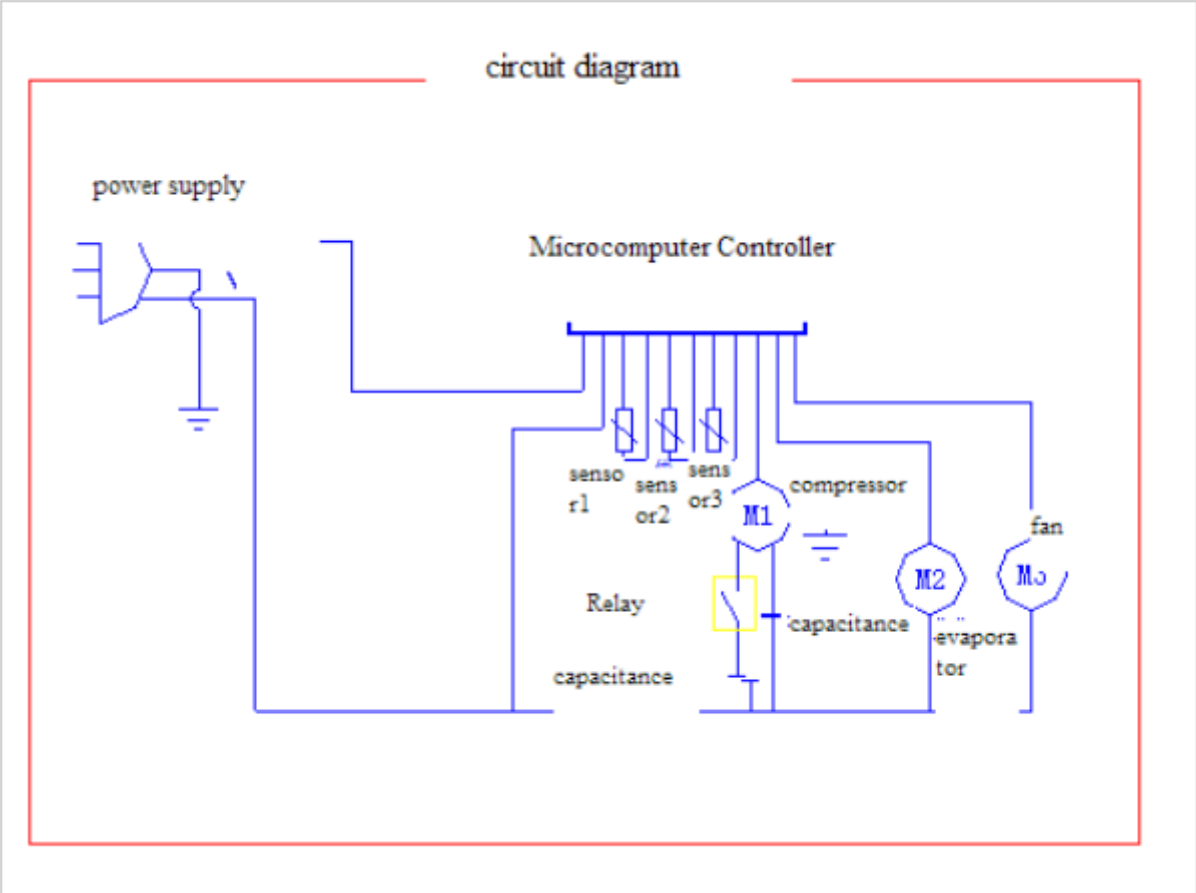
06 Specifications

Model	BLAR-101	Safety Type	I Class B type
Climate Type	N	Input Power (W)	215
Internal Temp.	2~10°C	Refrigerant	R134a
Capacity (L)	260 L	Exterior Dimensions (L×W×H) (mm)	590×603×1728
Rated Voltage(V~)	220	Rated Power (Hz)	50

Packing List:

Name	Operation Manual	Key
Amount	1	2

Circuit Diagram:



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

Use " ^ " roll parameter, display CL-AH-AL, Press "SET", Display Value, Use , " ^ V " to adjust parameters.



BIOLAB SCIENTIFIC LIMITED
91 Trafford Crescent, Markham, Ontario,
L3R 7J3, Canada

 +1 707 533 1445

 info@biolabscientific.com

 www.biolabscientific.com